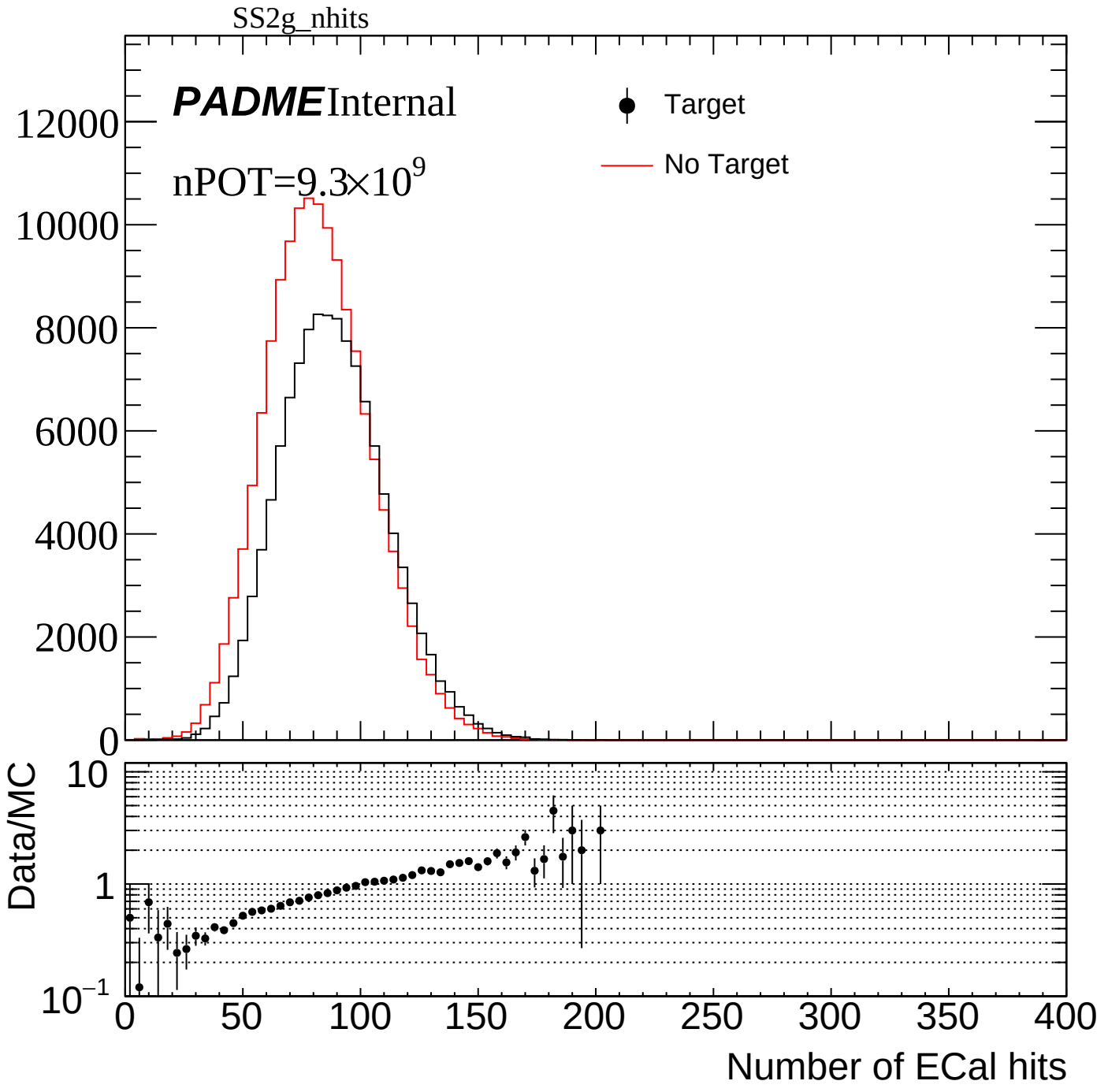
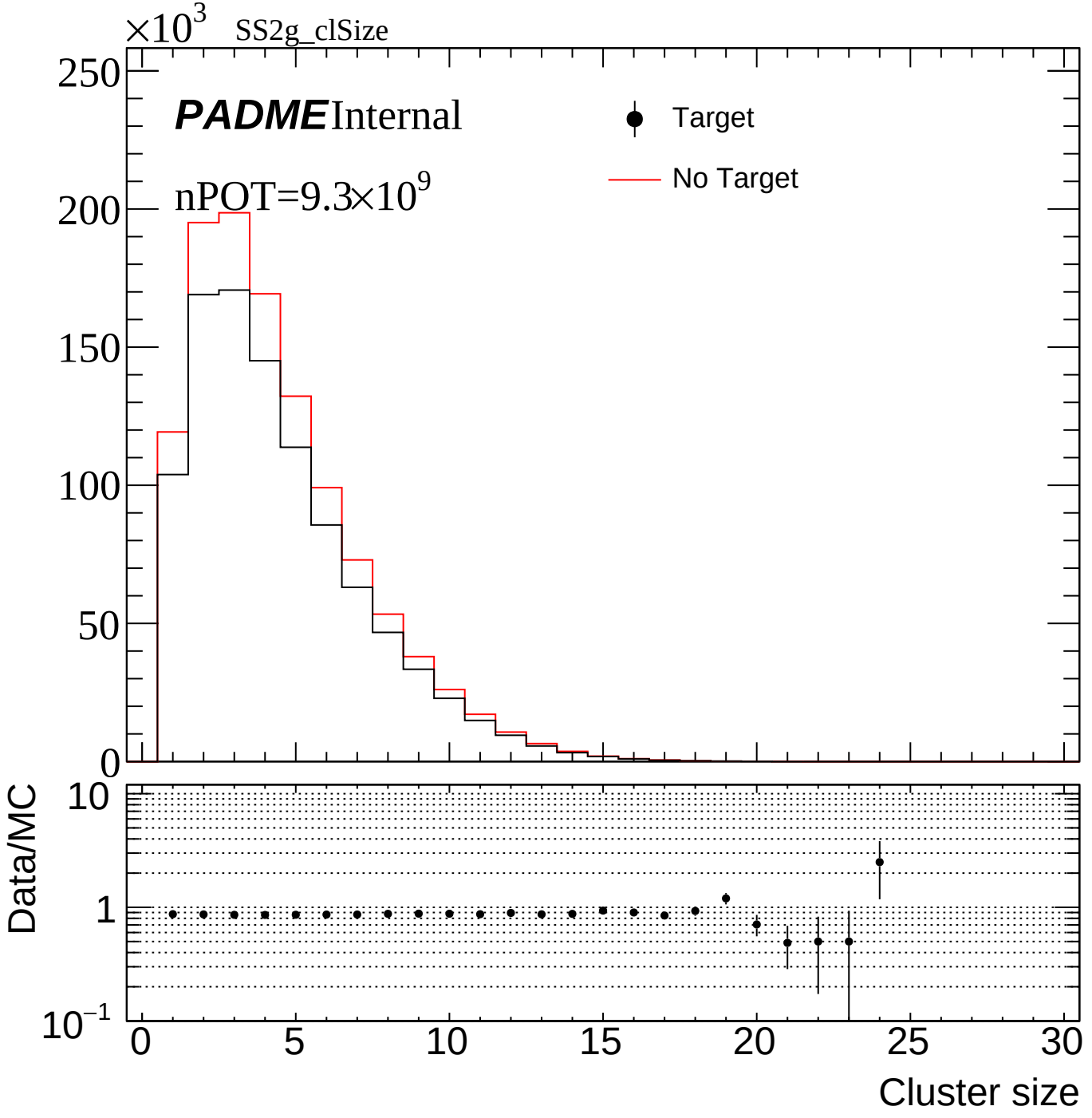
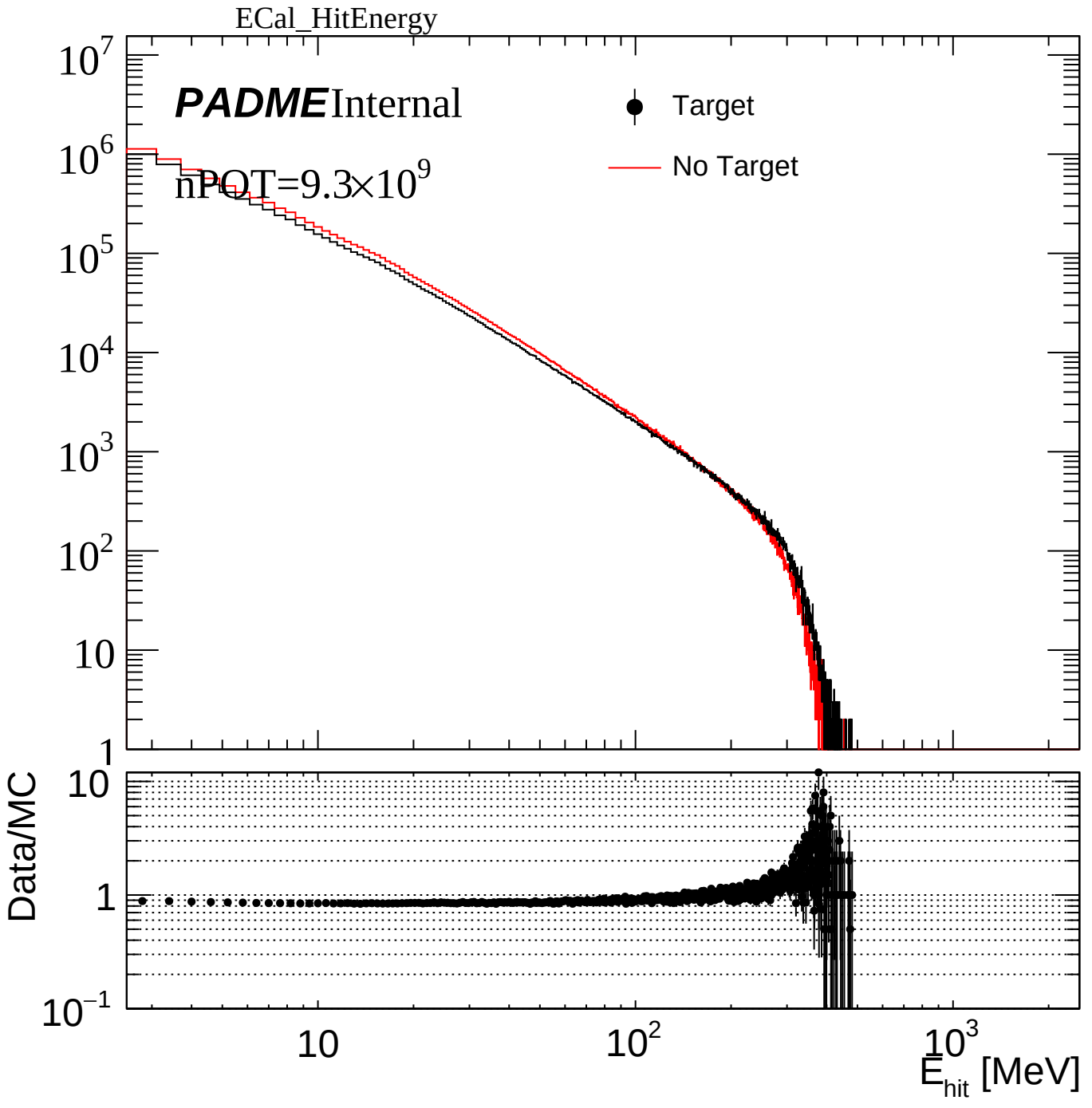
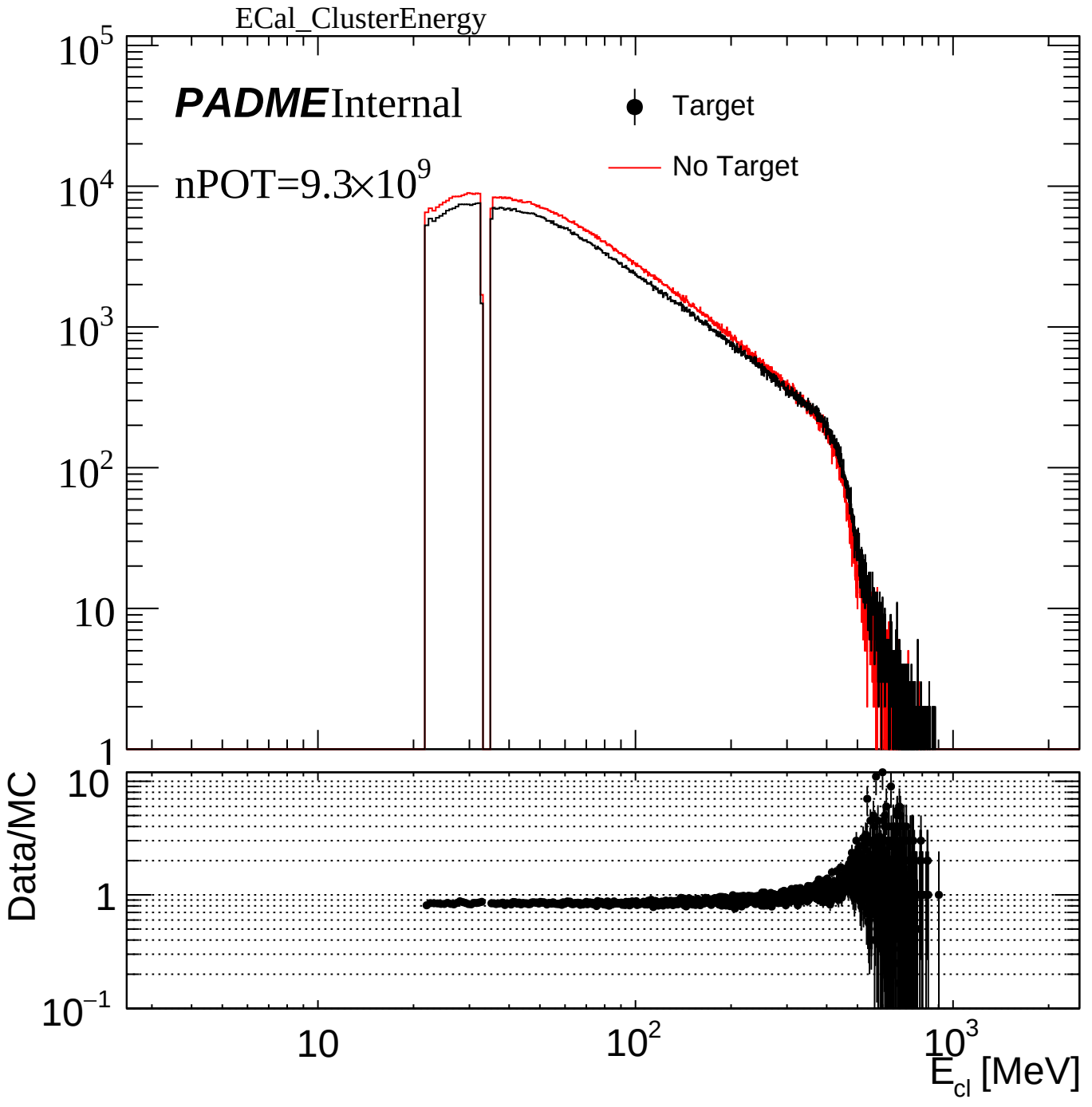
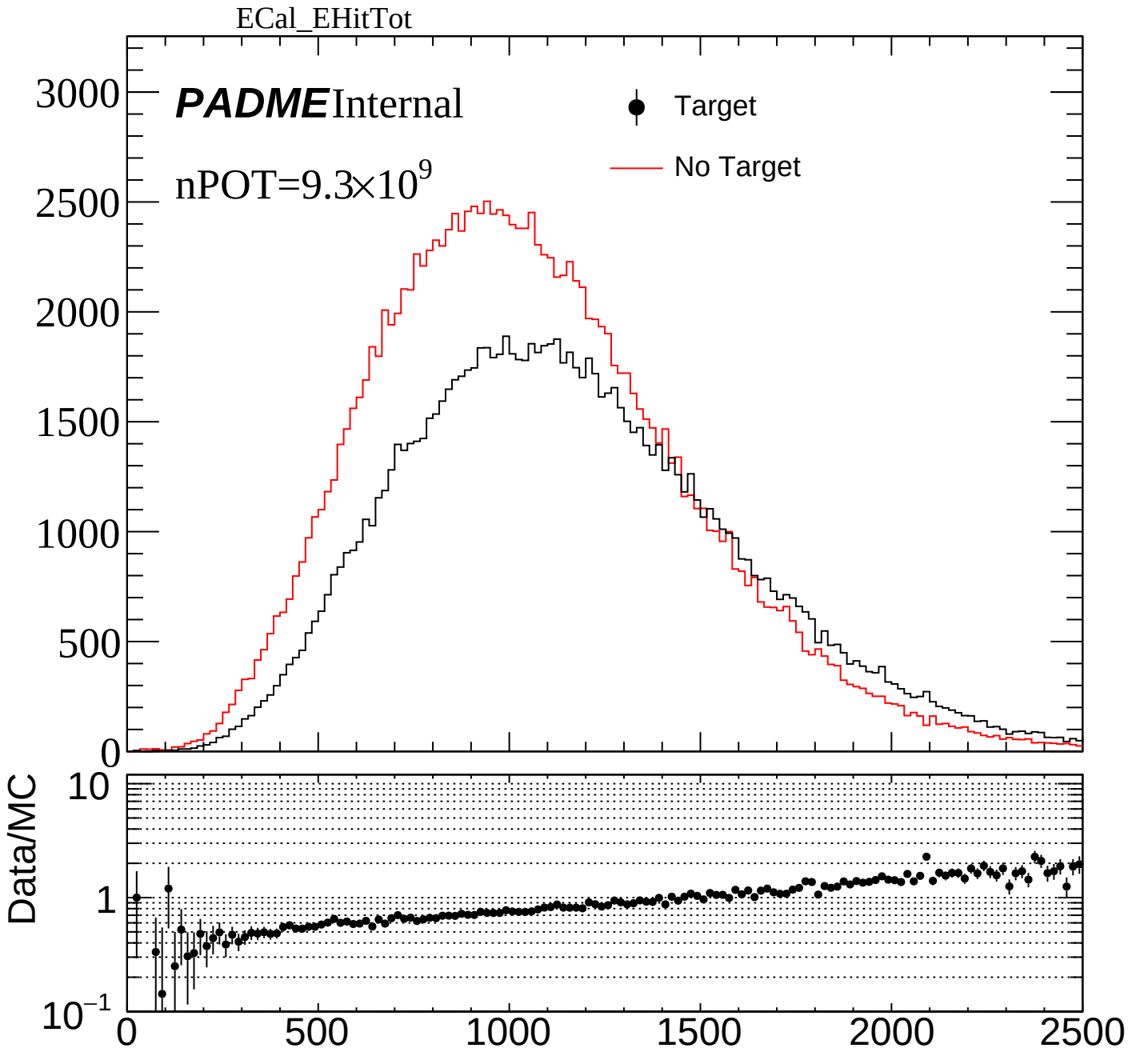
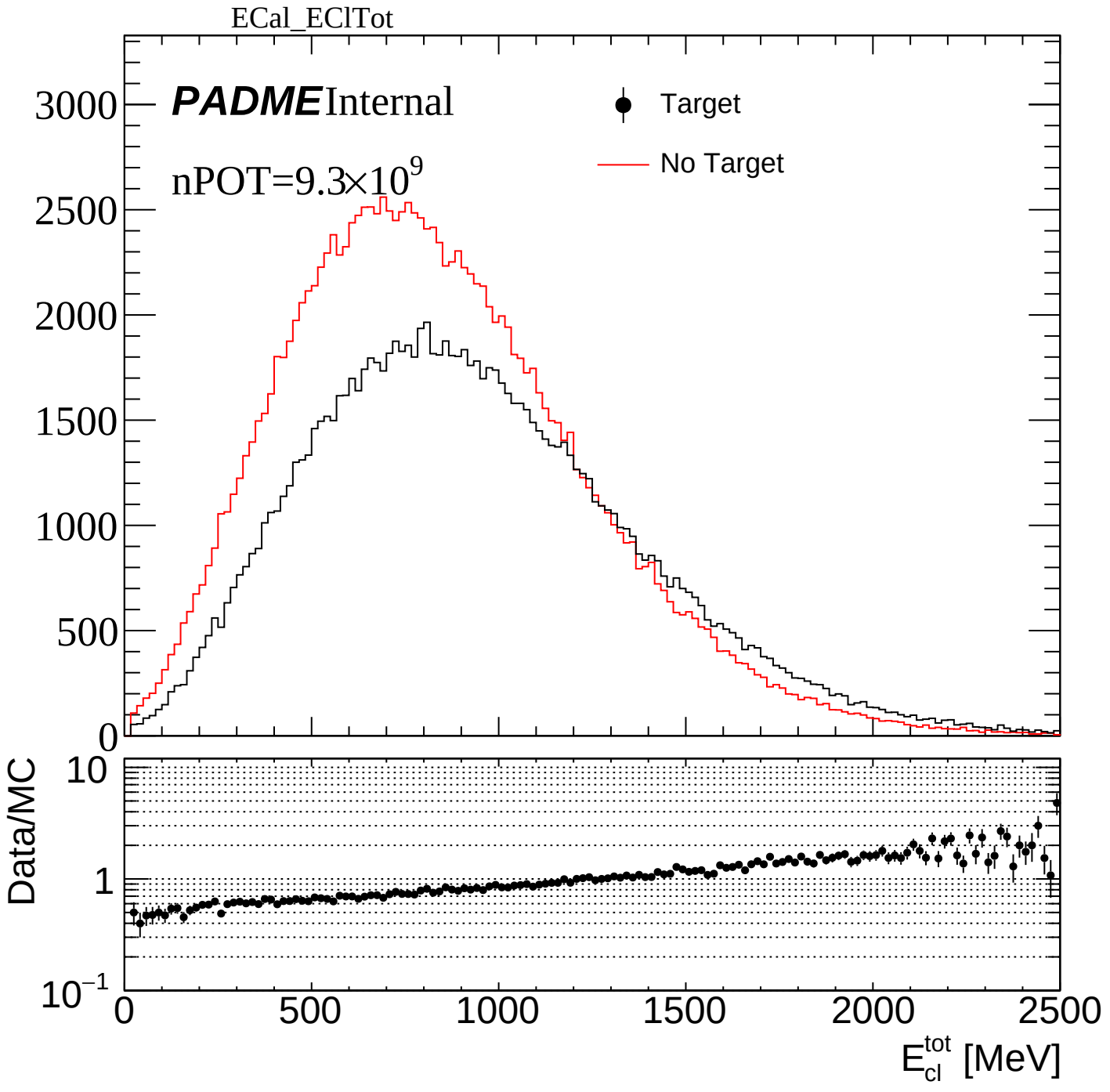

SS2g_nhits
PADME Internal
nPOT=9.3×10^9
Target
No Target
12000
10000
8000
6000
4000
2000
0
Data/MC
10
1
10^−1
0
50
100
150
200
250
300
350
400
Number of ECal hits

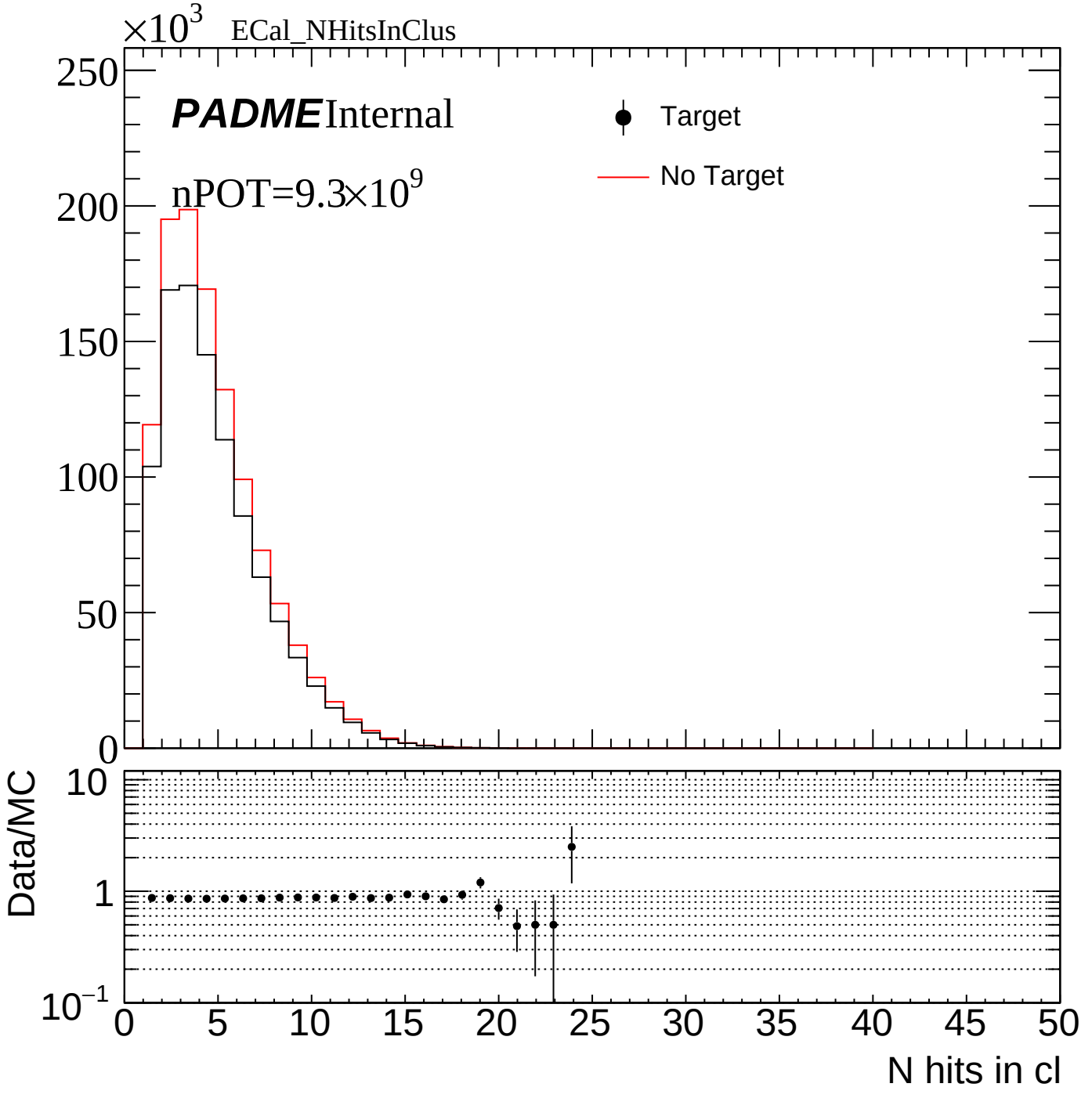

×10^3 SS2g_clSize
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
5
10
15
20
25
30
Cluster size

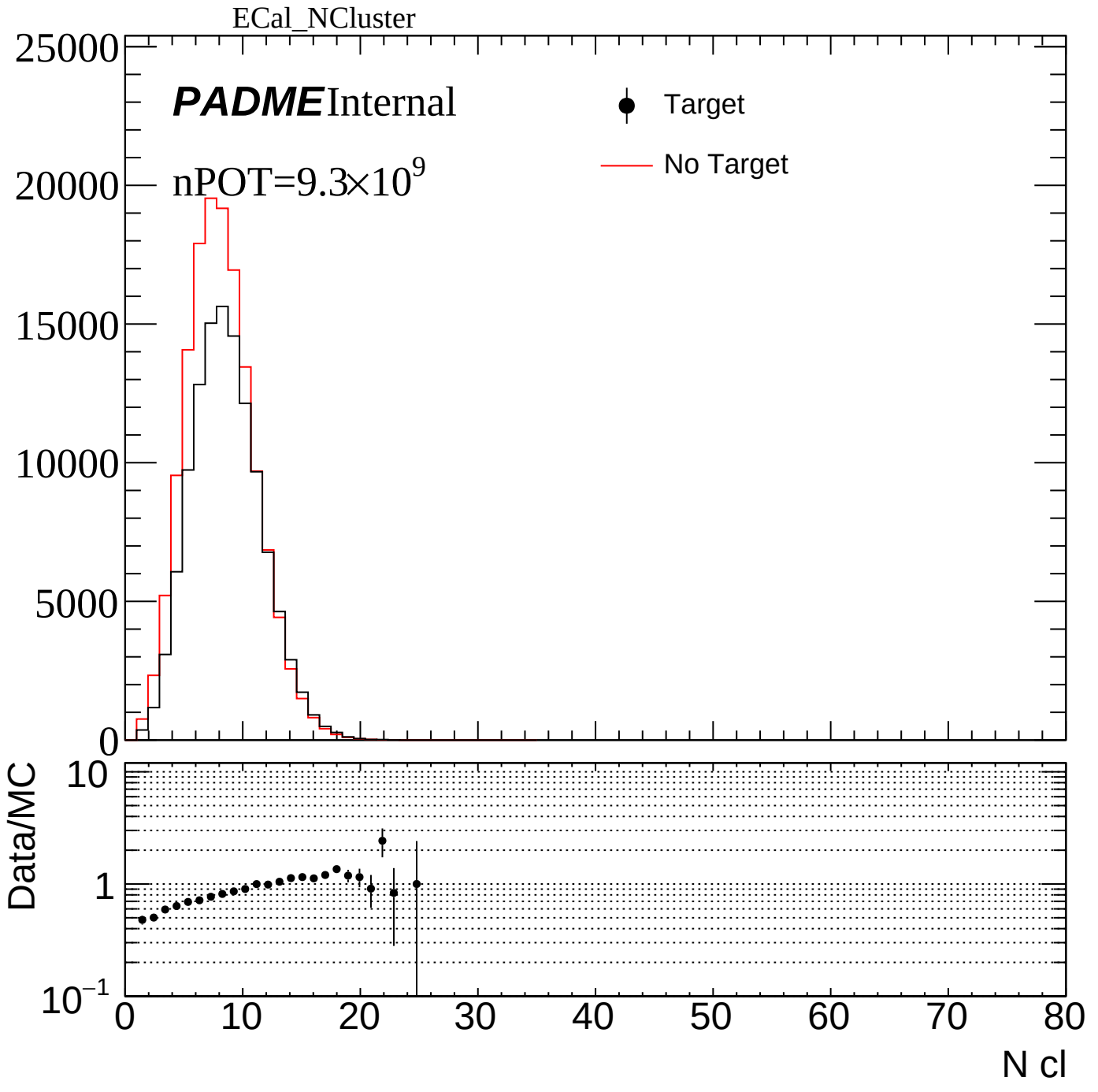

ECal_HitEnergy
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E_hit [MeV]

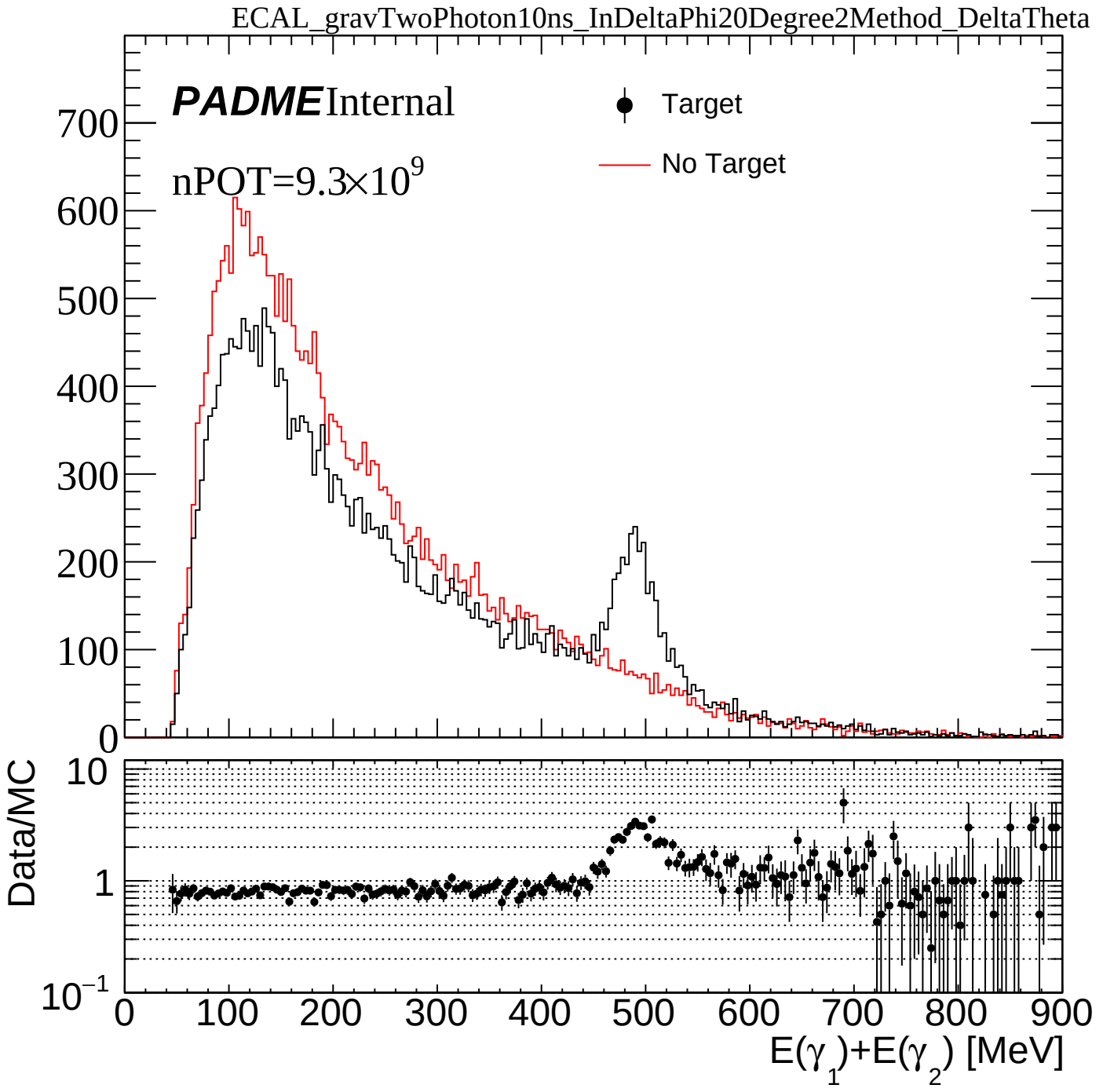

ECal_ClusterEnergy
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E_cl [MeV]

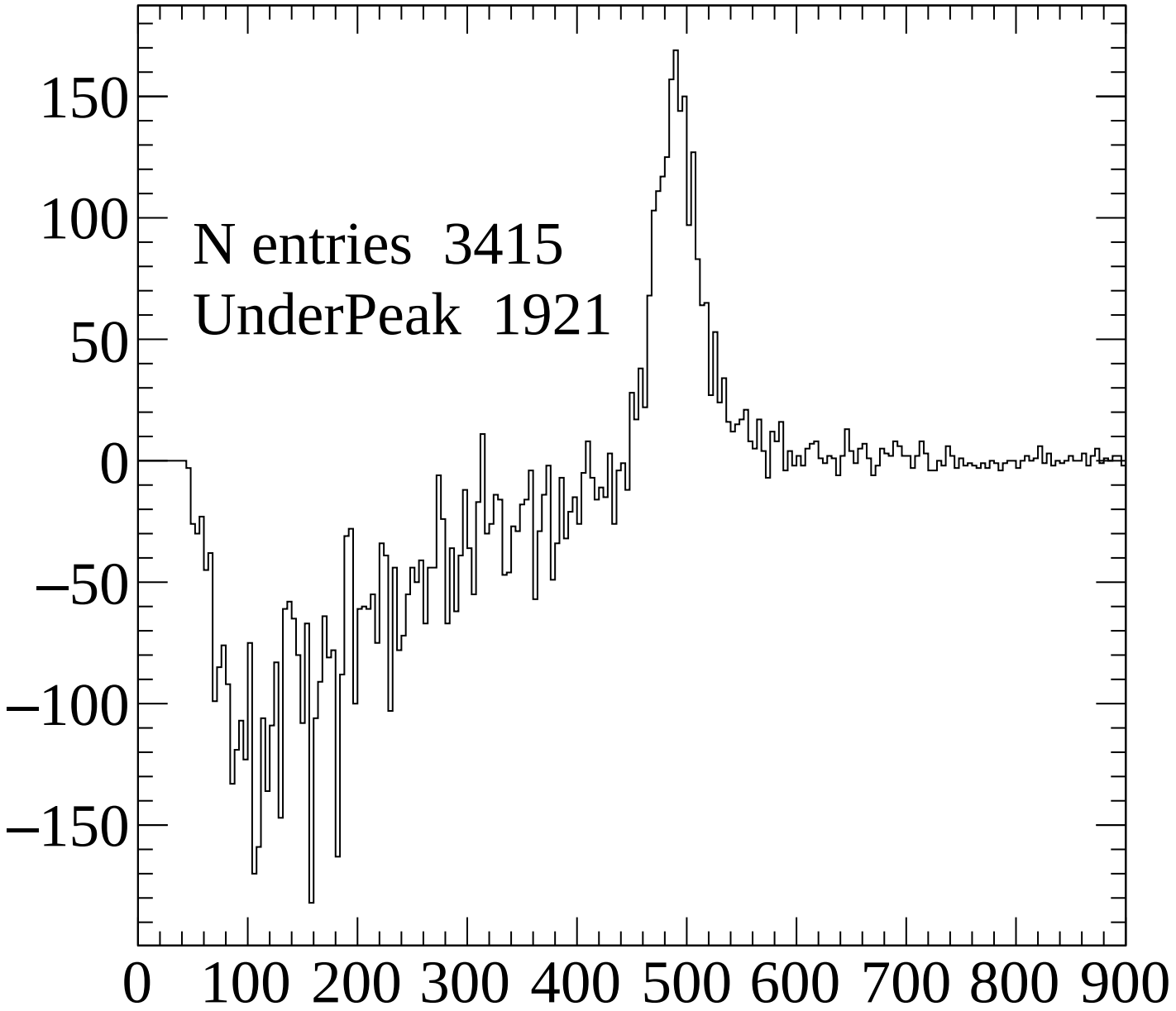

ECal_EHitTot
PADME Internal
nPOT=9.3×10^9
Target
No Target
3000
2500
2000
1500
1000
500
0
Data/MC
10
1
10^−1
0
500
1000
1500
2000
2500

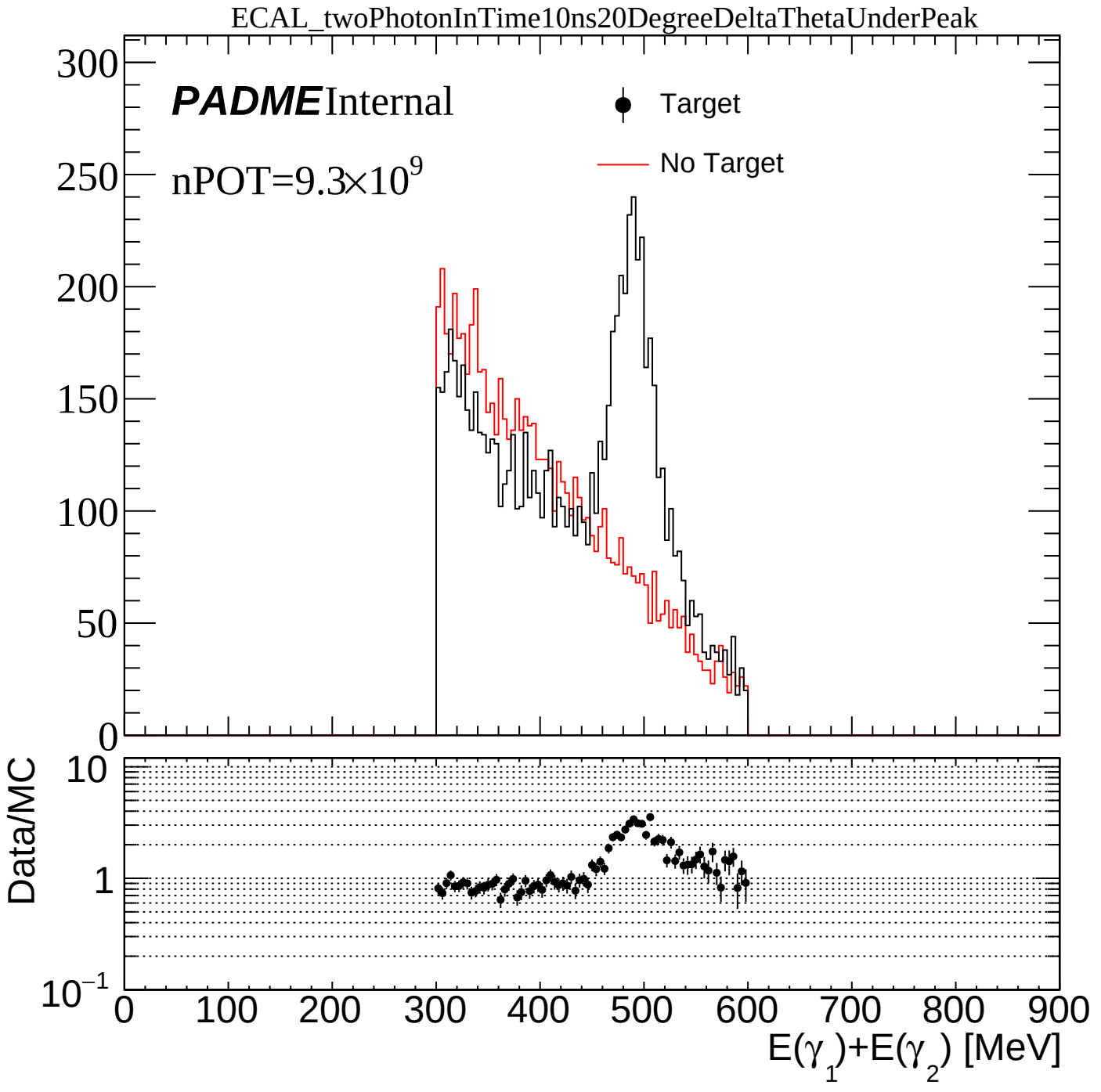

ECal_EClTot
PADME Internal
nPOT=9.3×10^9
Target
No Target
3000
2500
2000
1500
1000
500
0
Data/MC
10
1
10^−1
0
500
1000
1500
2000
2500
E_cl^tot [MeV]

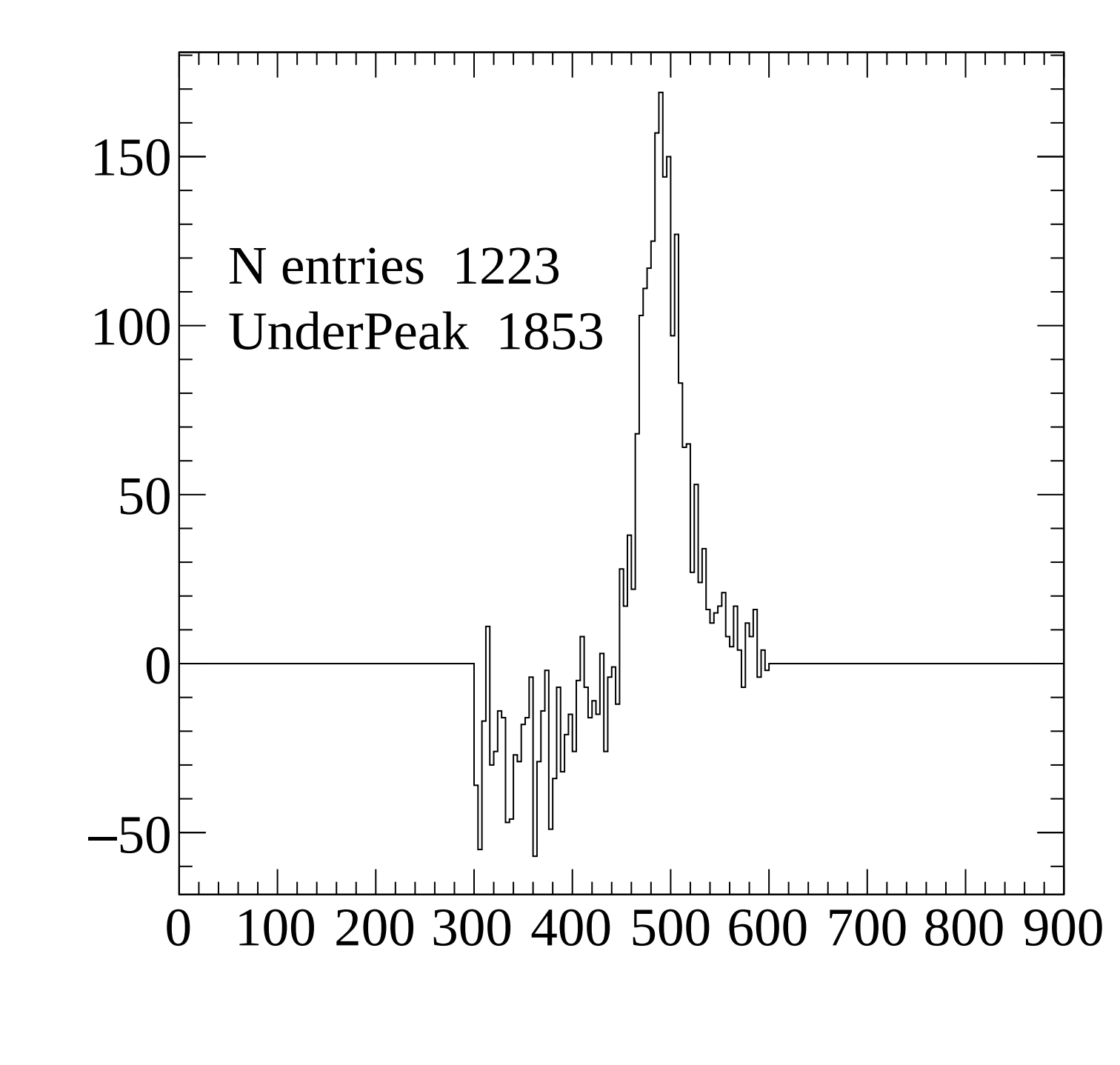

×10^3
ECal_NHitsInClus
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
5
10
15
20
25
30
35
40
45
50
N hits in cl

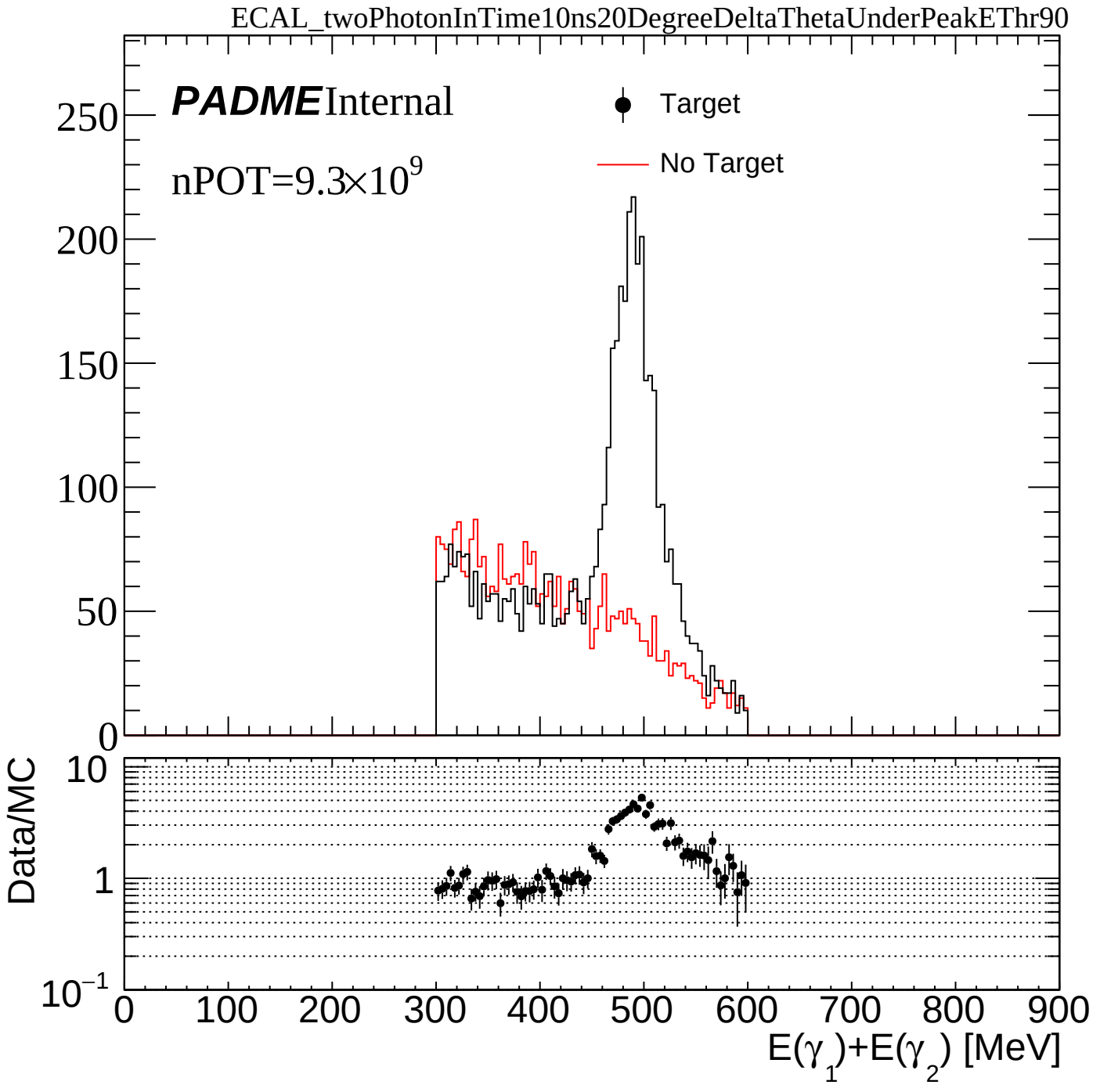

ECal_NCluster
PADME Internal
nPOT=9.3×10^9
Target
No Target
25000
20000
15000
10000
5000
0
Data/MC
10
1
10^−1
0
10
20
30
40
50
60
70
80
N cl

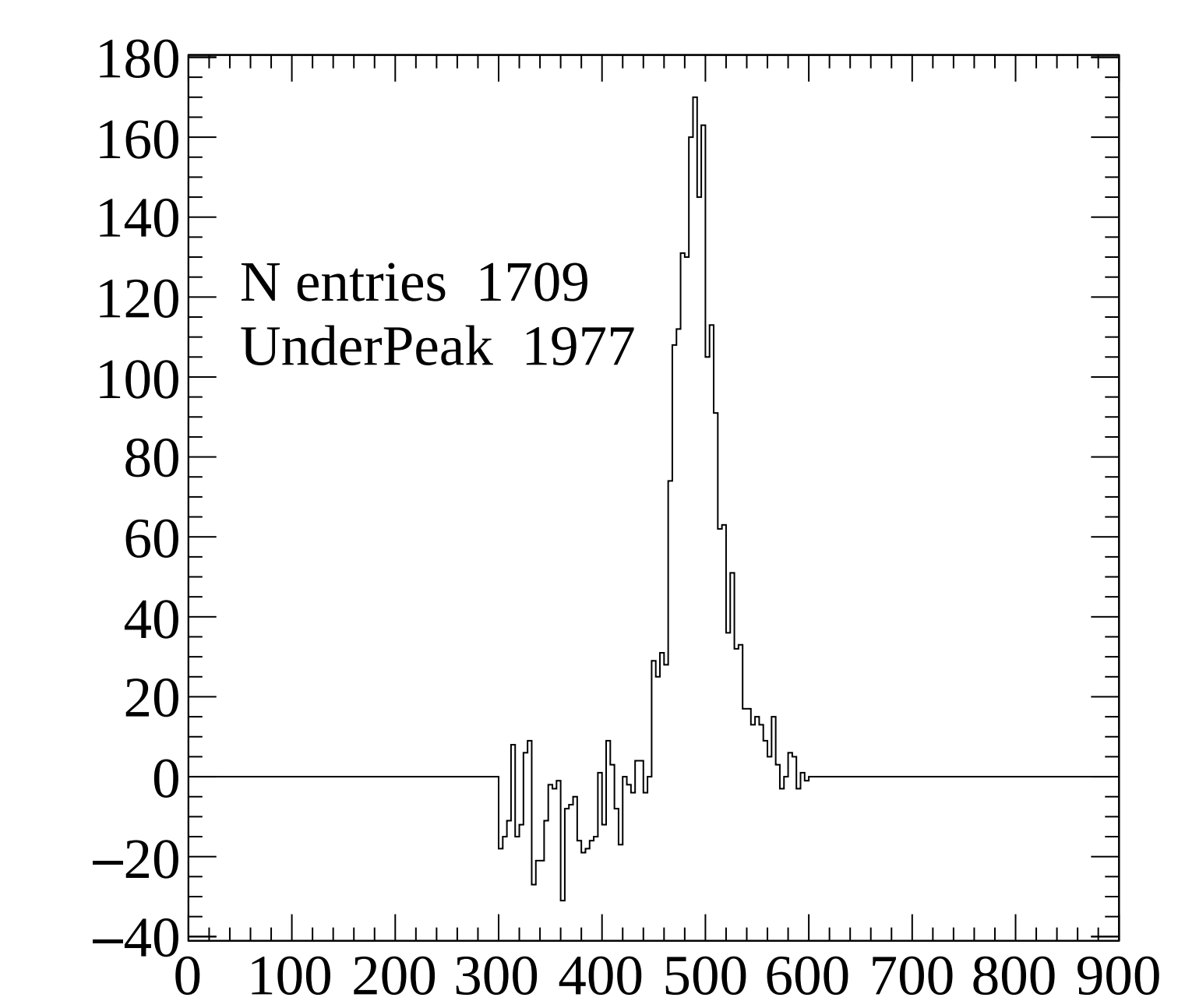

ECAL_gravTwoPhoton10ns_InDeltaPhi20Degree2Method_DeltaTheta
PADME Internal
nPOT=9.3×10^9
Target
No Target
700
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

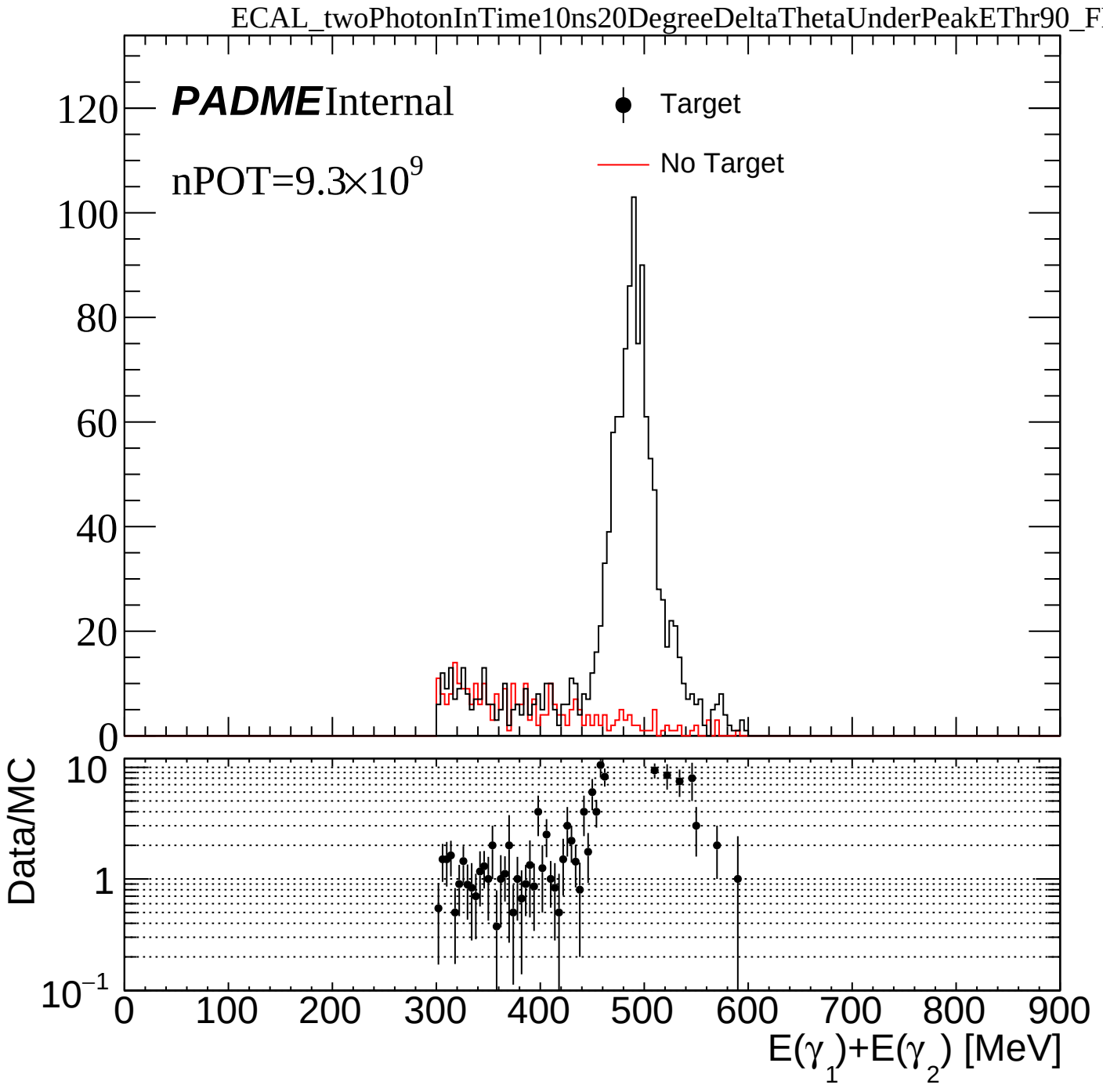

N entries 3415
UnderPeak 1921
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

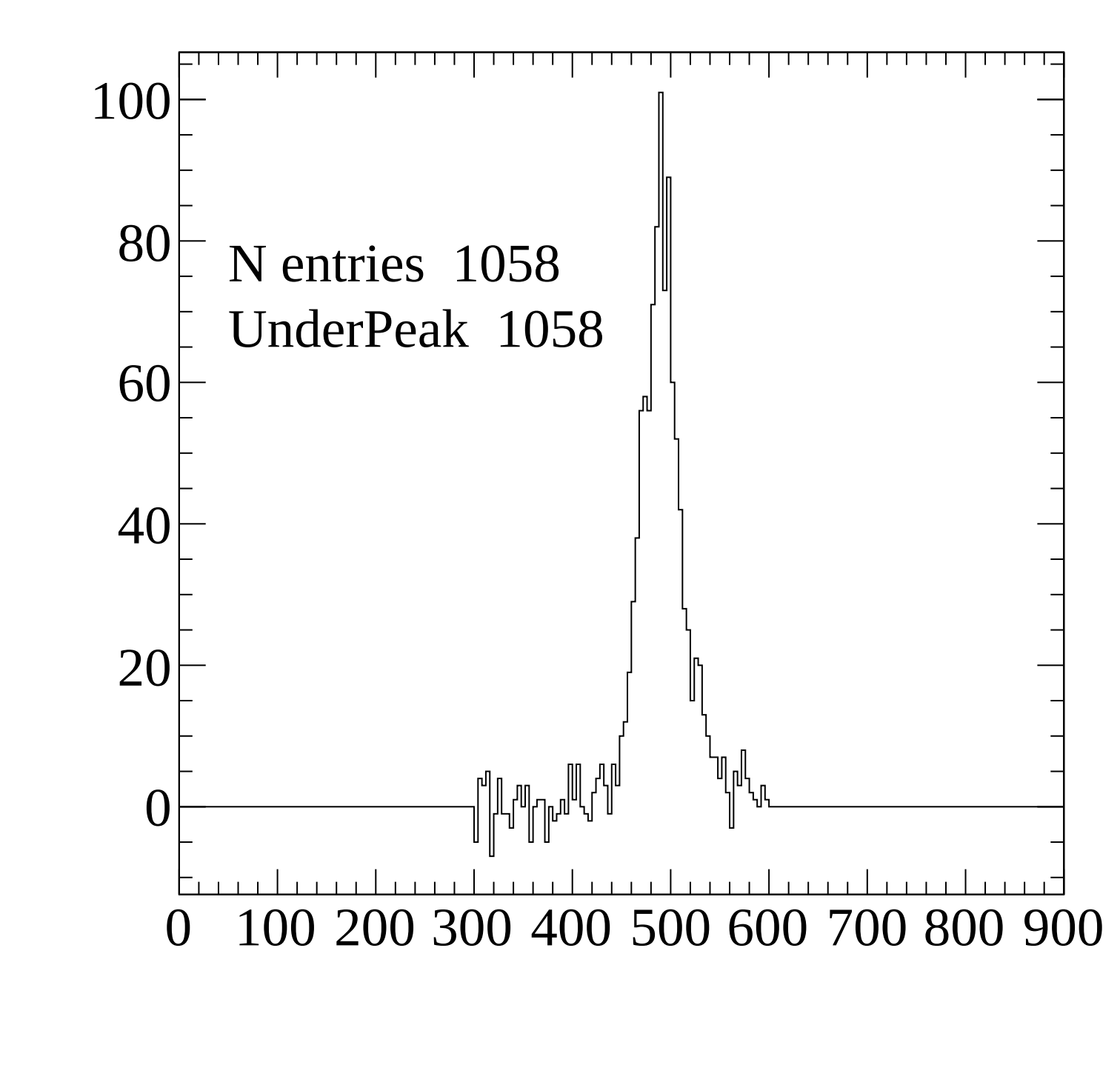

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
300
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

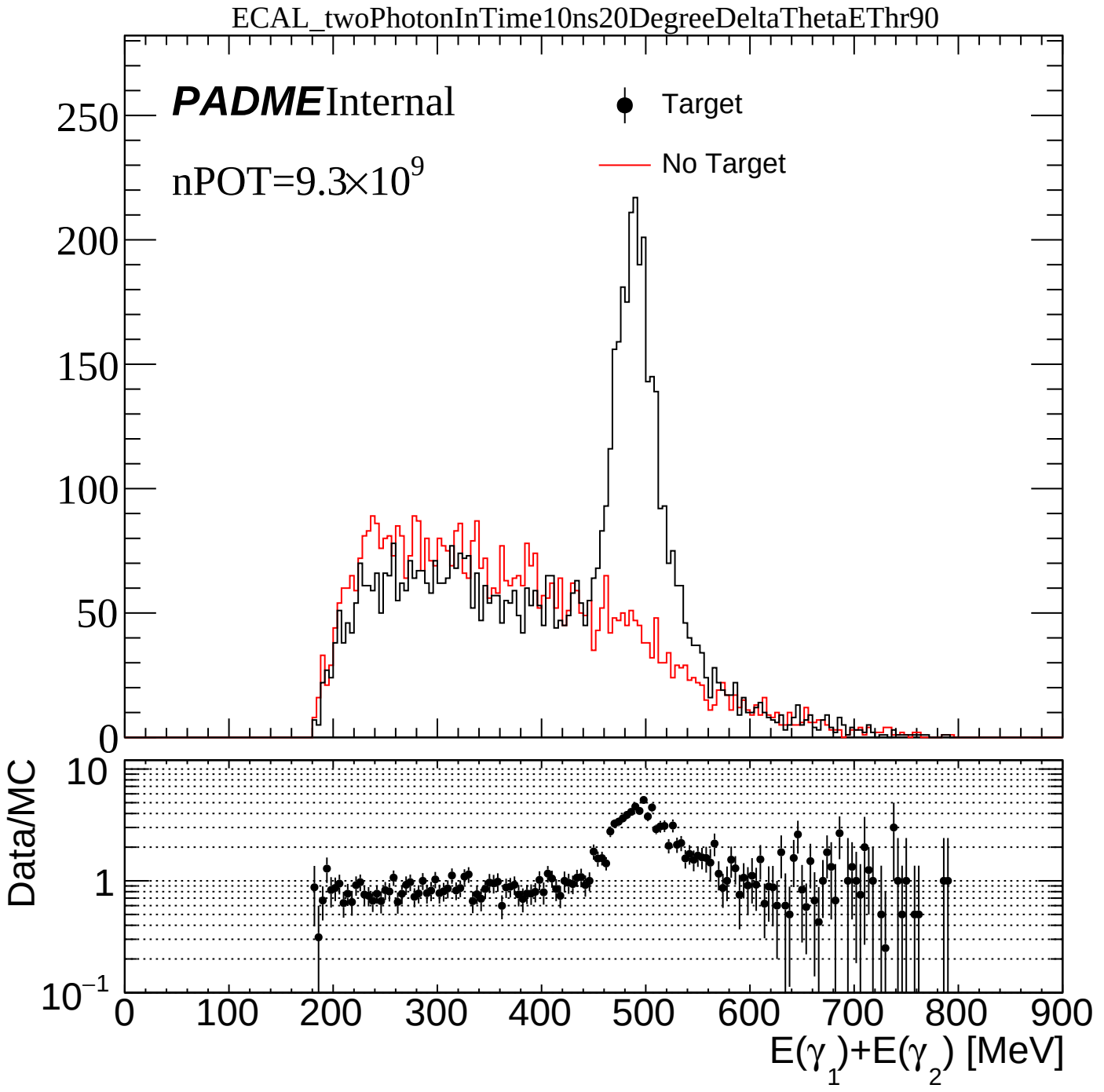

N entries 1223
UnderPeak 1853
150
100
50
0
−50
0
100
200
300
400
500
600
700
800
900

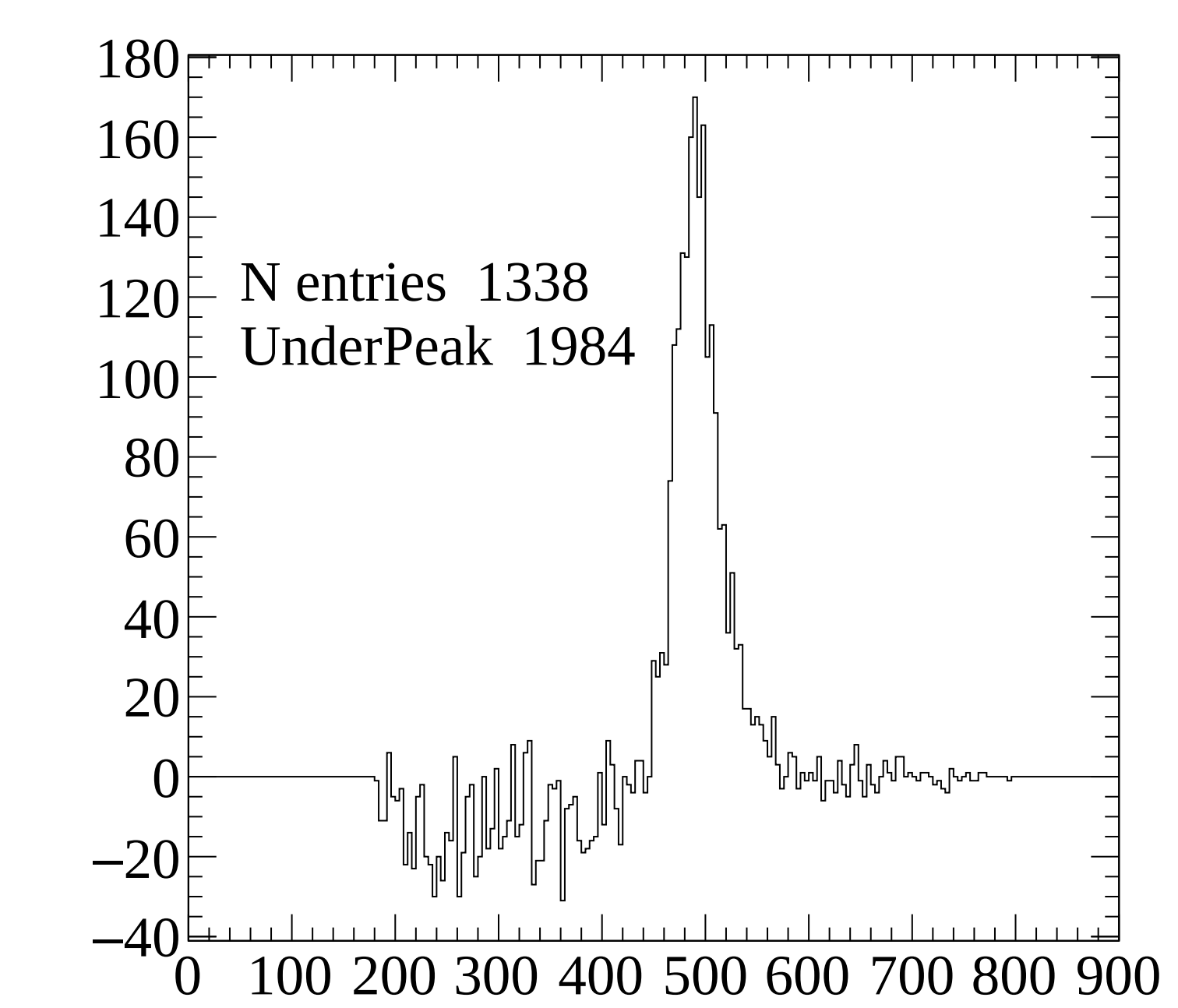

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

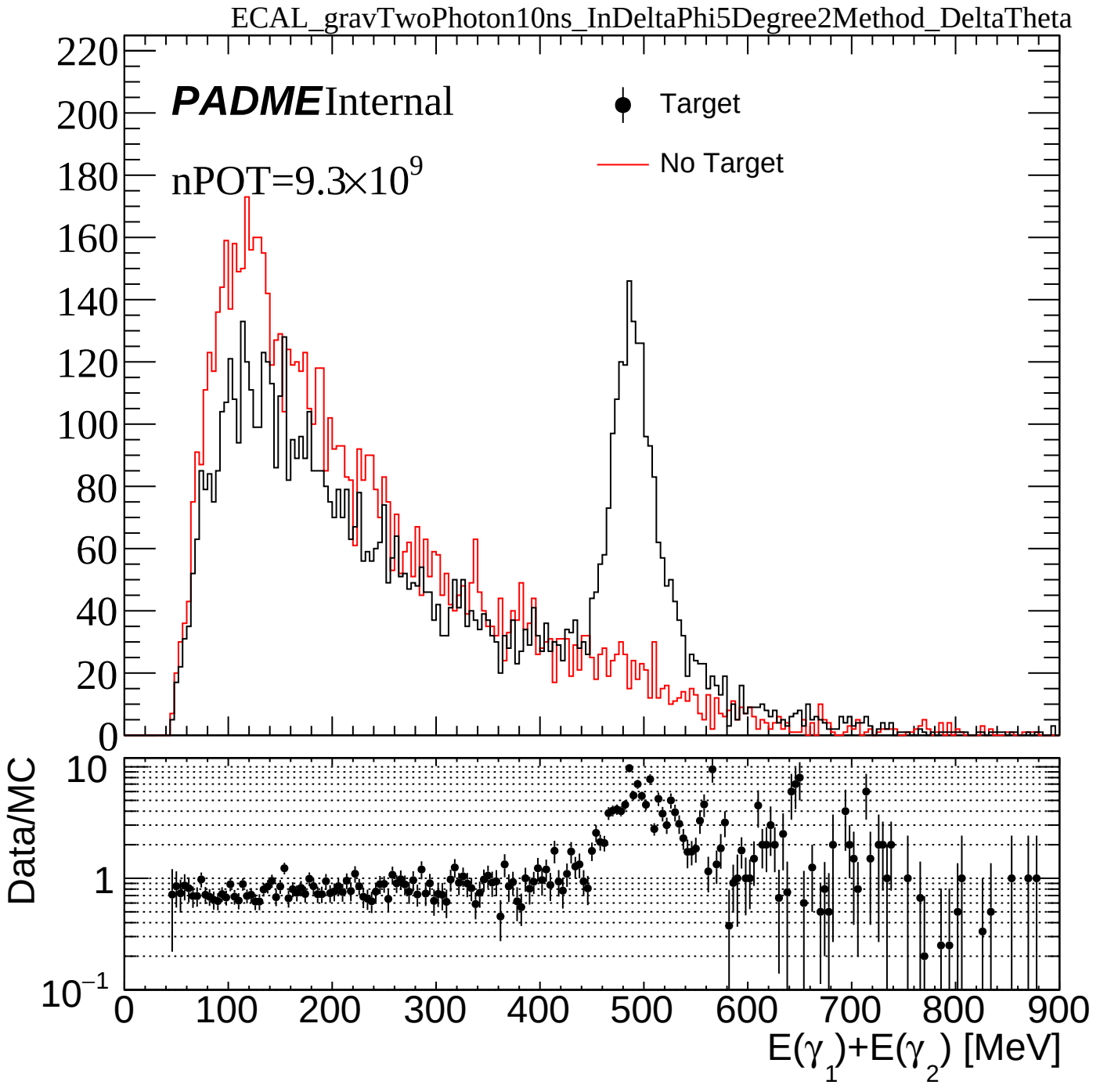

N entries 1709
UnderPeak 1977
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

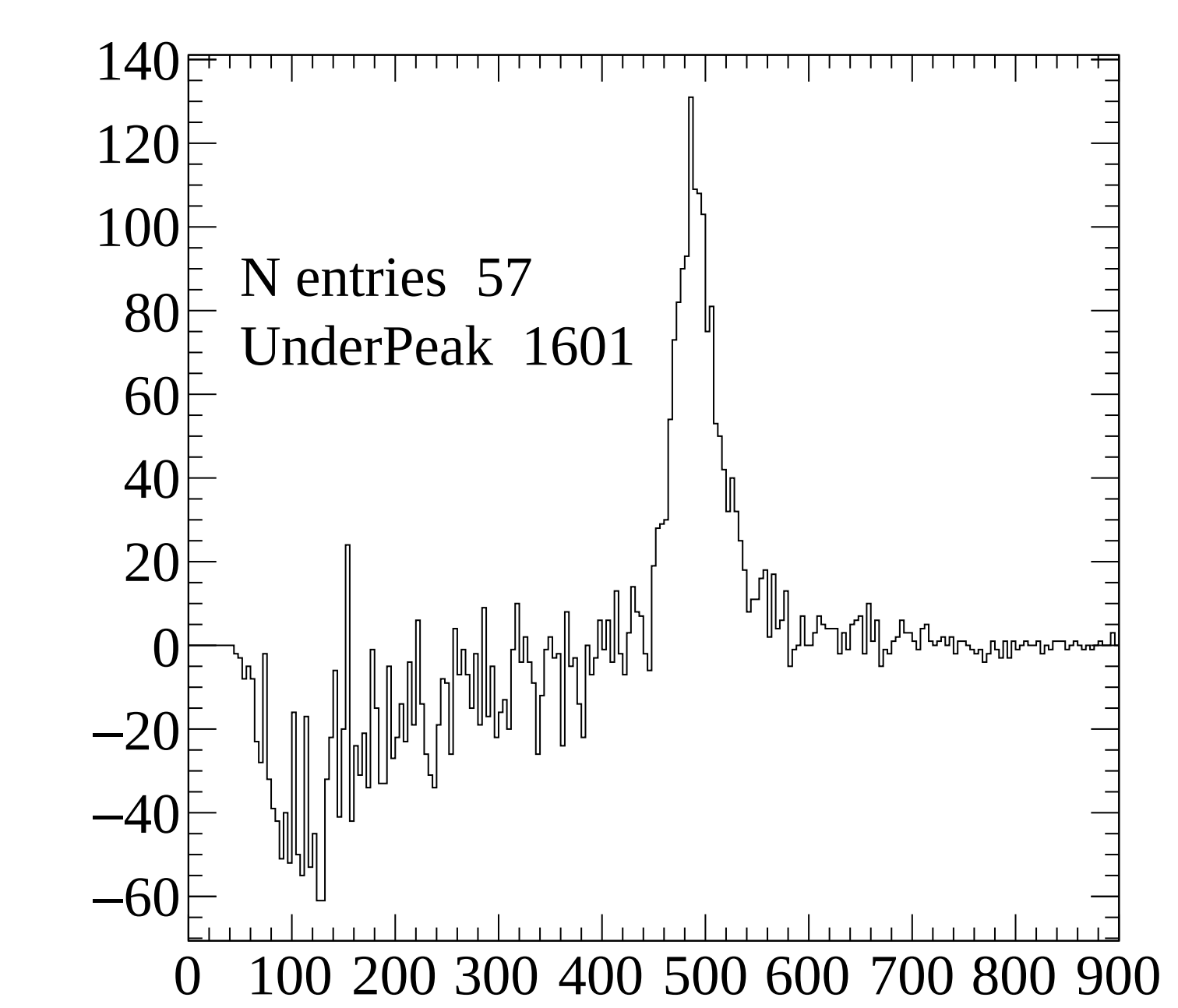

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_FR
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

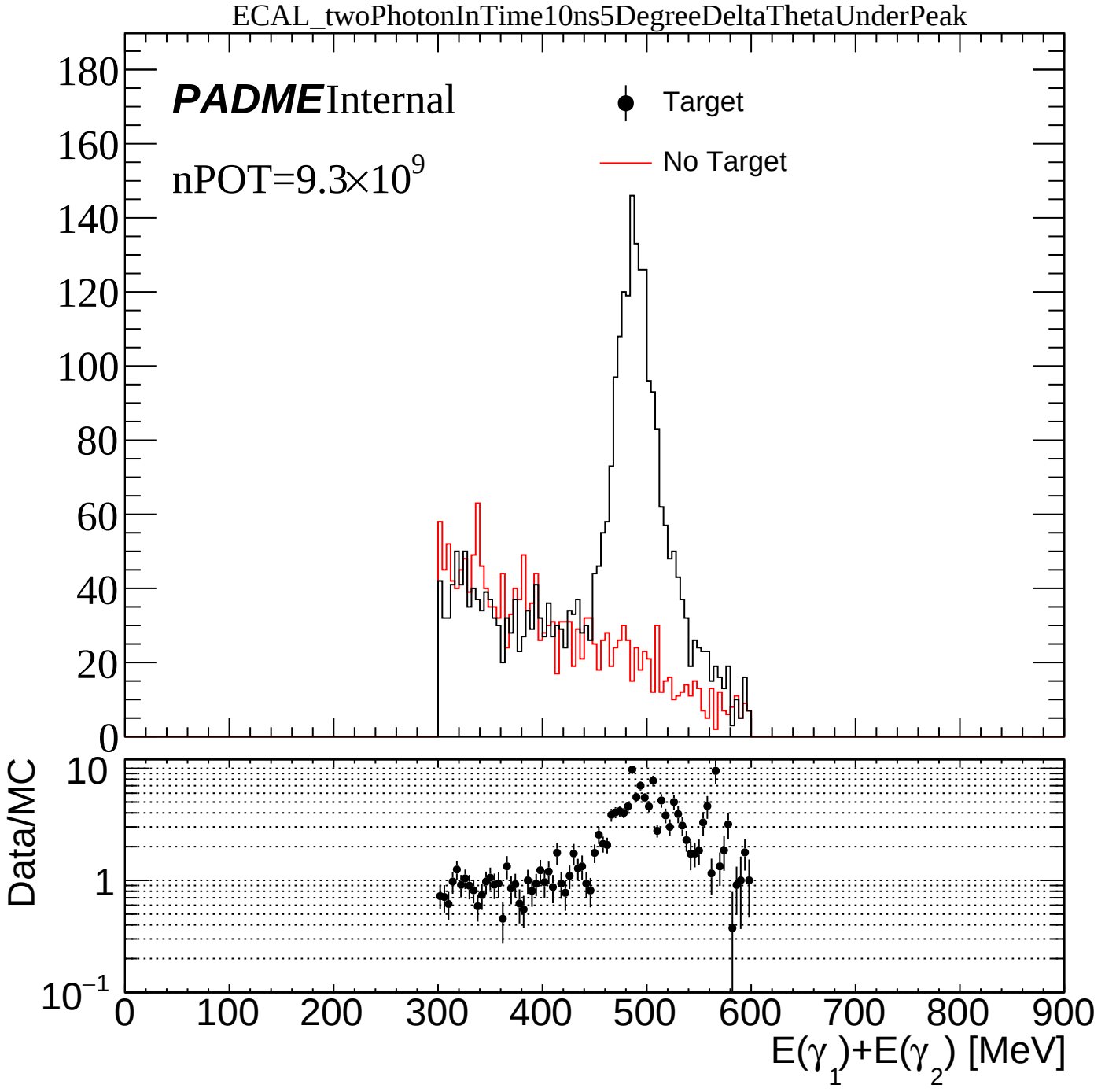

N entries 1058
UnderPeak 1058
100
80
60
40
20
0
0
100
200
300
400
500
600
700
800
900

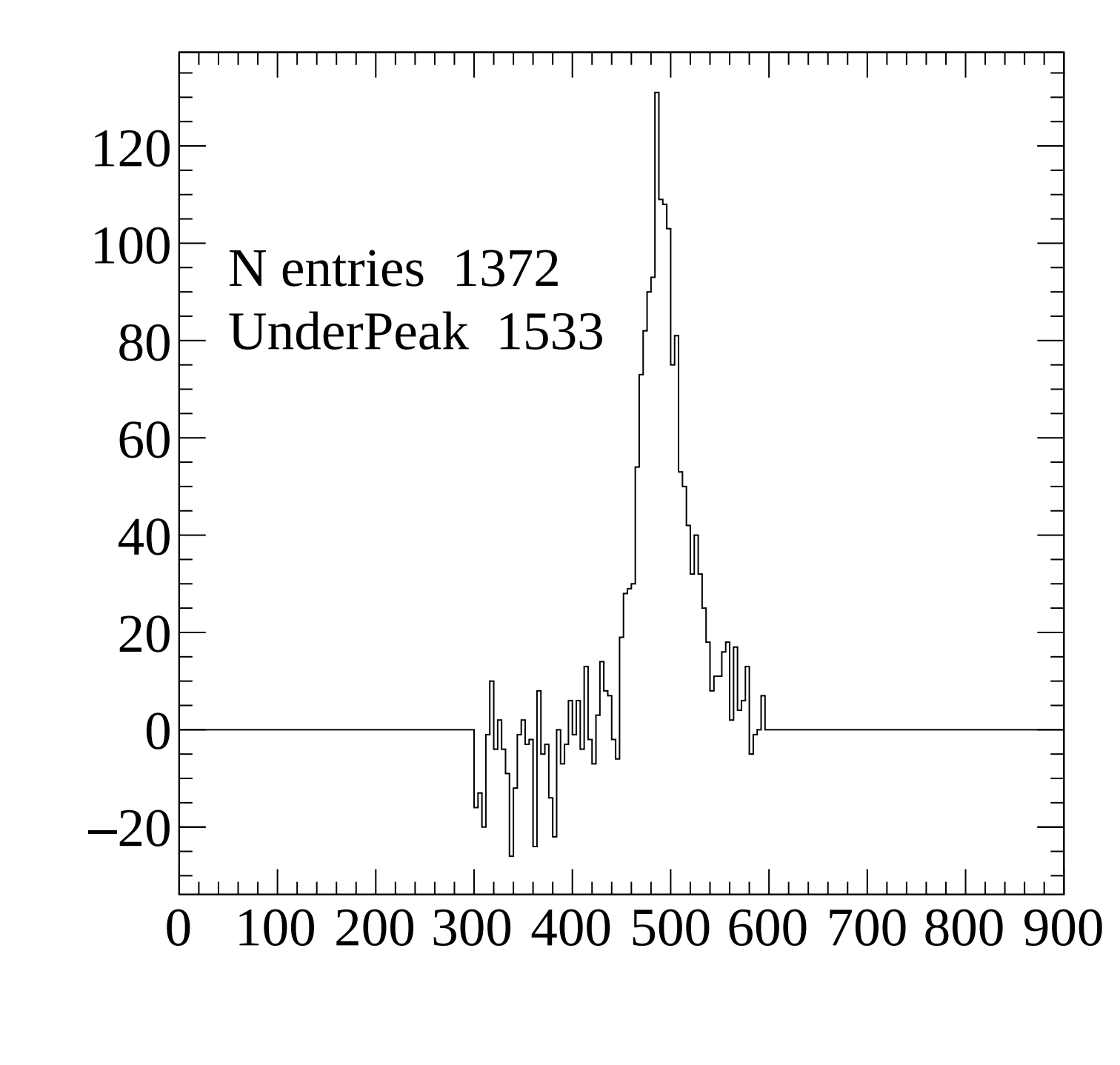

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

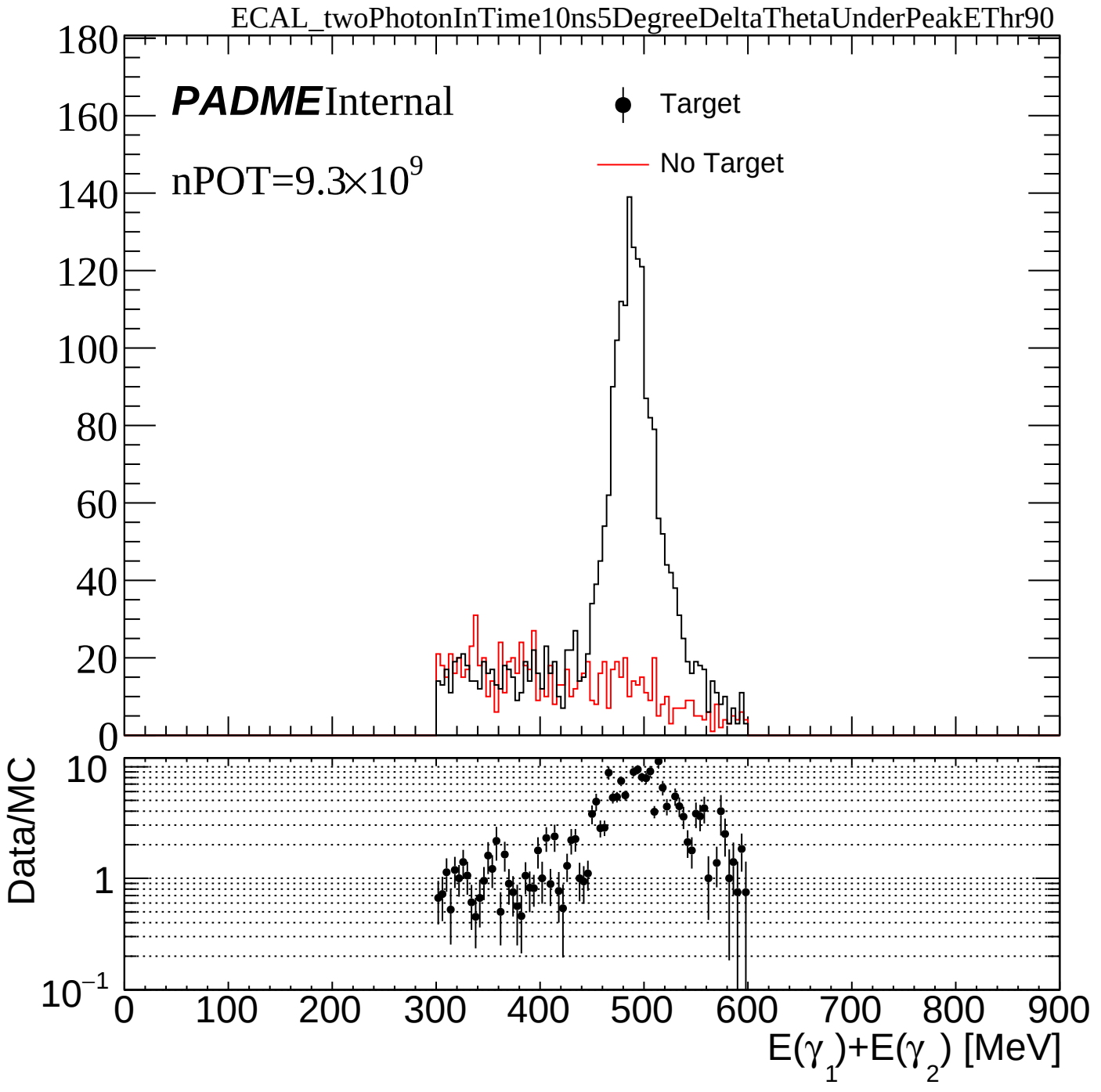

N entries 1338
UnderPeak 1984
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

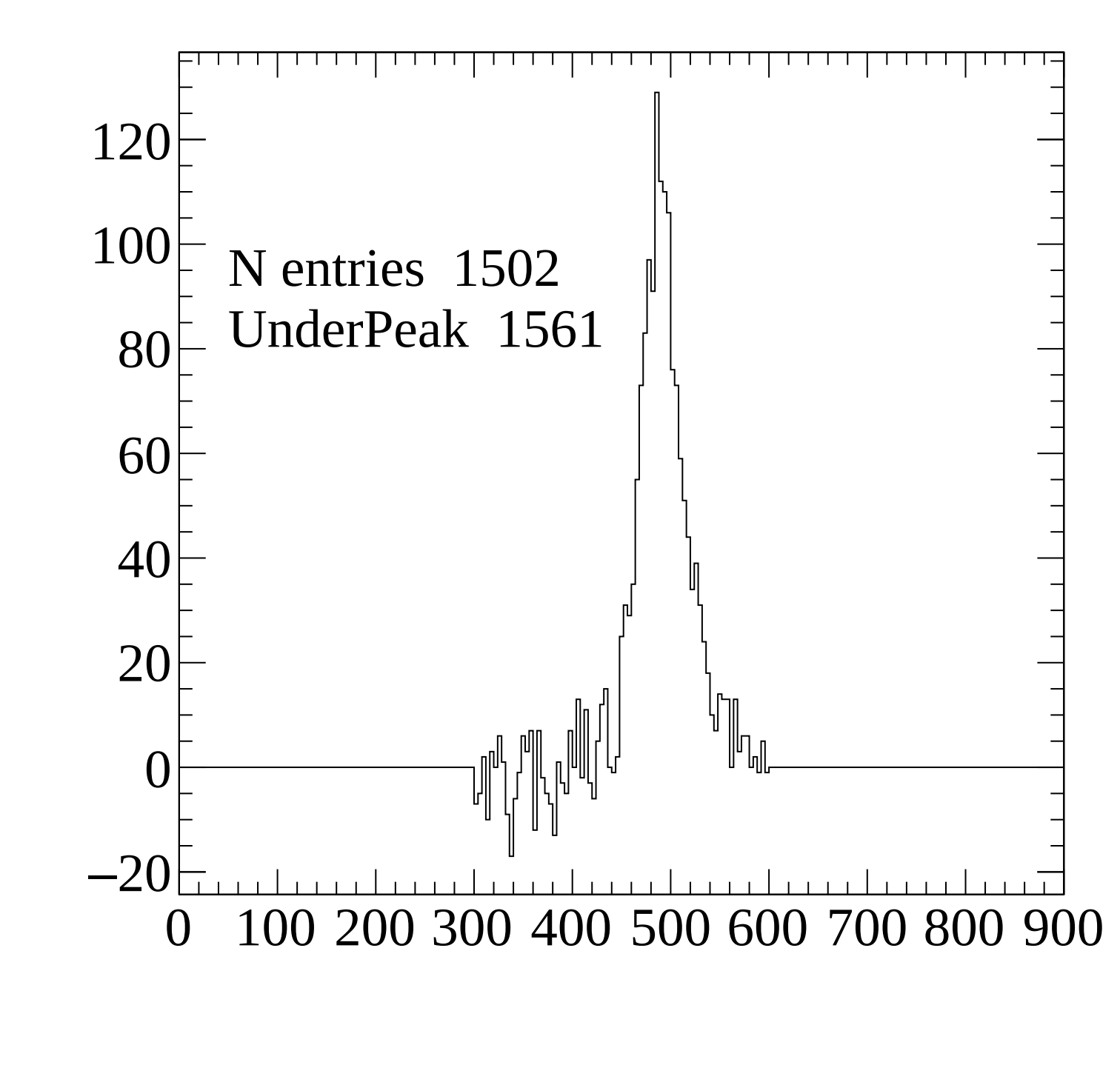

ECAL_gravTwoPhoton10ns_InDeltaPhi5Degree2Method_DeltaTheta
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

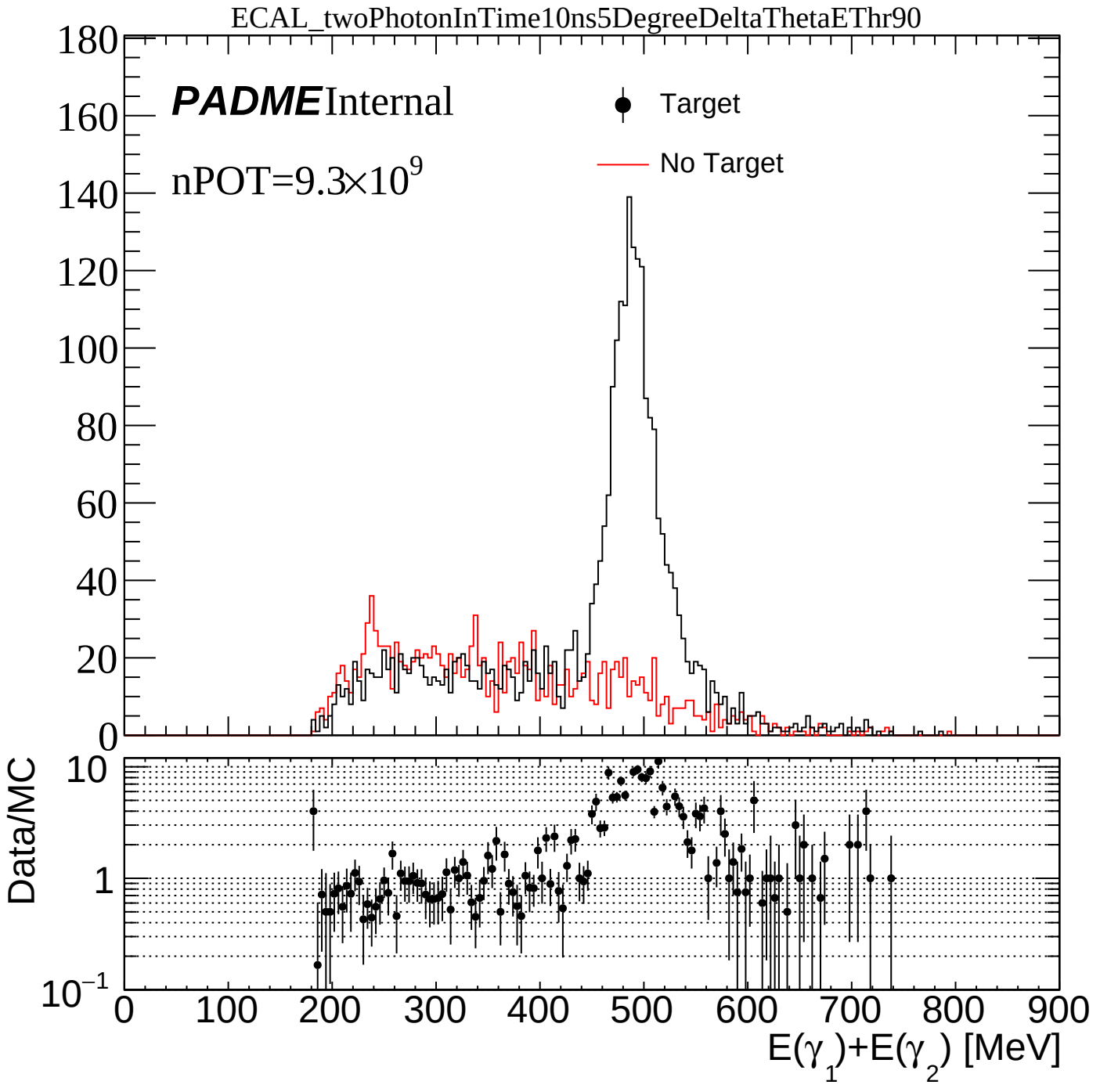

N entries 57
UnderPeak 1601
140
120
100
80
60
40
20
0
−20
−40
−60
0
100
200
300
400
500
600
700
800
900

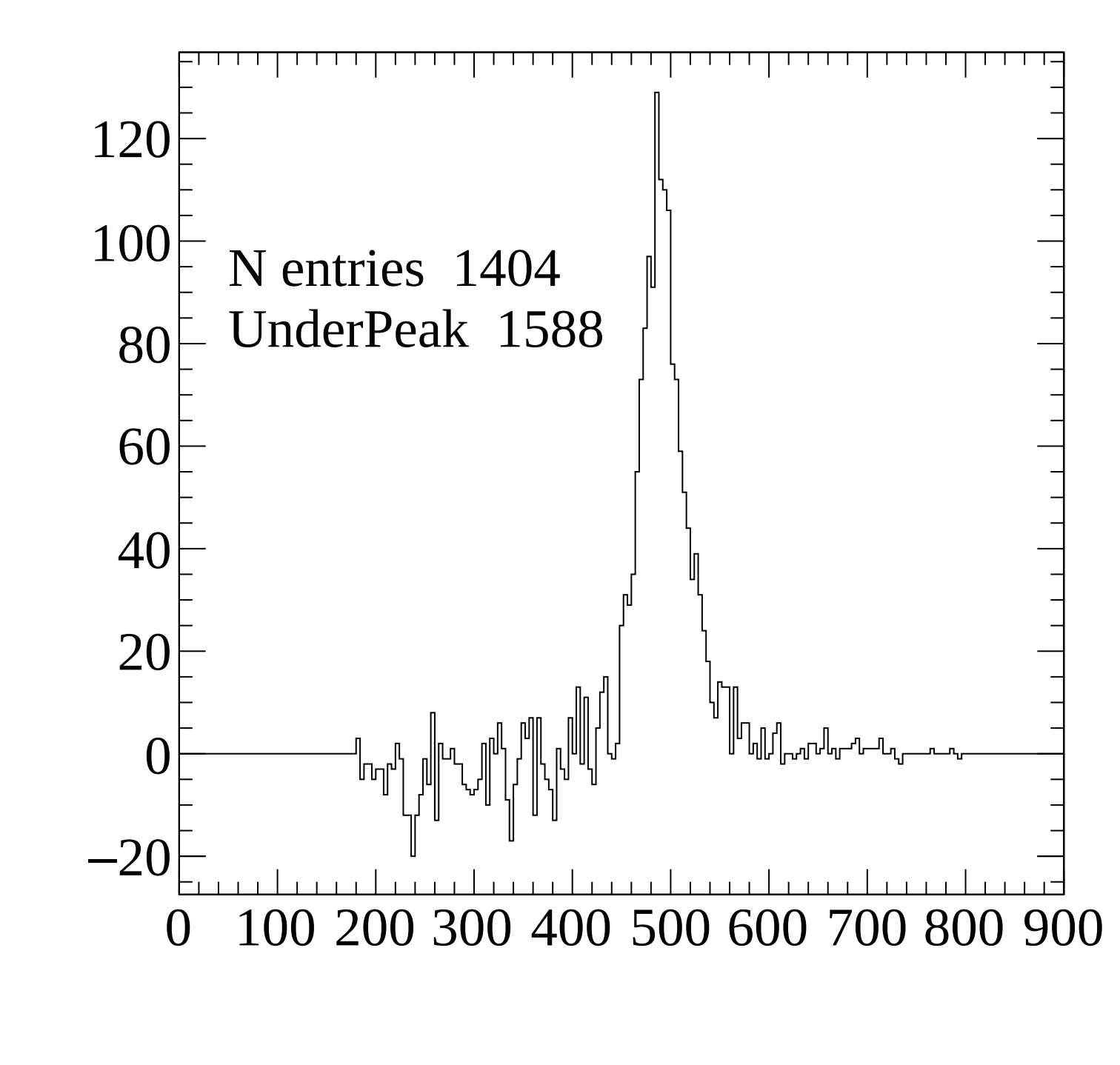

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

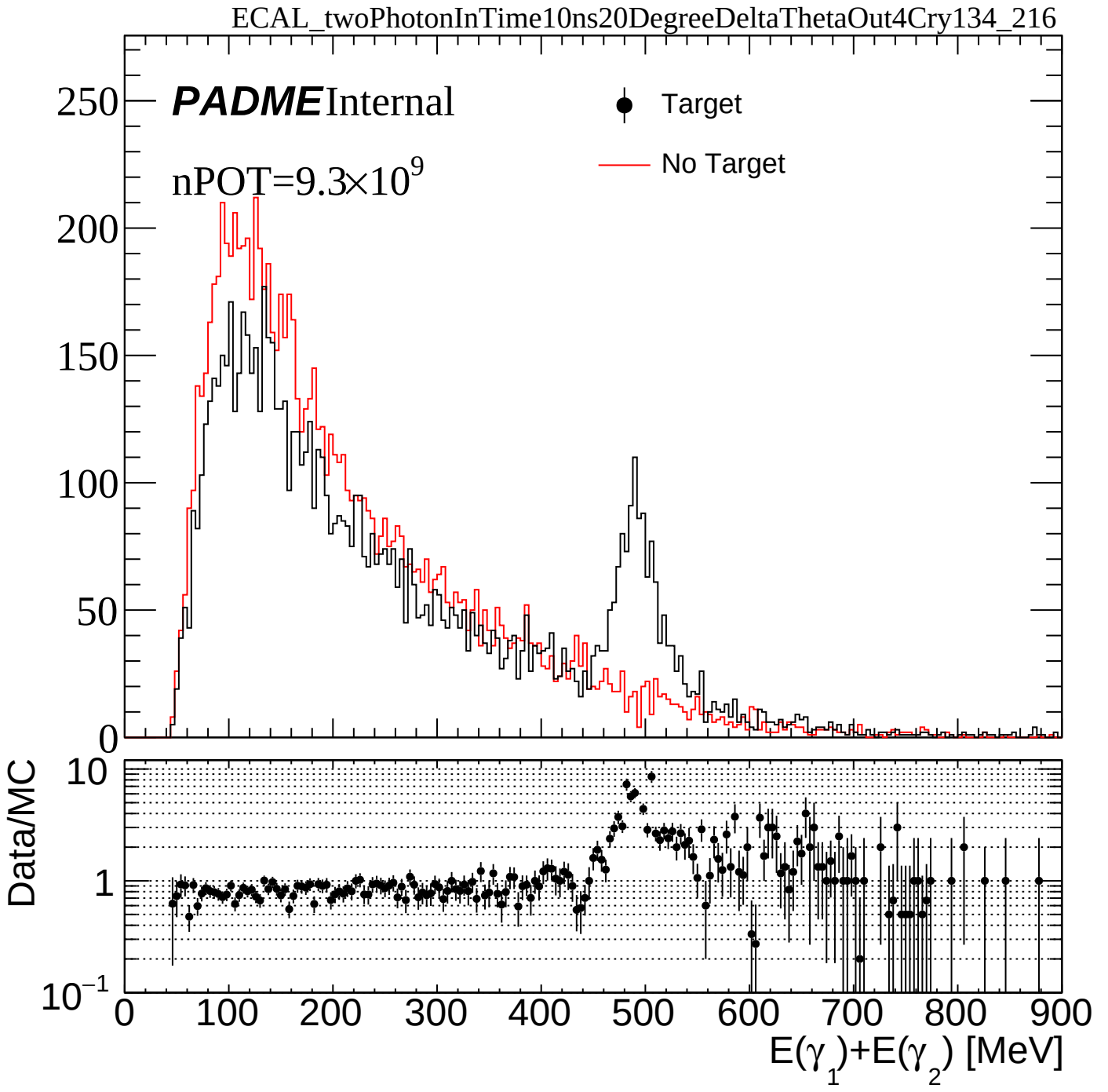

N entries 1372
UnderPeak 1533
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

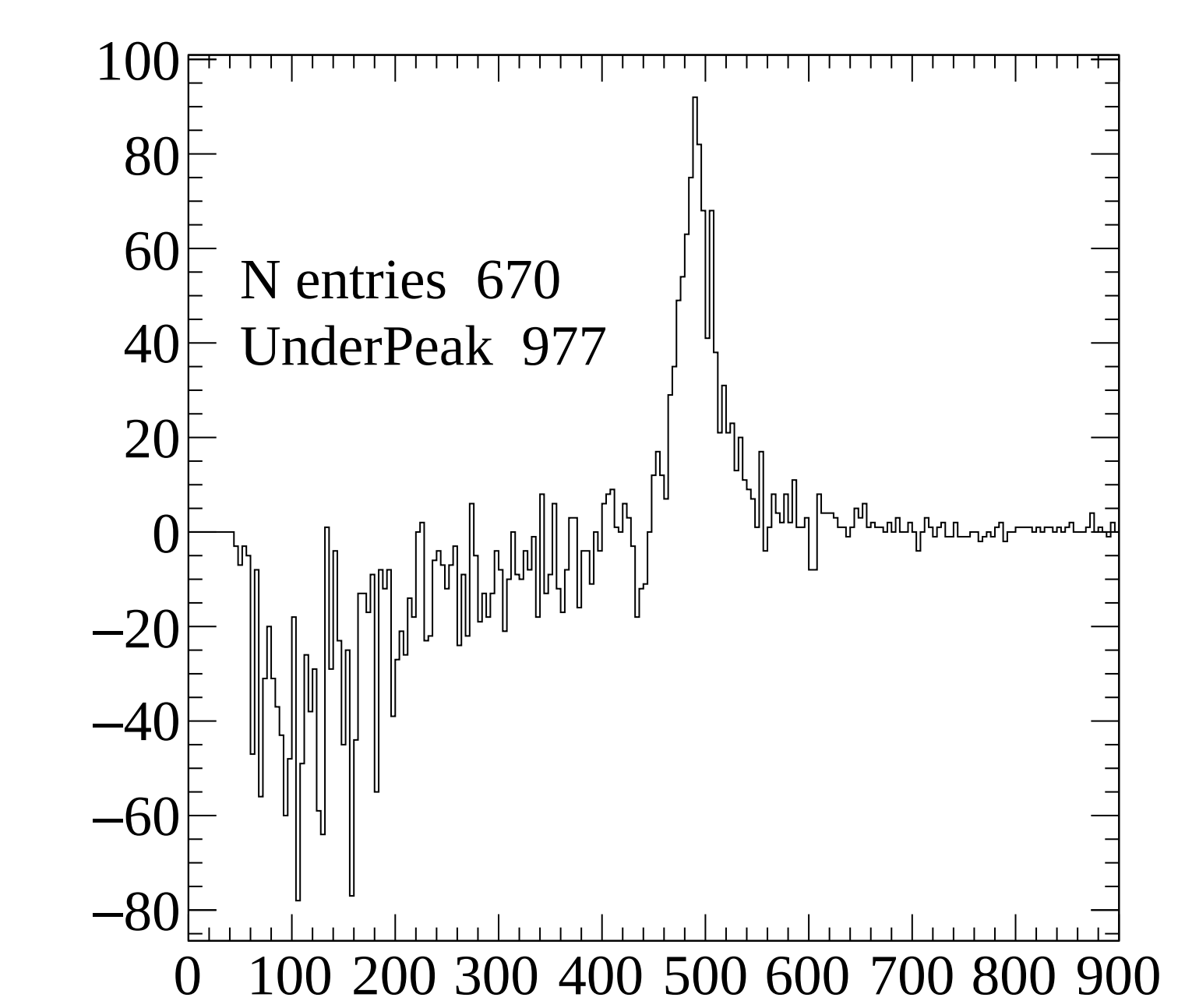

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

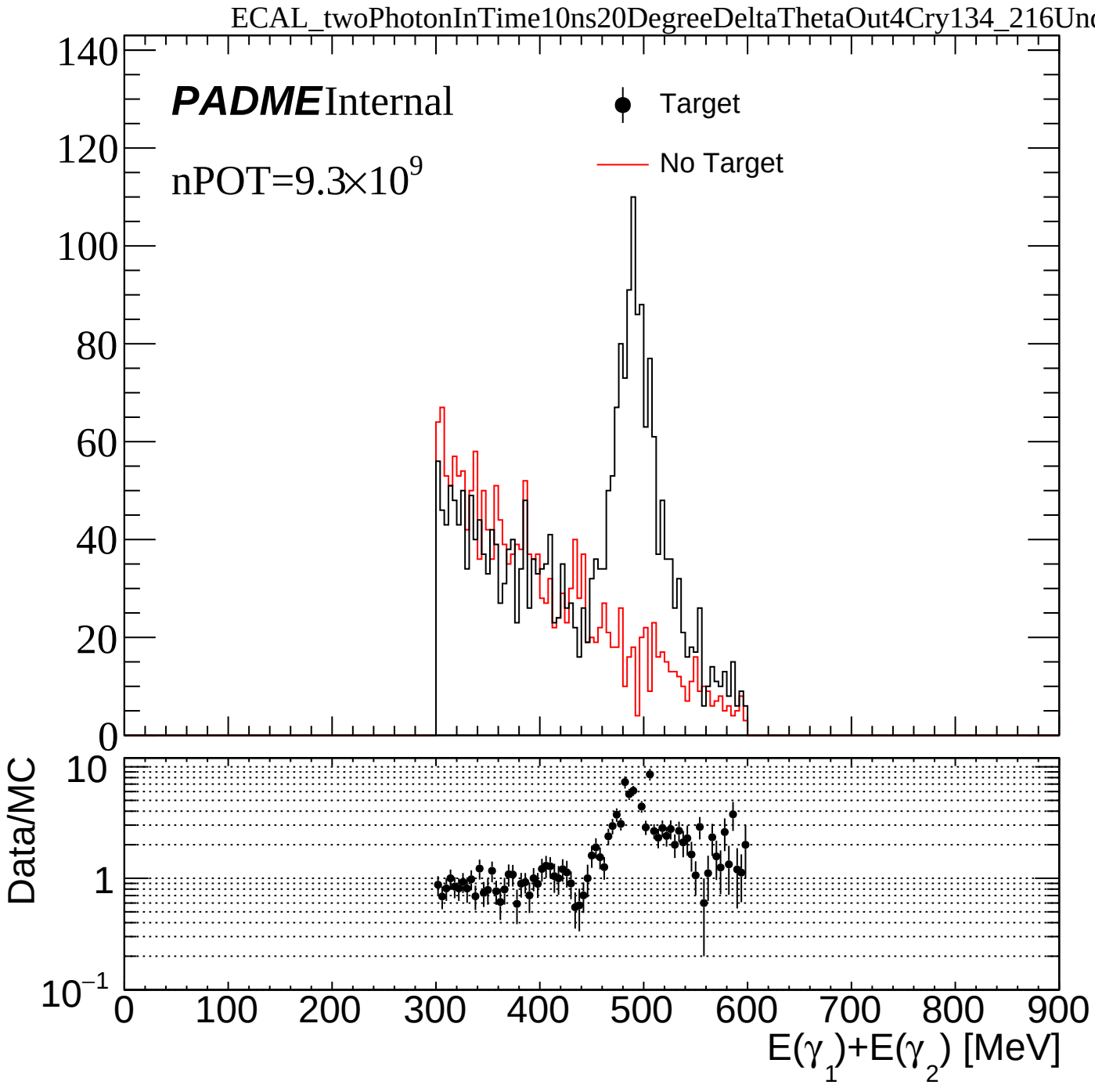

N entries 1502
UnderPeak 1561
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

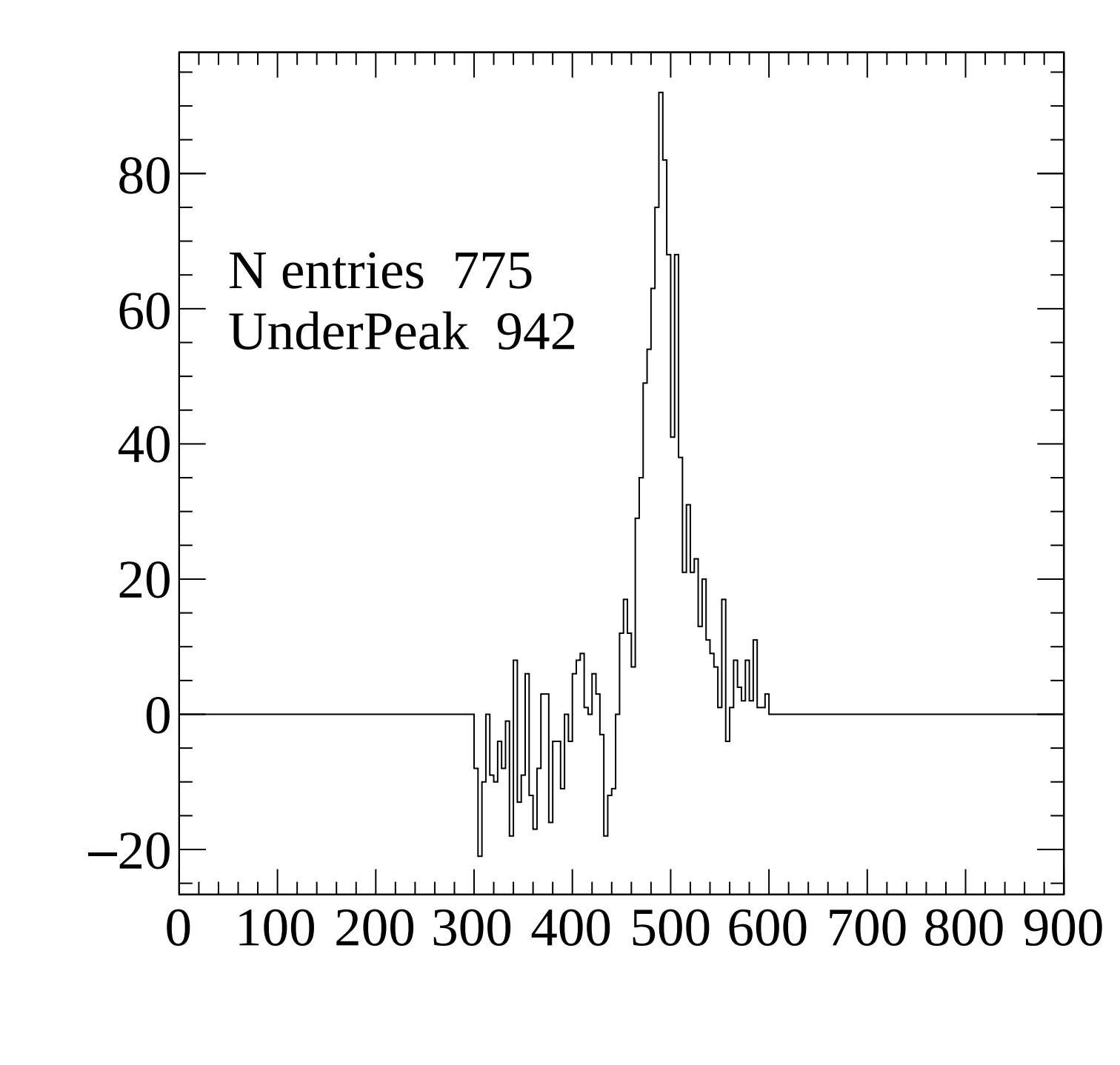

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

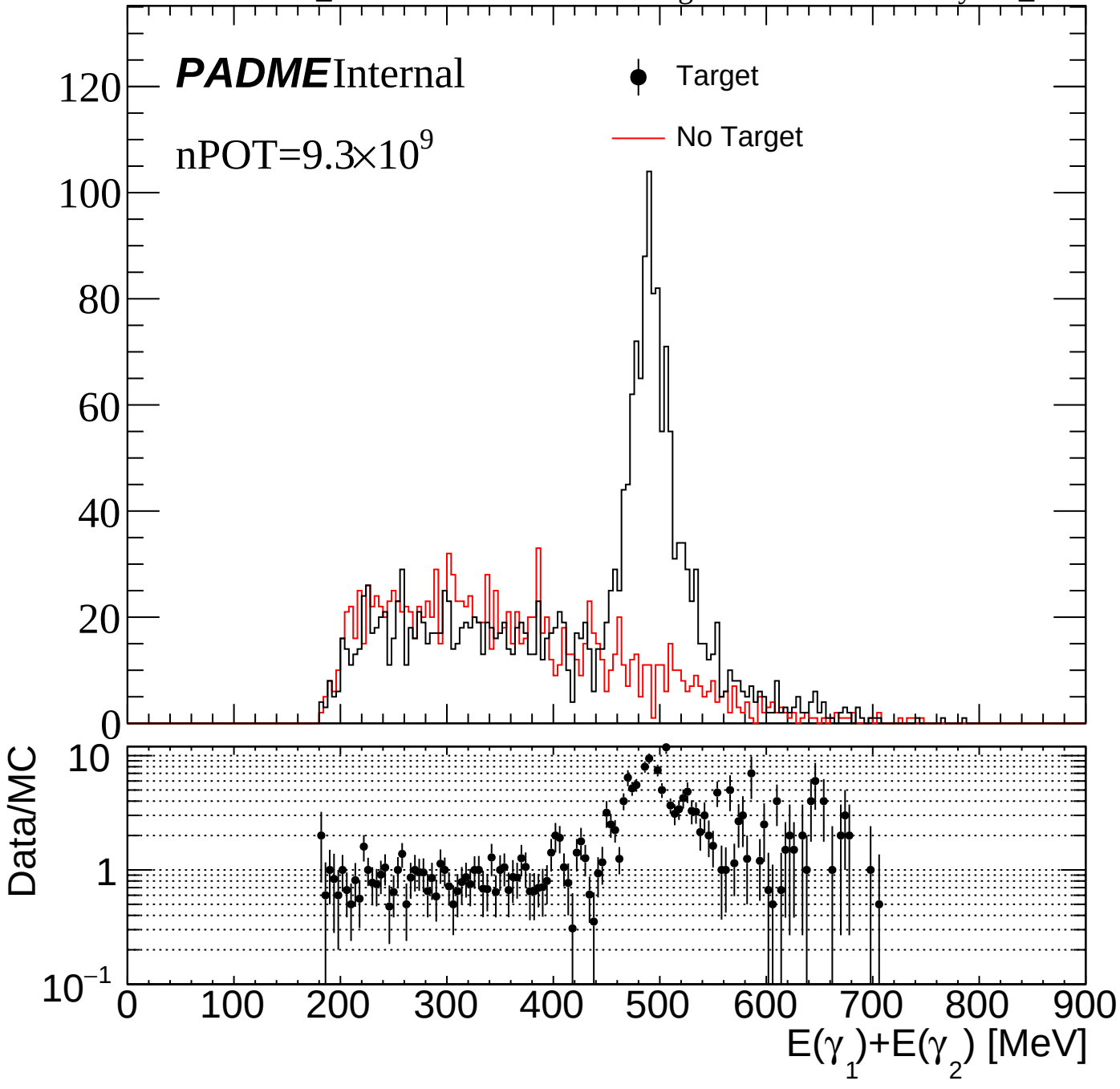

N entries 1404
UnderPeak 1588
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

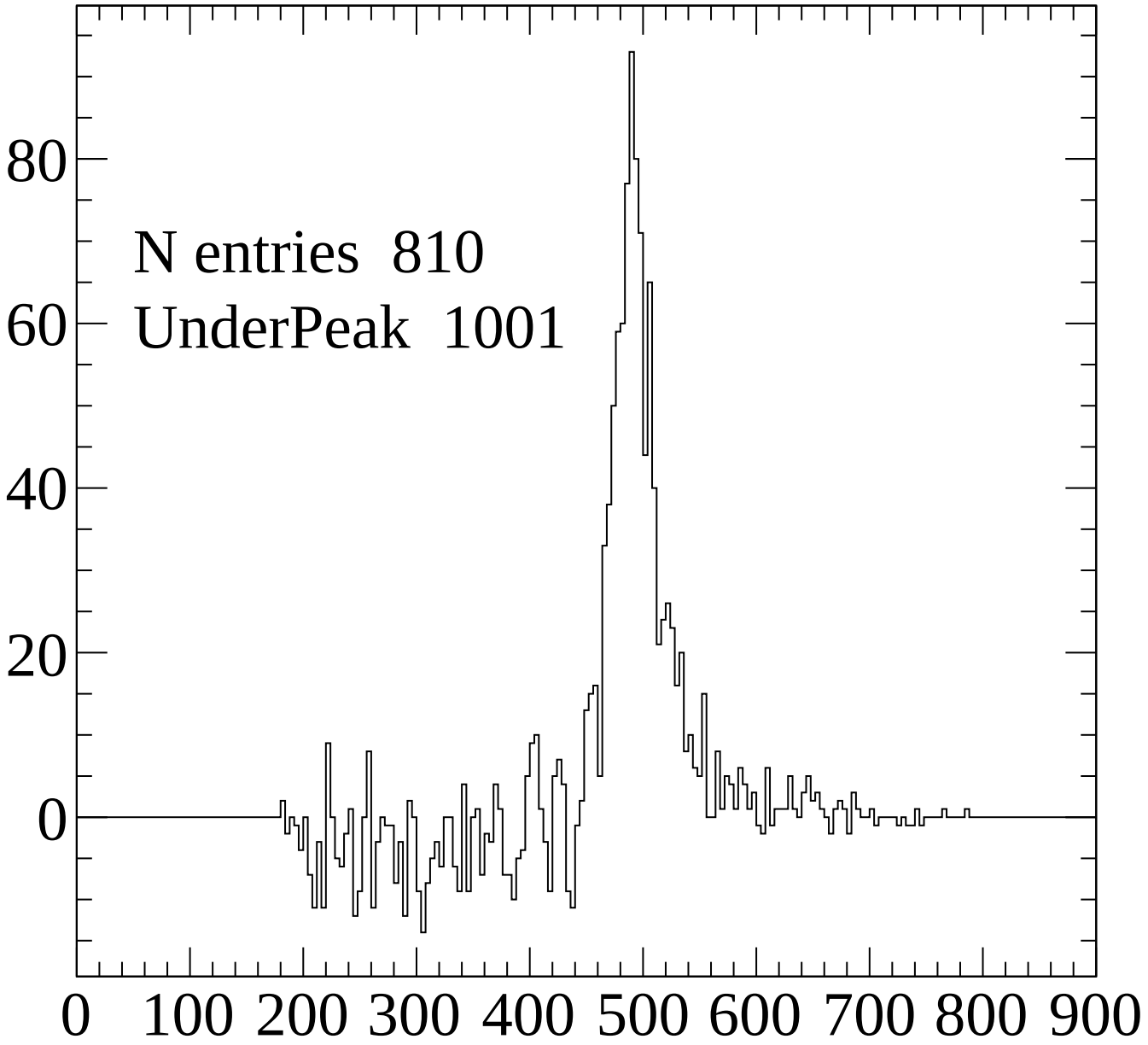

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaOut4Cry134_216
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

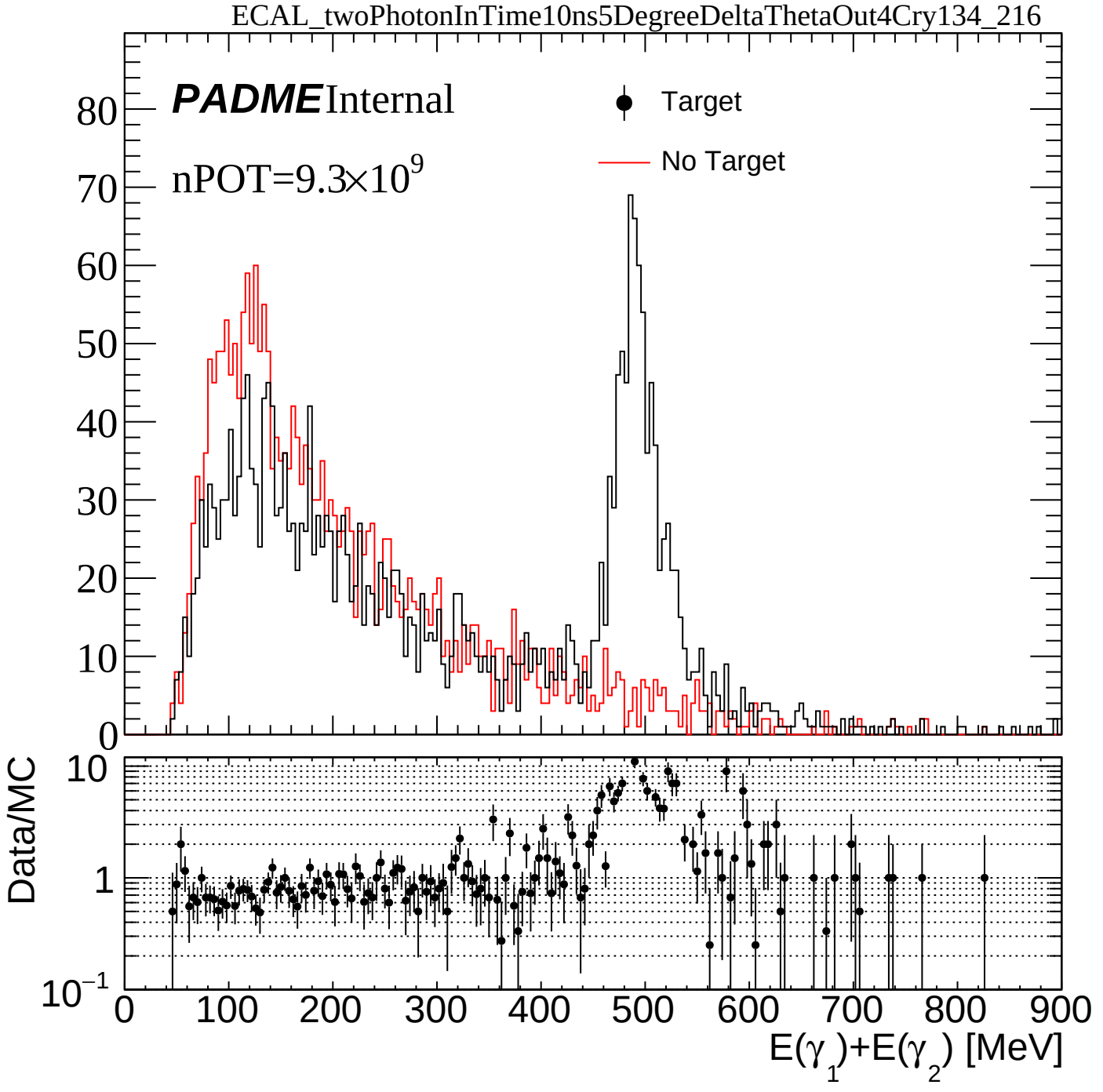

N entries 670
UnderPeak 977
100
80
60
40
20
0
−20
−40
−60
−80
0
100
200
300
400
500
600
700
800
900

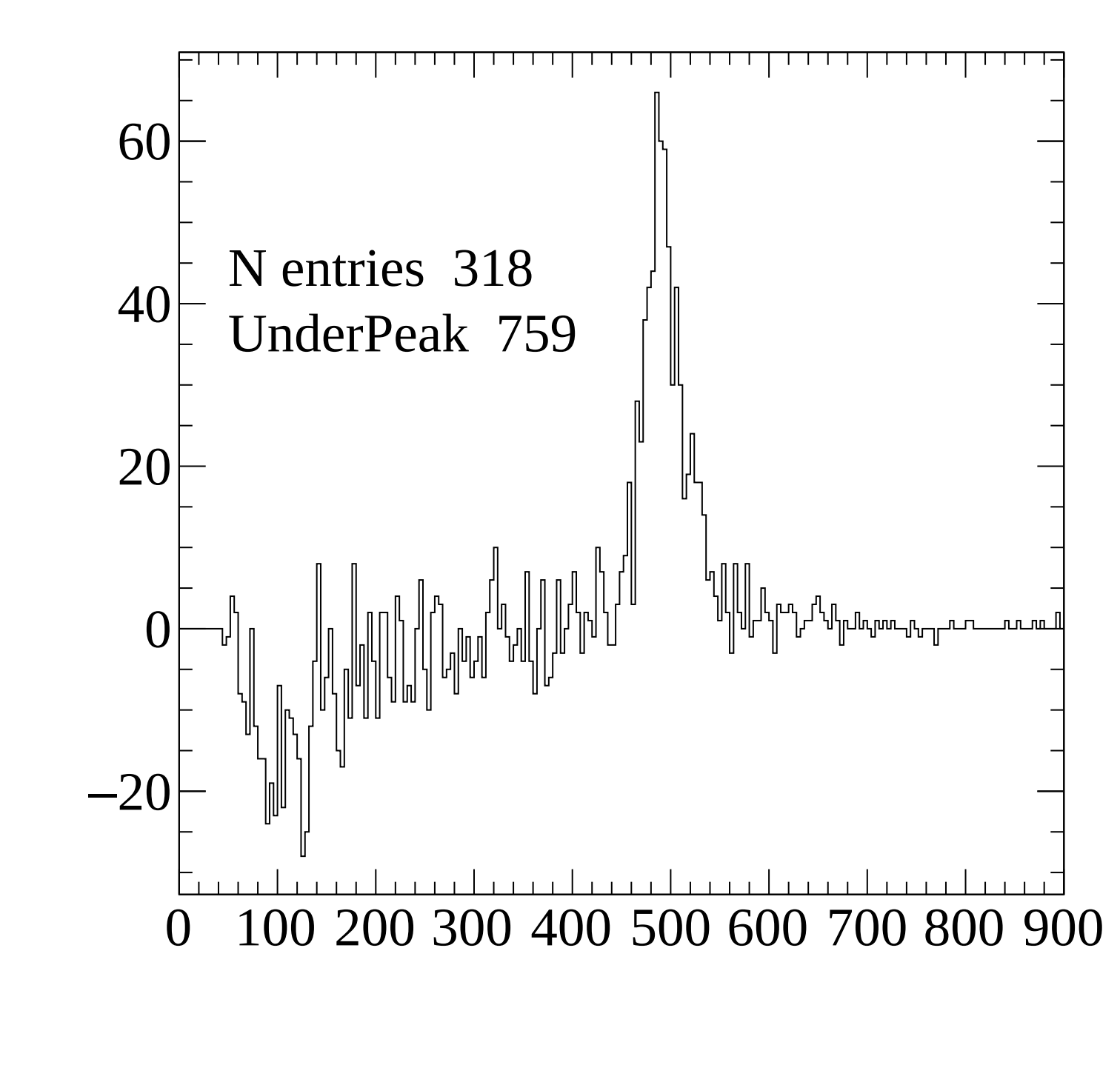

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaOut4Cry134_216Unde
PADME Internal
nPOT=9.3×10^9
Target
No Target
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

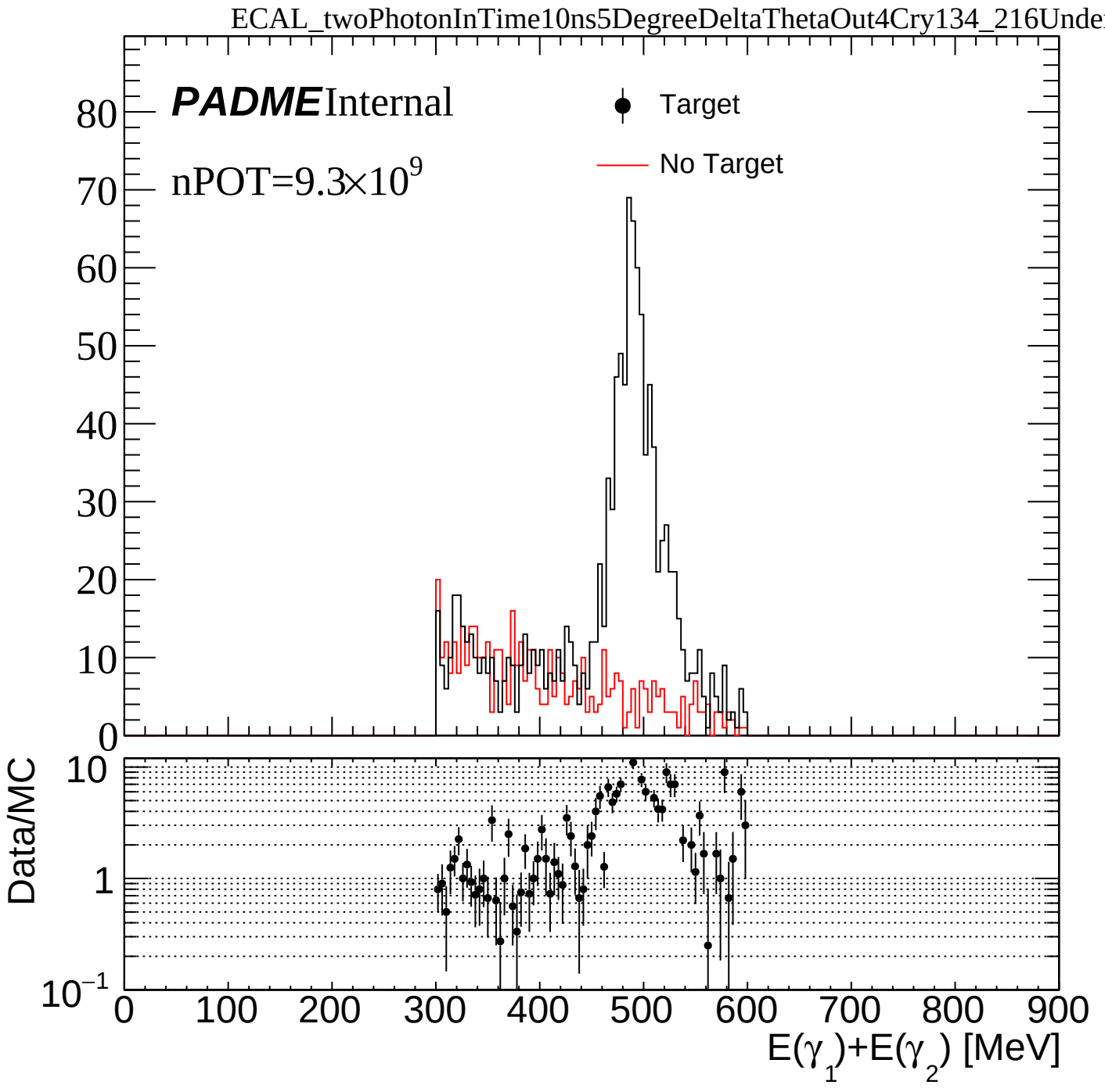

N entries 775
UnderPeak 942
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

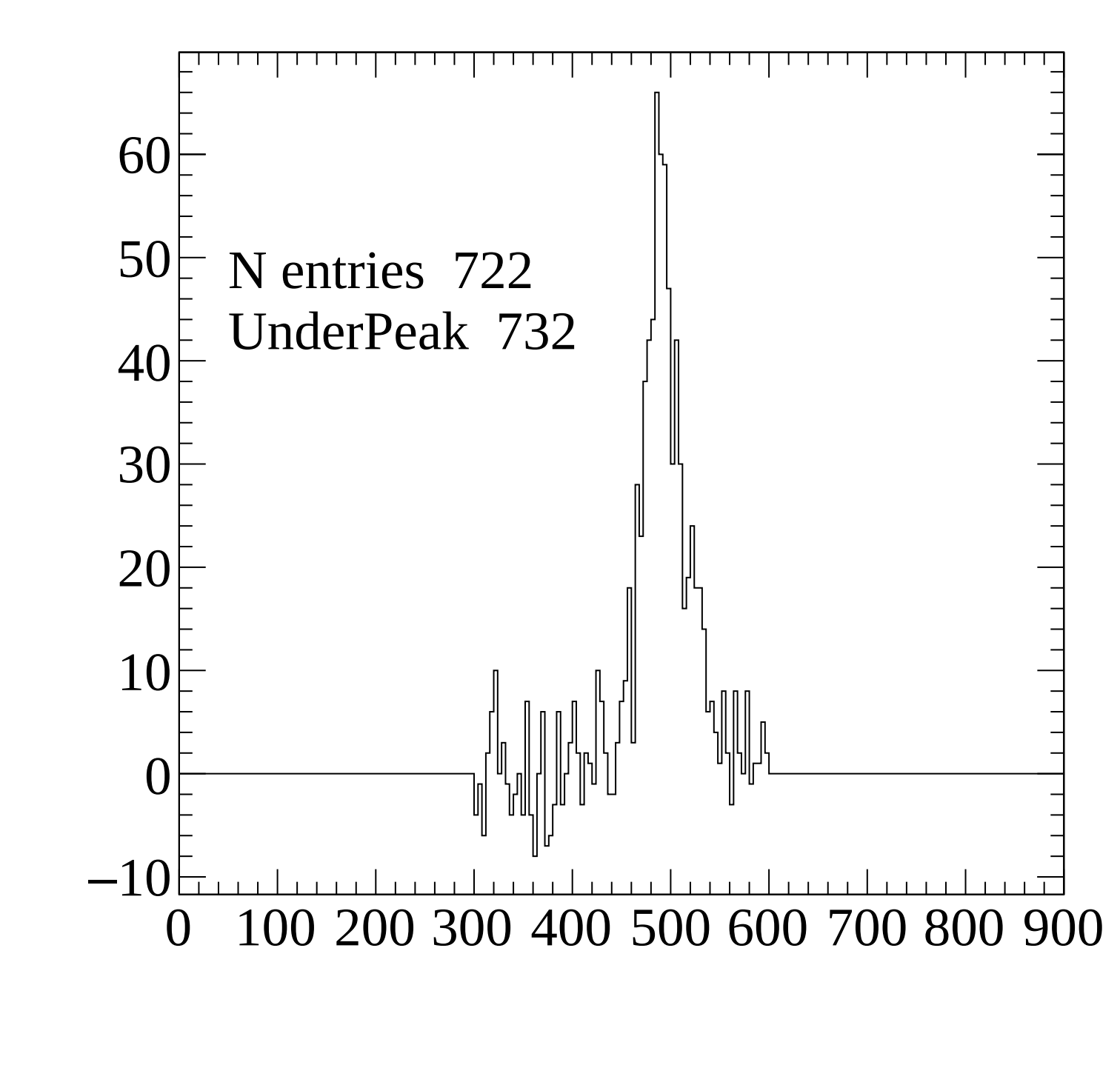

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaOut4Cry134_216EThr
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

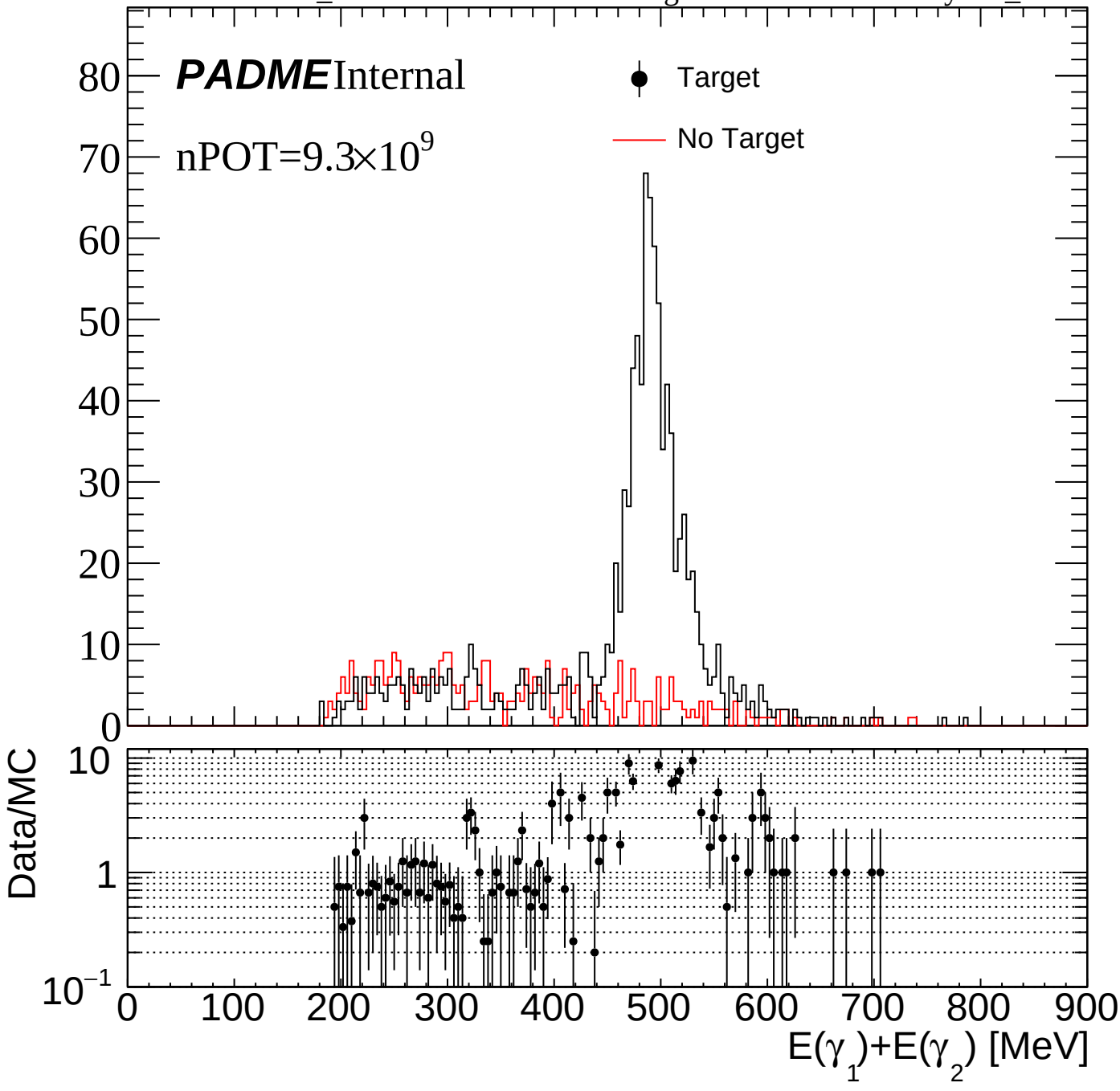

N entries 810
UnderPeak 1001
80
60
40
20
0
0
100
200
300
400
500
600
700
800
900

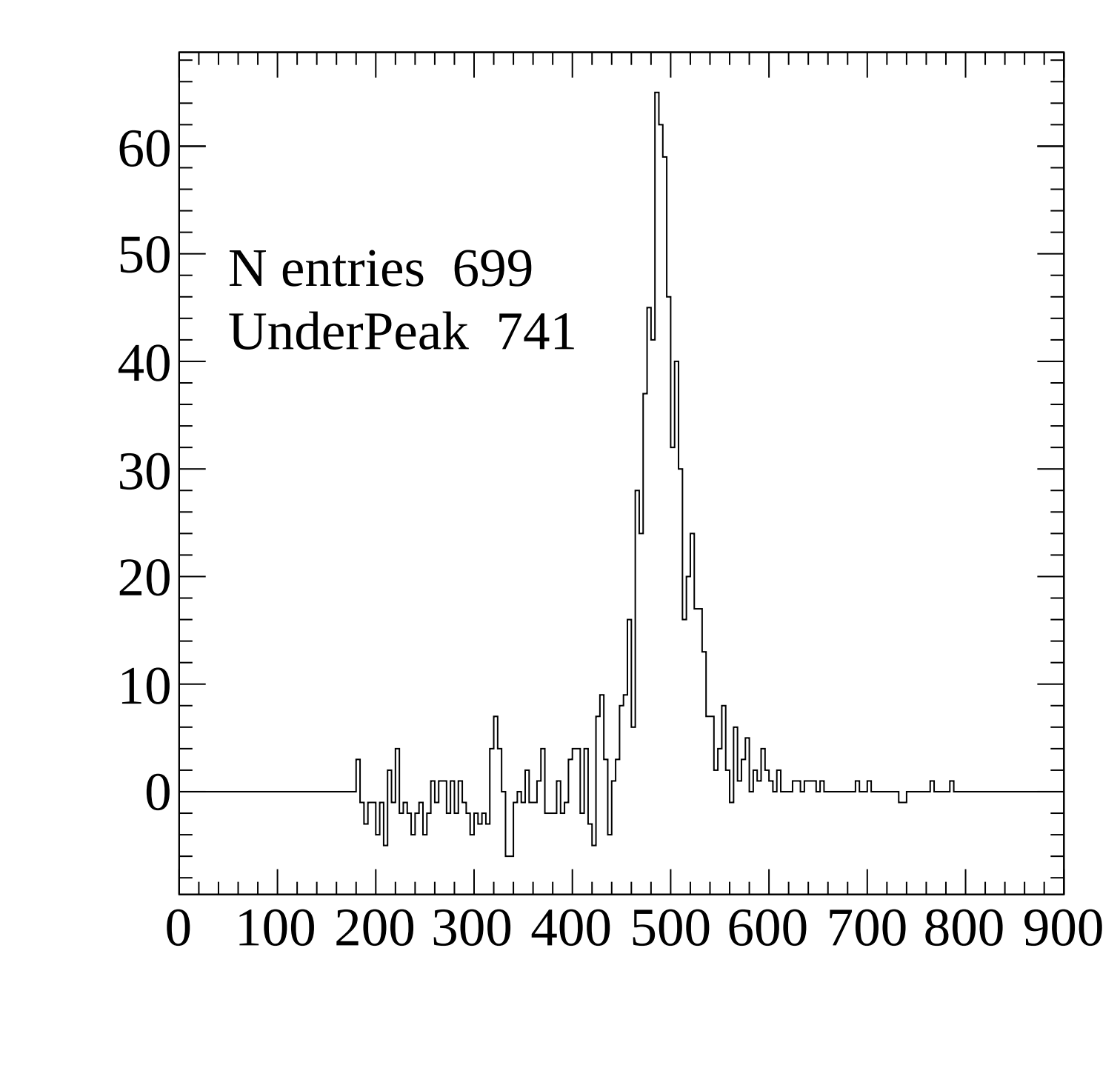

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaOut4Cry134_216
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

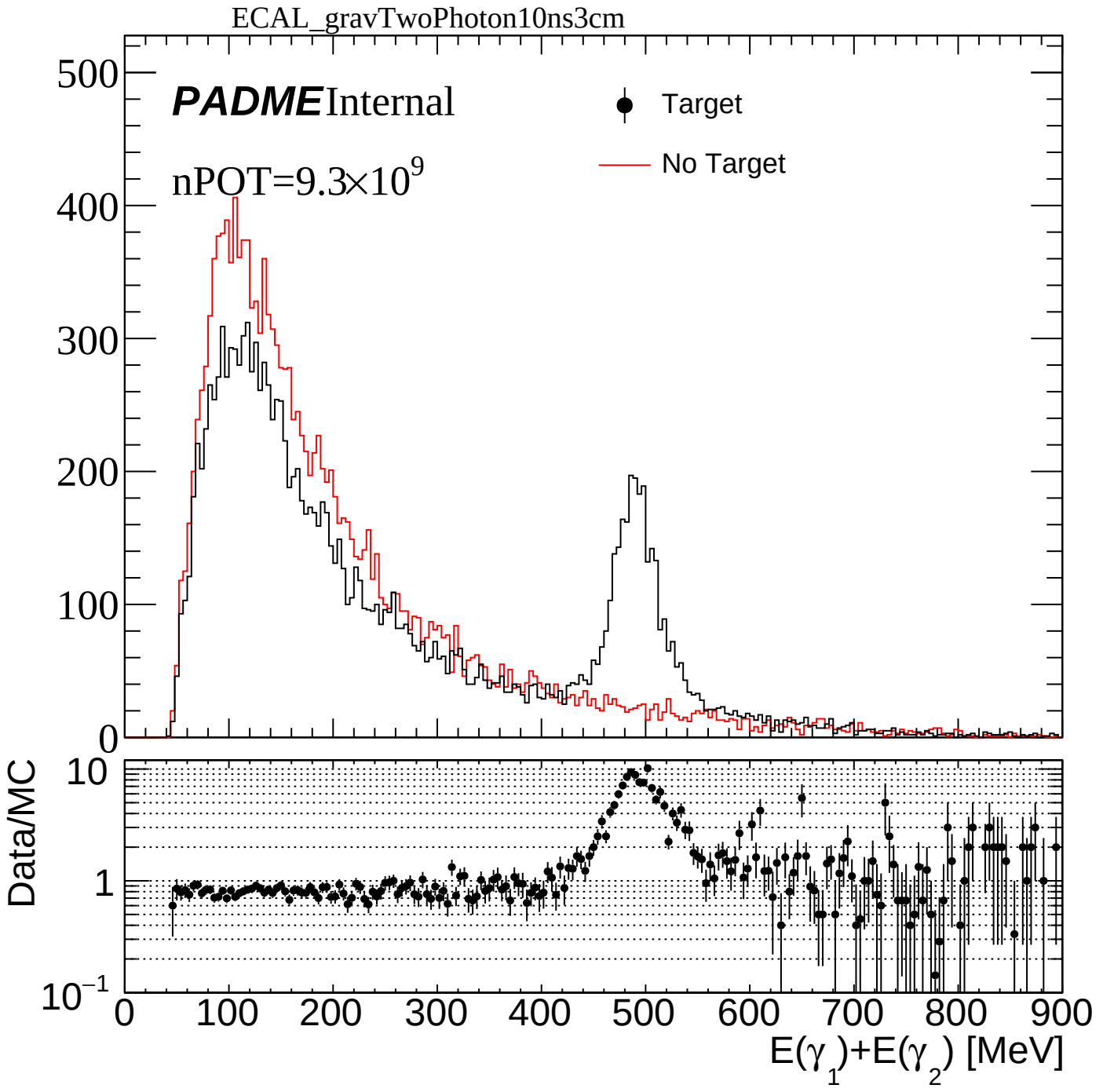

N entries 318
UnderPeak 759
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

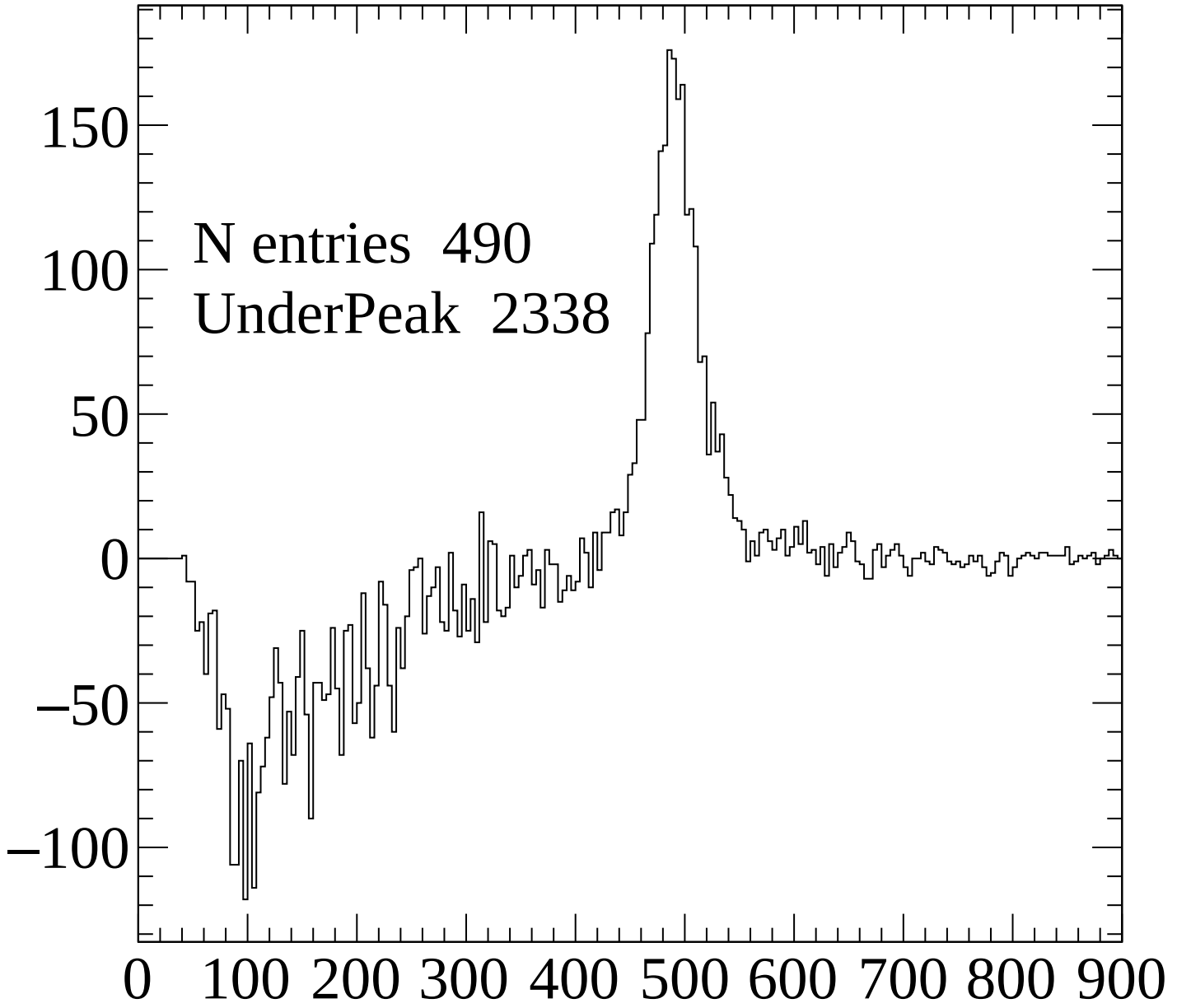

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaOut4Cry134_216UnderI
PADME Internal
nPOT=9.3×10^9
Target
No Target
80
70
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

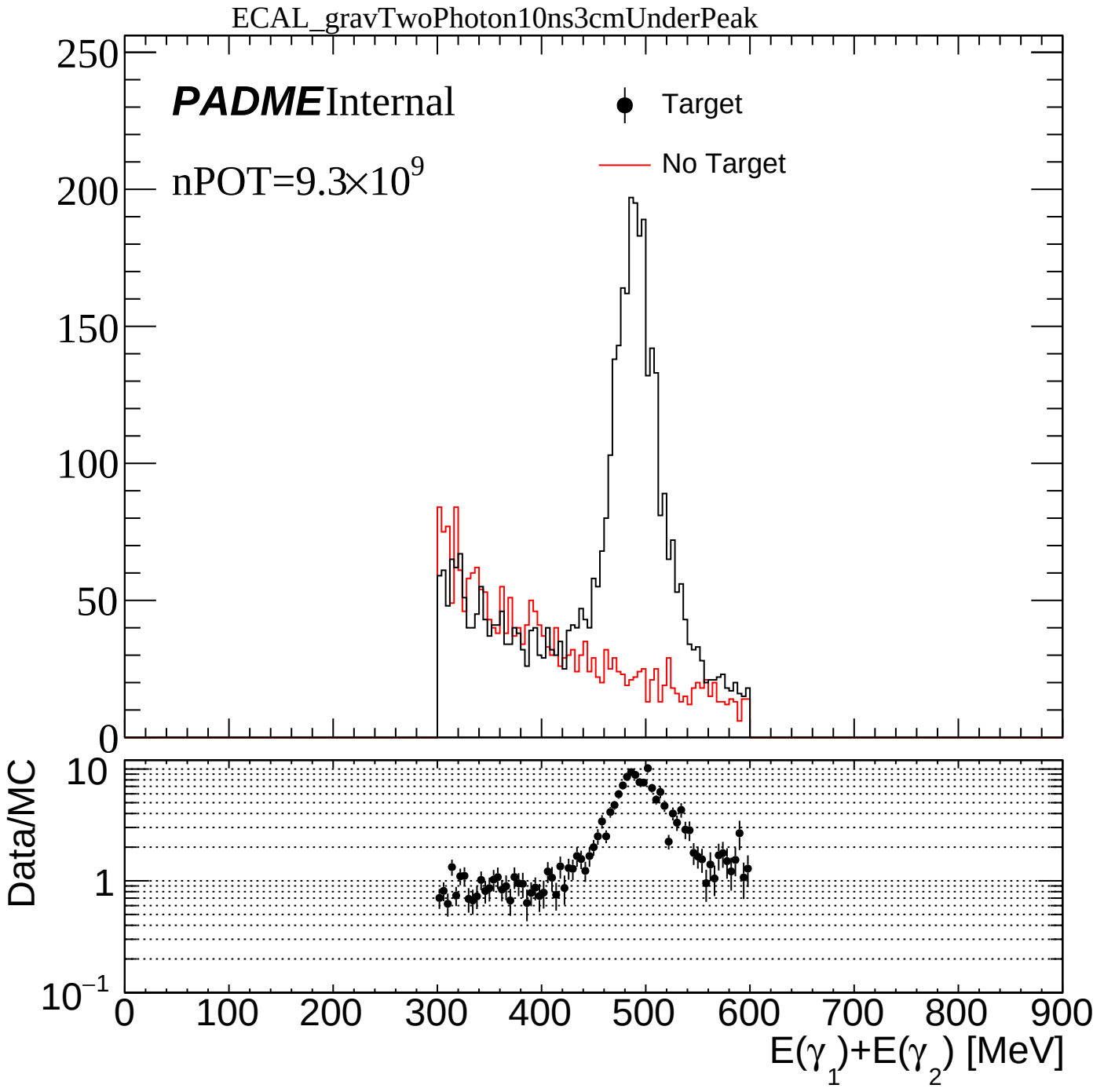

N entries 722
UnderPeak 732
60
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

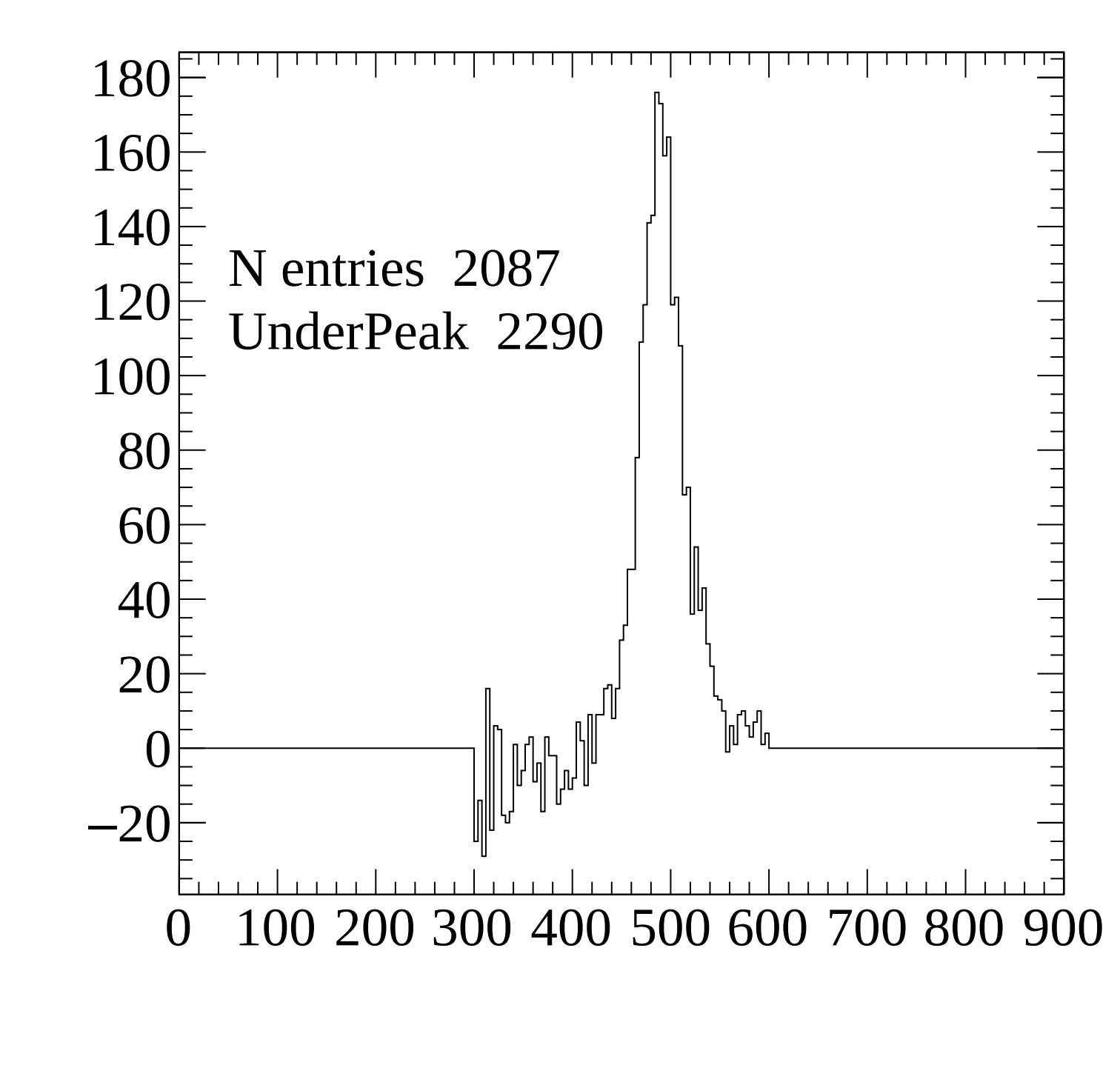

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaOut4Cry134_216EThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
80
70
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

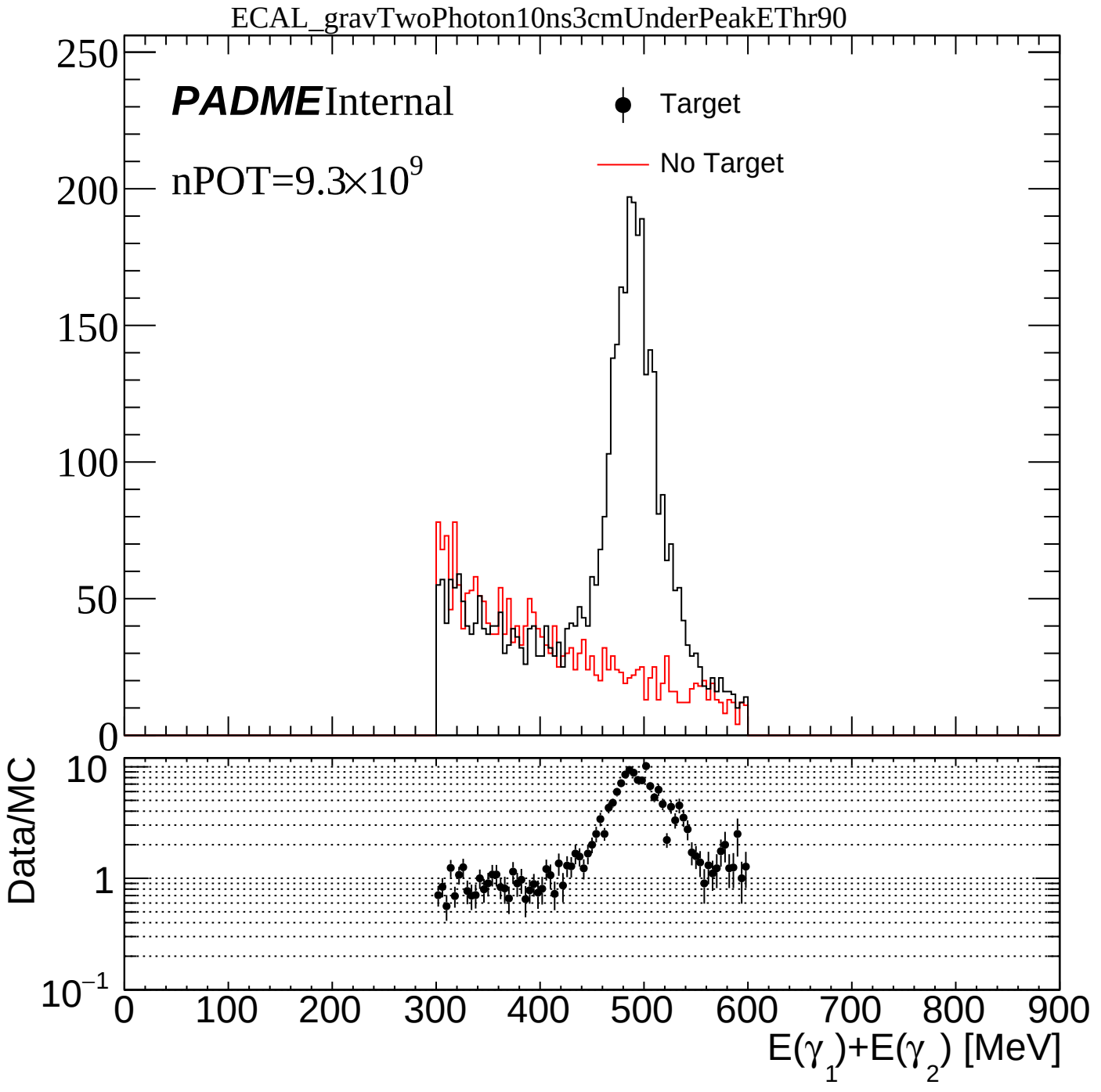

N entries 699
UnderPeak 741
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900

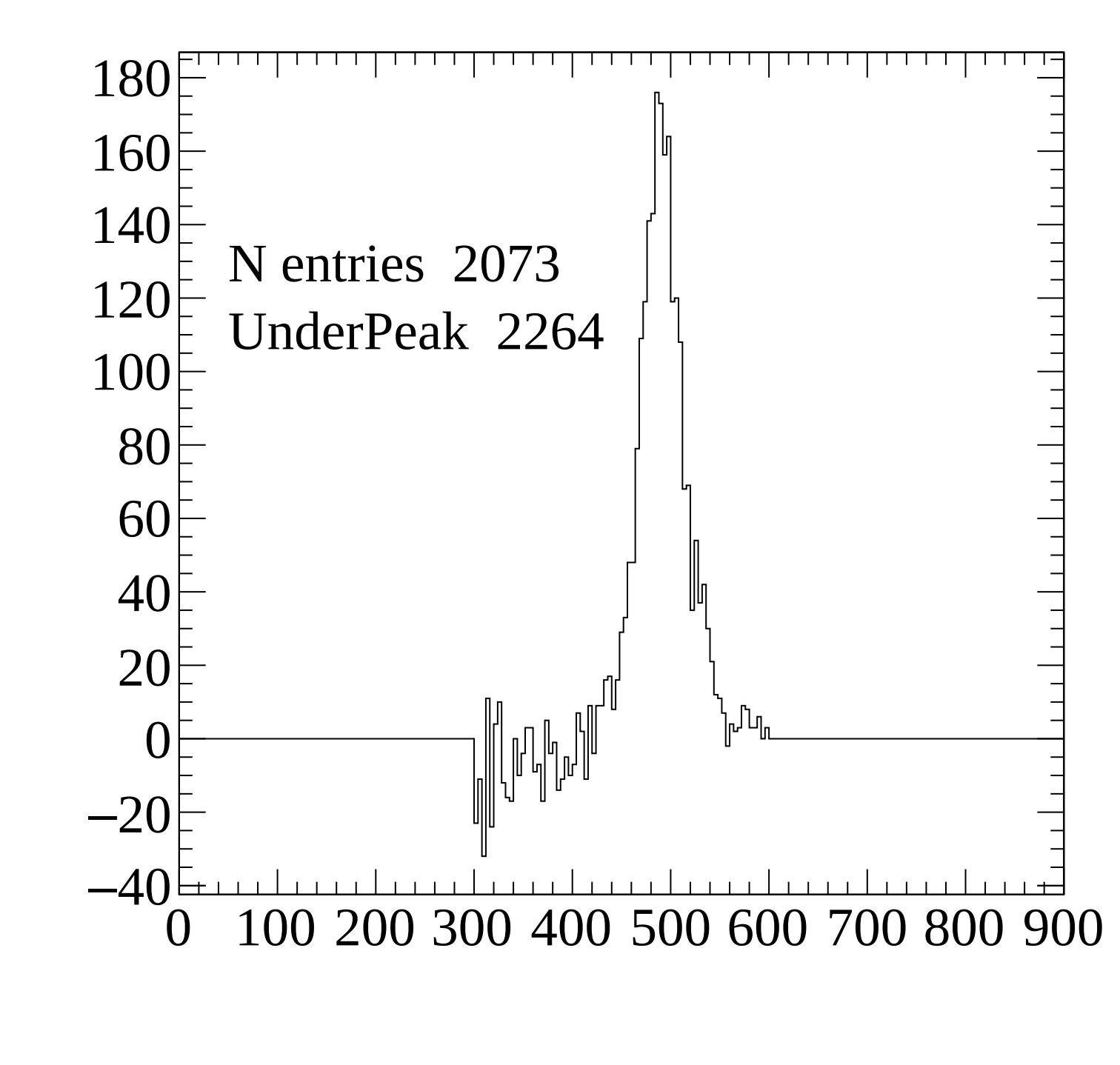

ECAL_gravTwoPhoton10ns3cm
PADME Internal
nPOT=9.3×10^9
Target
No Target
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

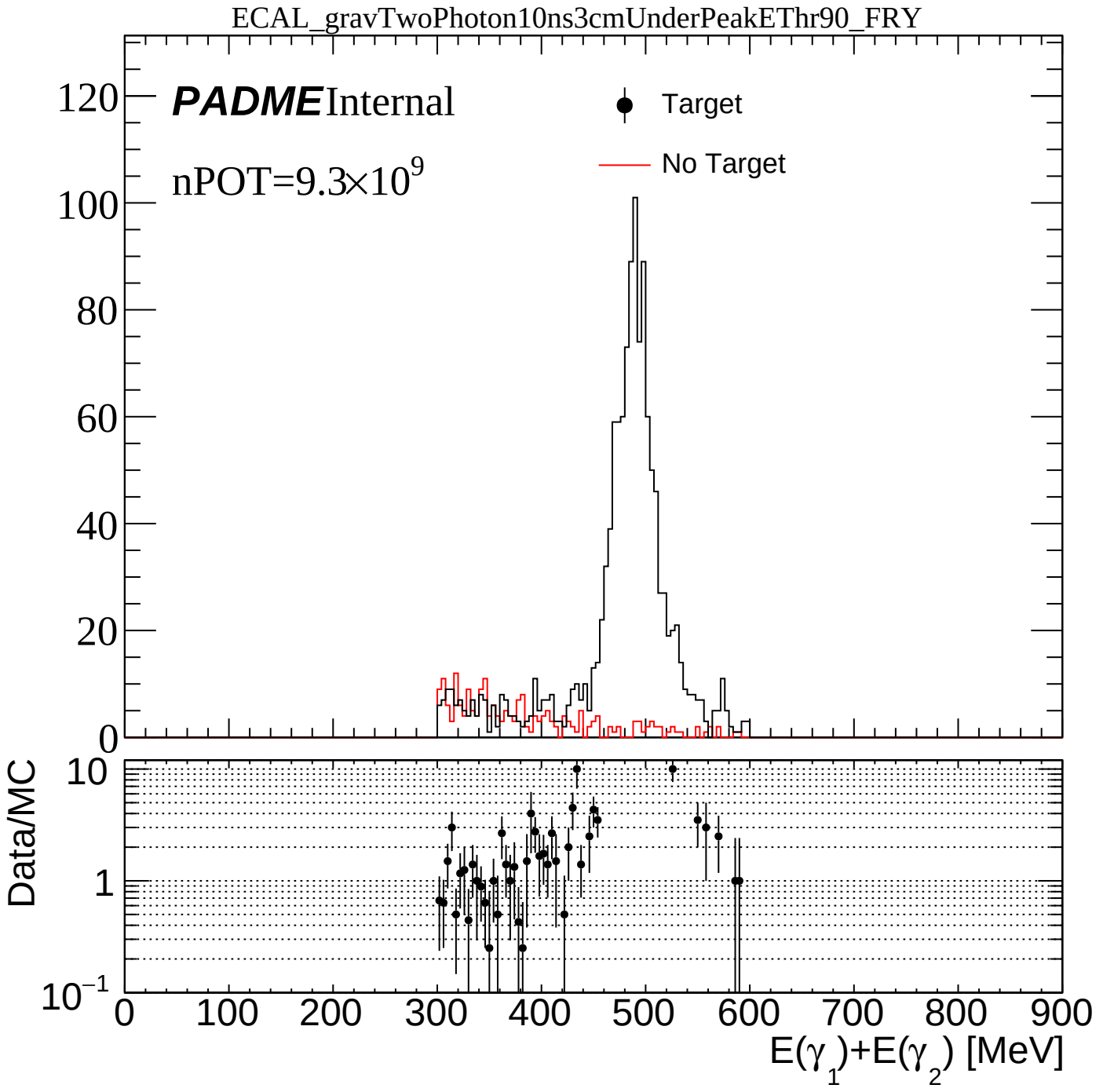

N entries 490
UnderPeak 2338
150
100
50
0
−50
−100
0
100
200
300
400
500
600
700
800
900

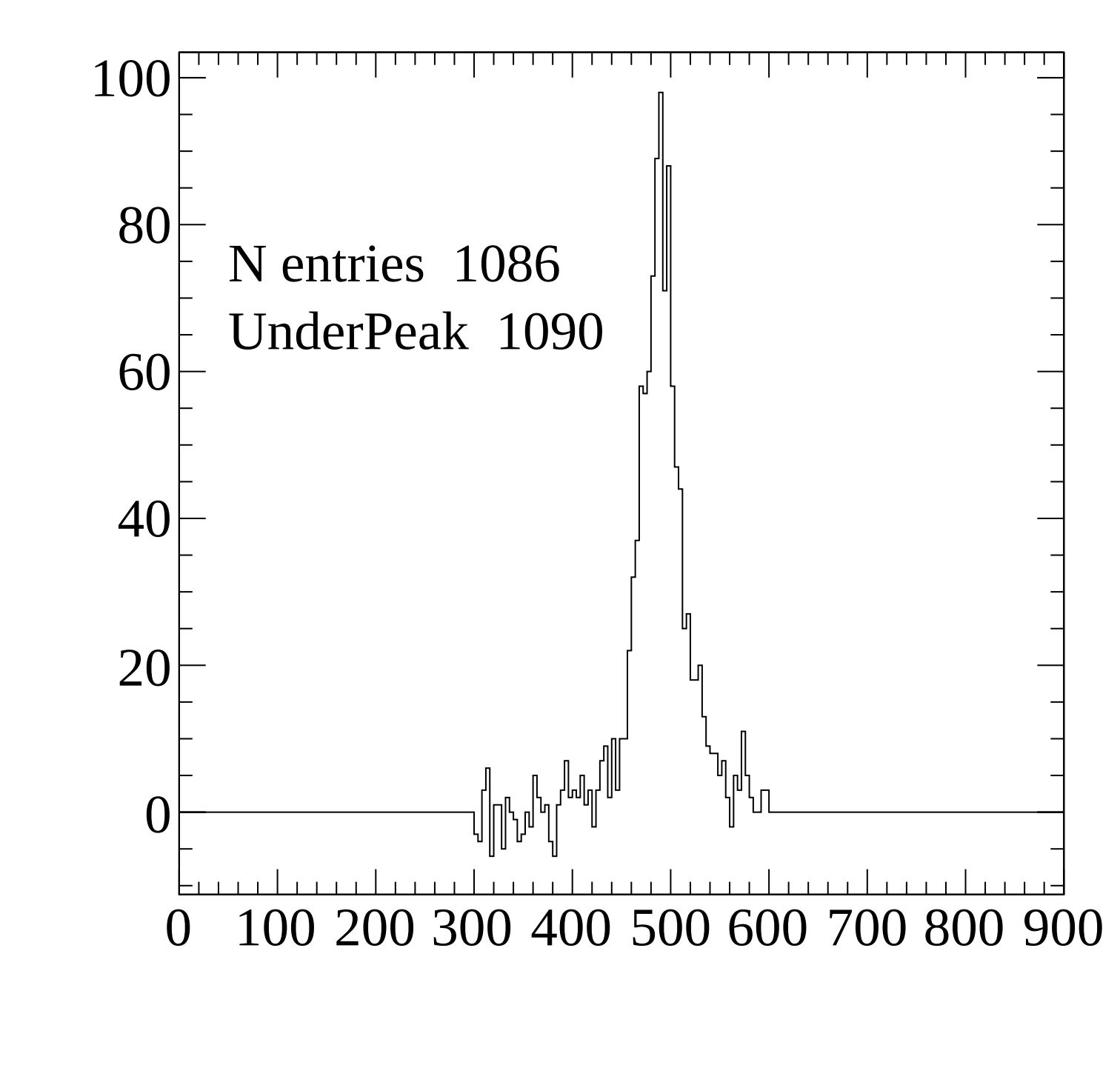

ECAL_gravTwoPhoton10ns3cmUnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

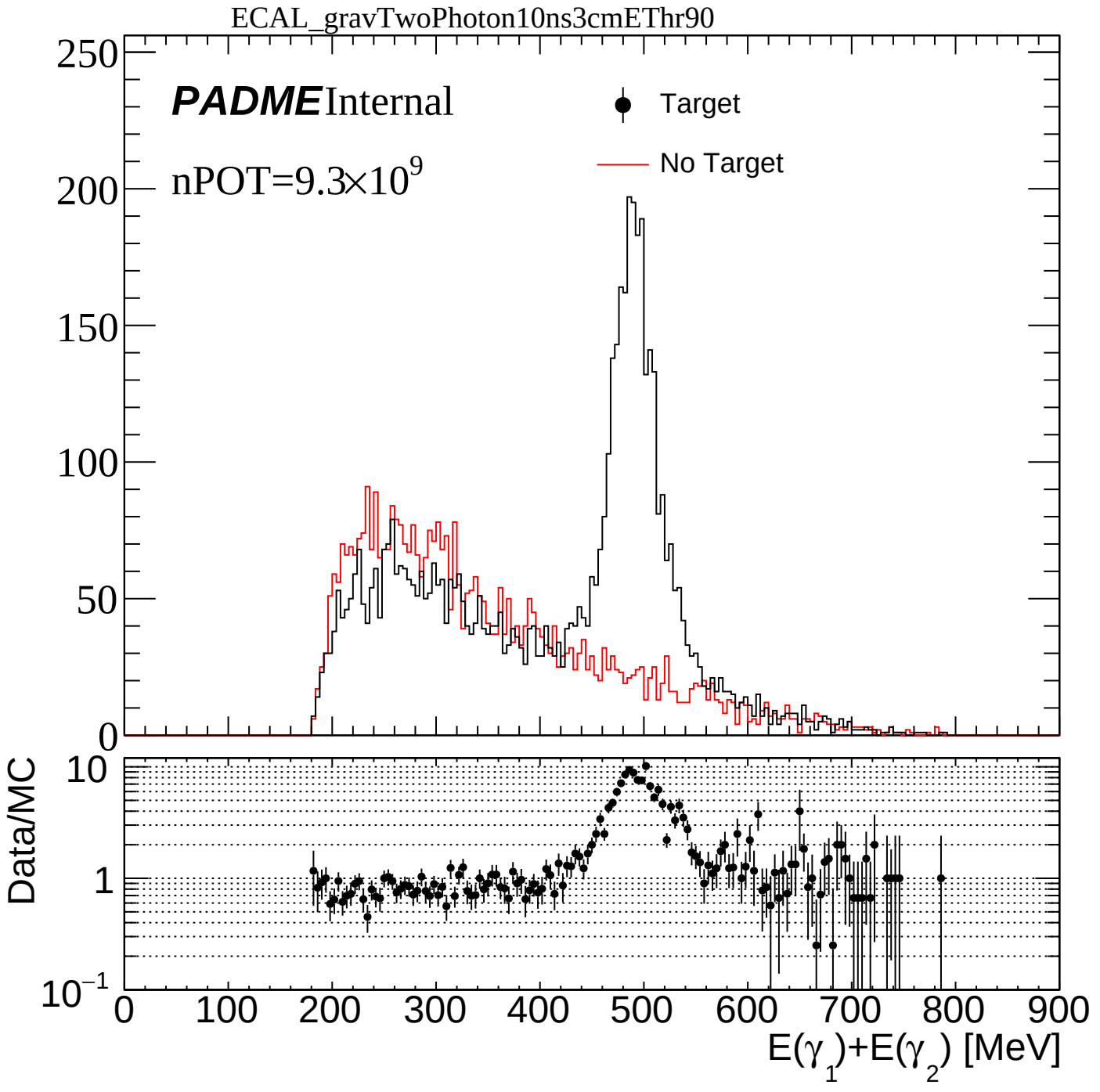

N entries 2087
UnderPeak 2290
180
160
140
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

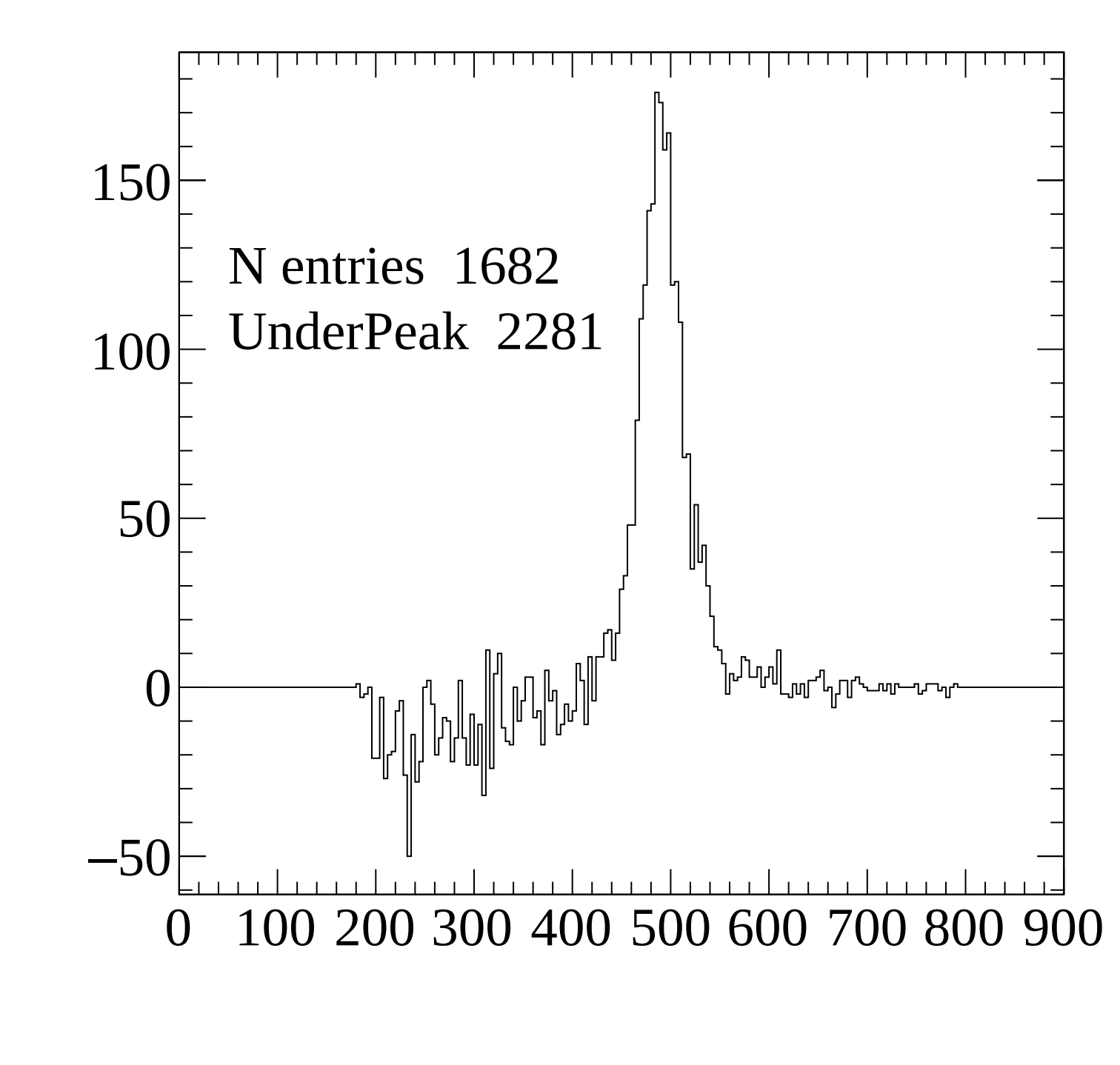

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

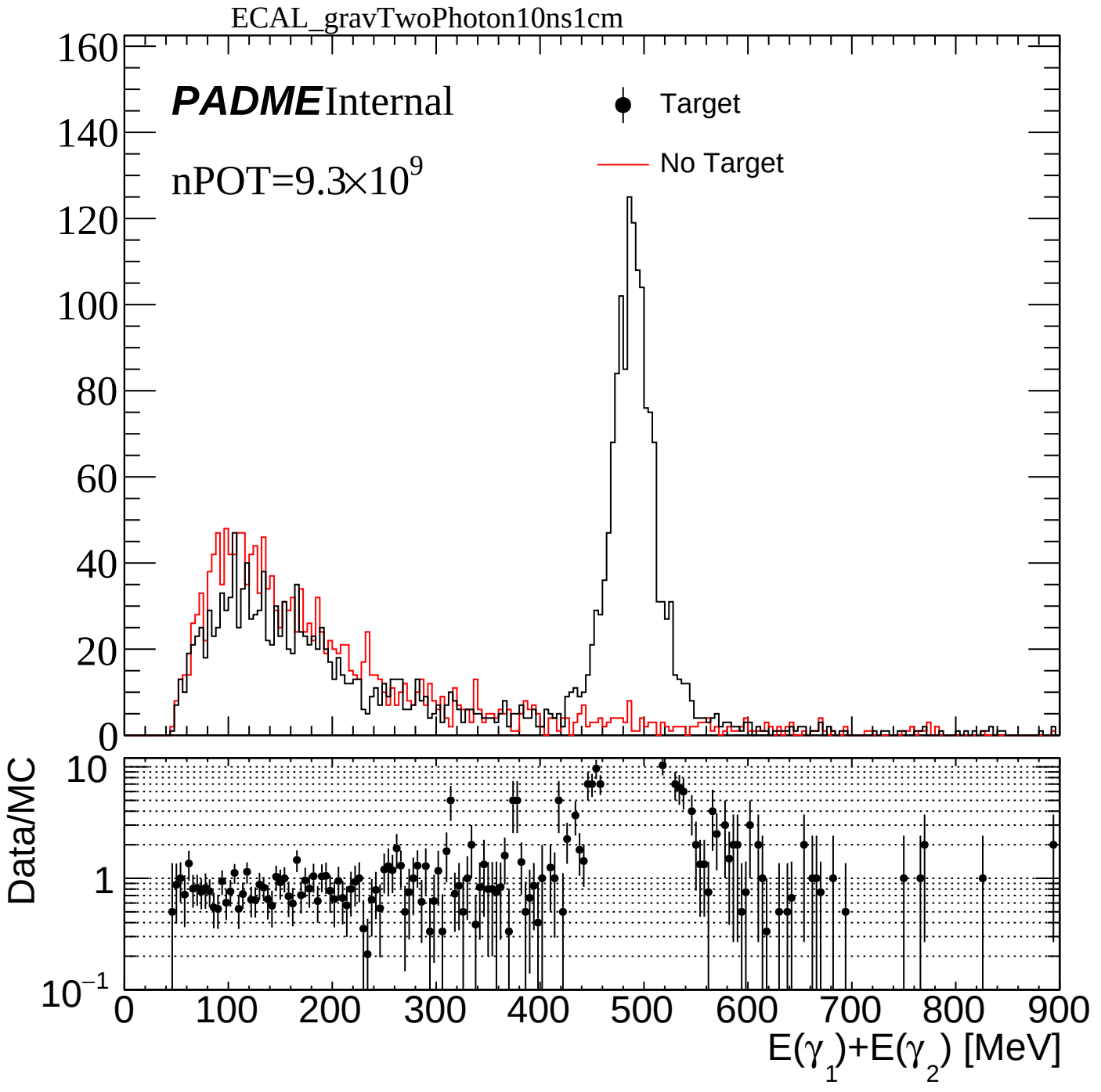

N entries 2073
UnderPeak 2264
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

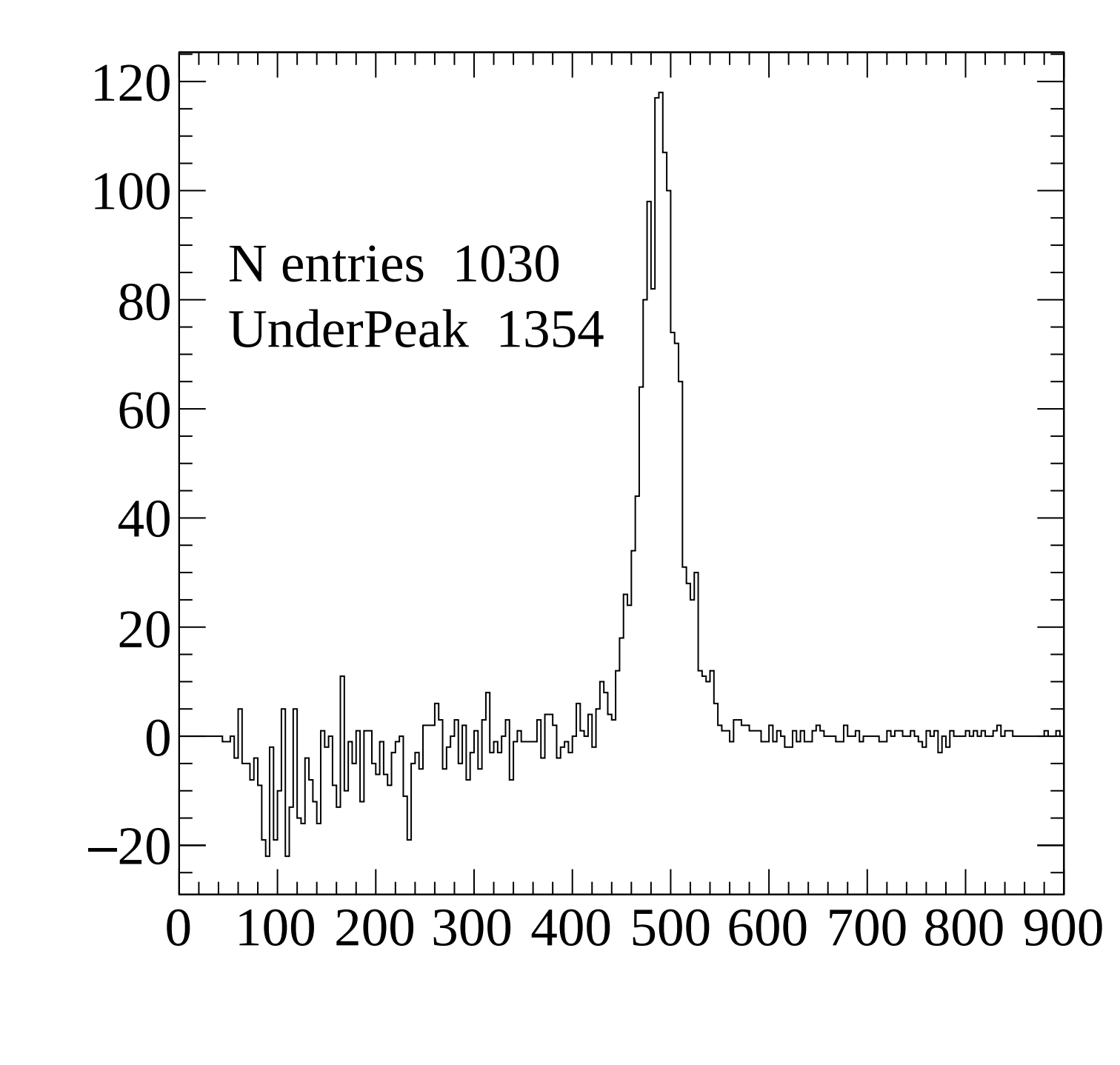

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_FRY
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

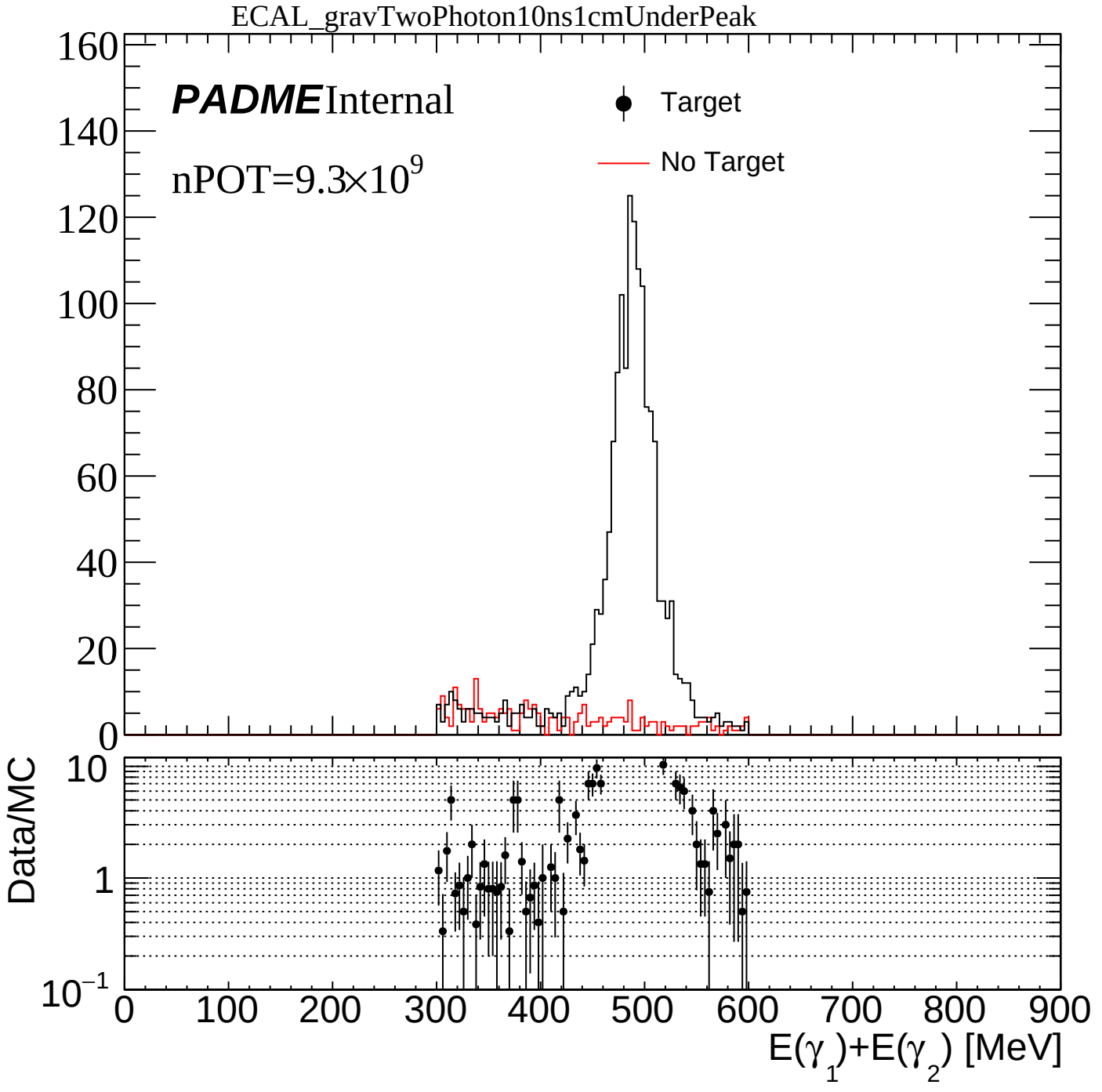

N entries 1086
UnderPeak 1090
100
80
60
40
20
0
0 100 200 300 400 500 600 700 800 900

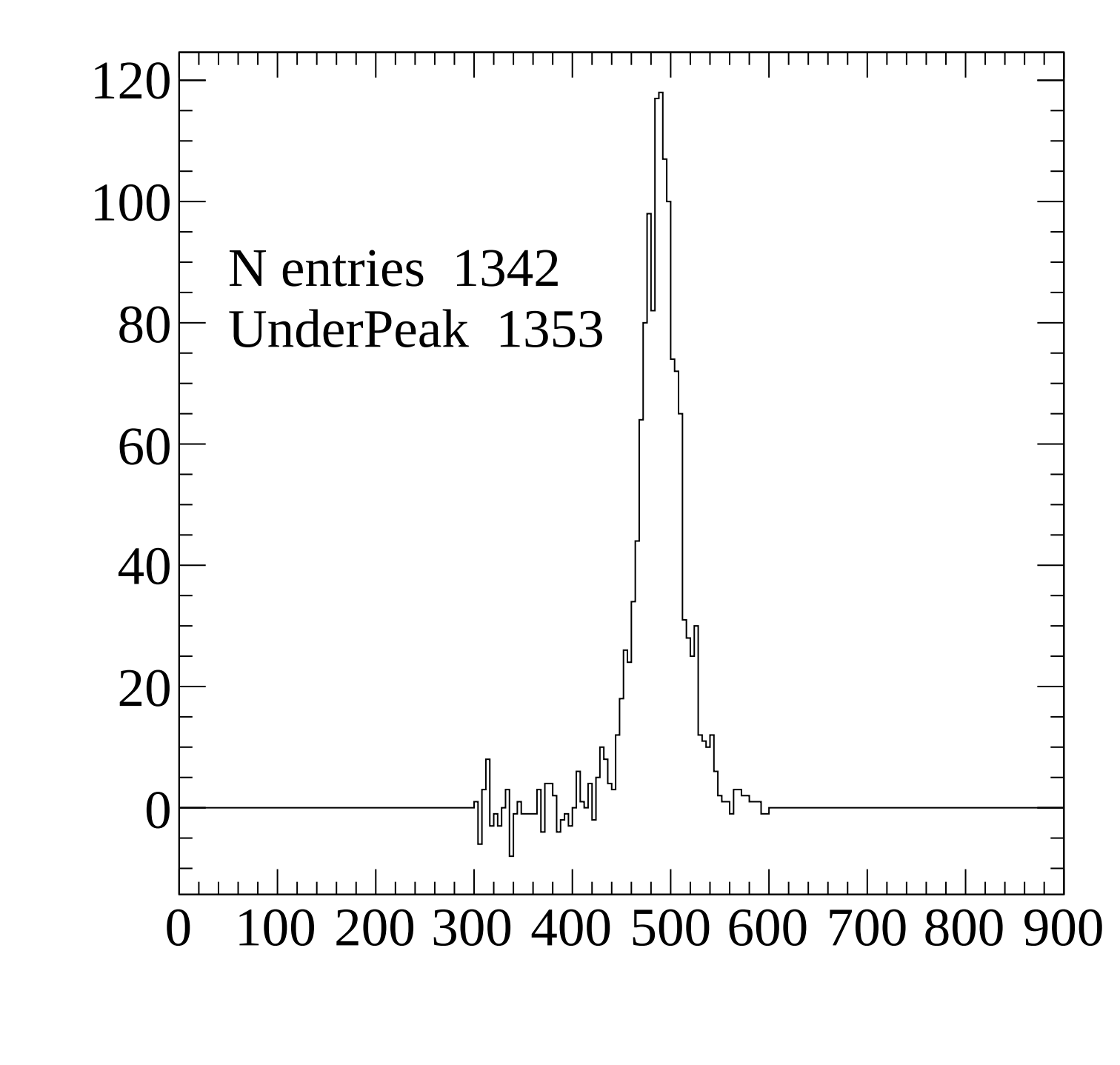

ECAL_gravTwoPhoton10ns3cmEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

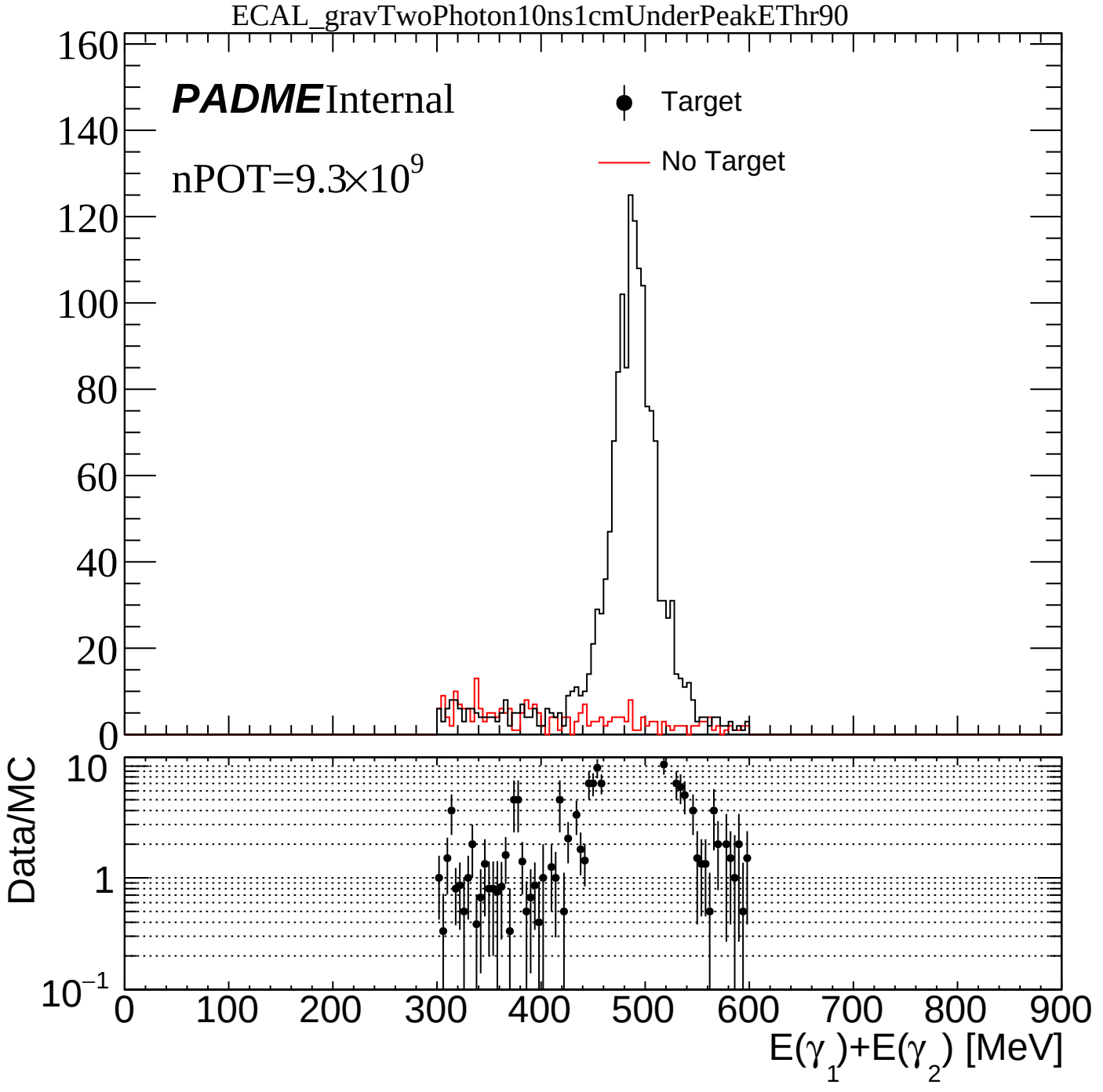

N entries 1682
UnderPeak 2281
150
100
50
0
−50
0
100
200
300
400
500
600
700
800
900

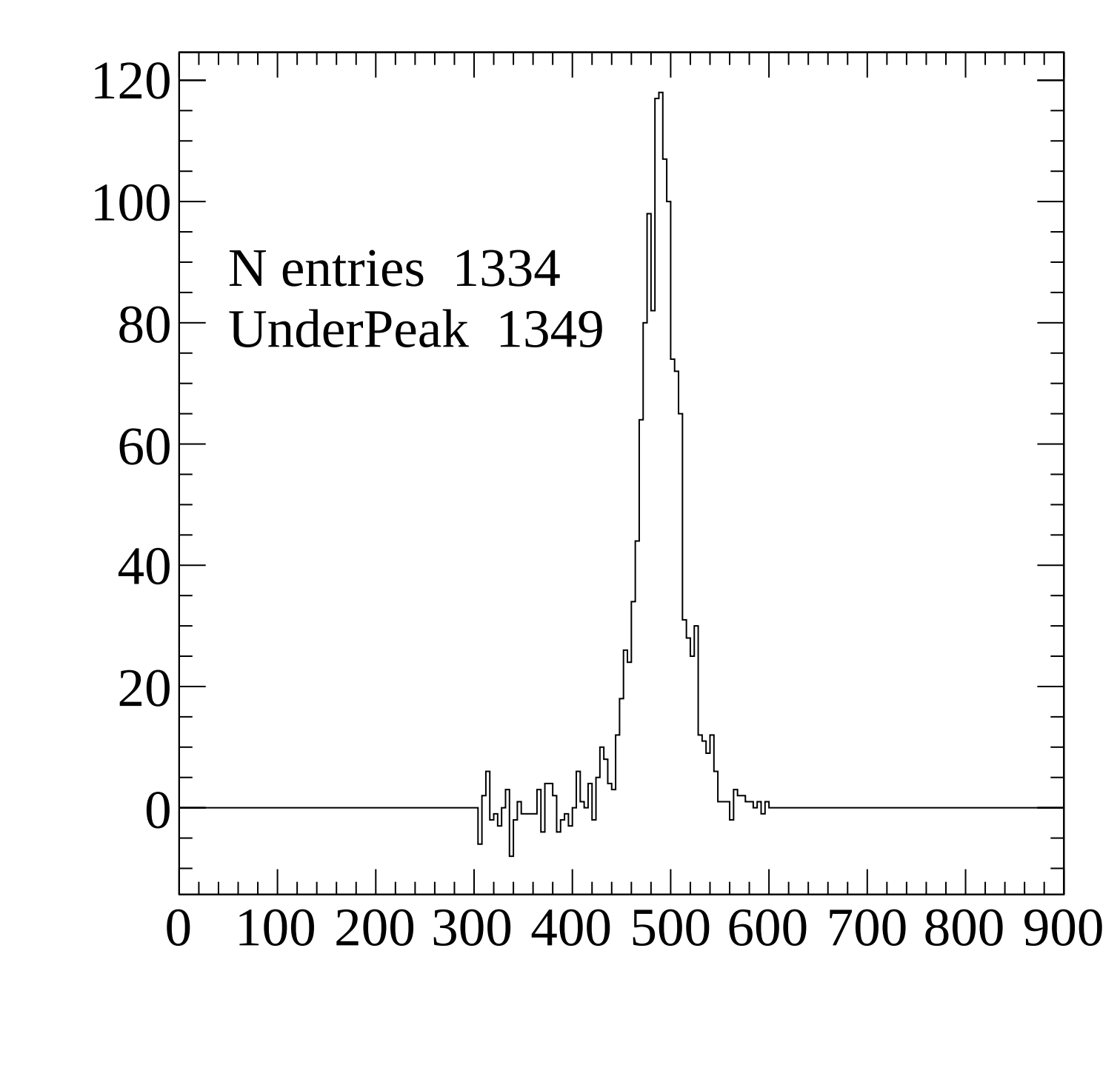

ECAL_gravTwoPhoton10ns1cm
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

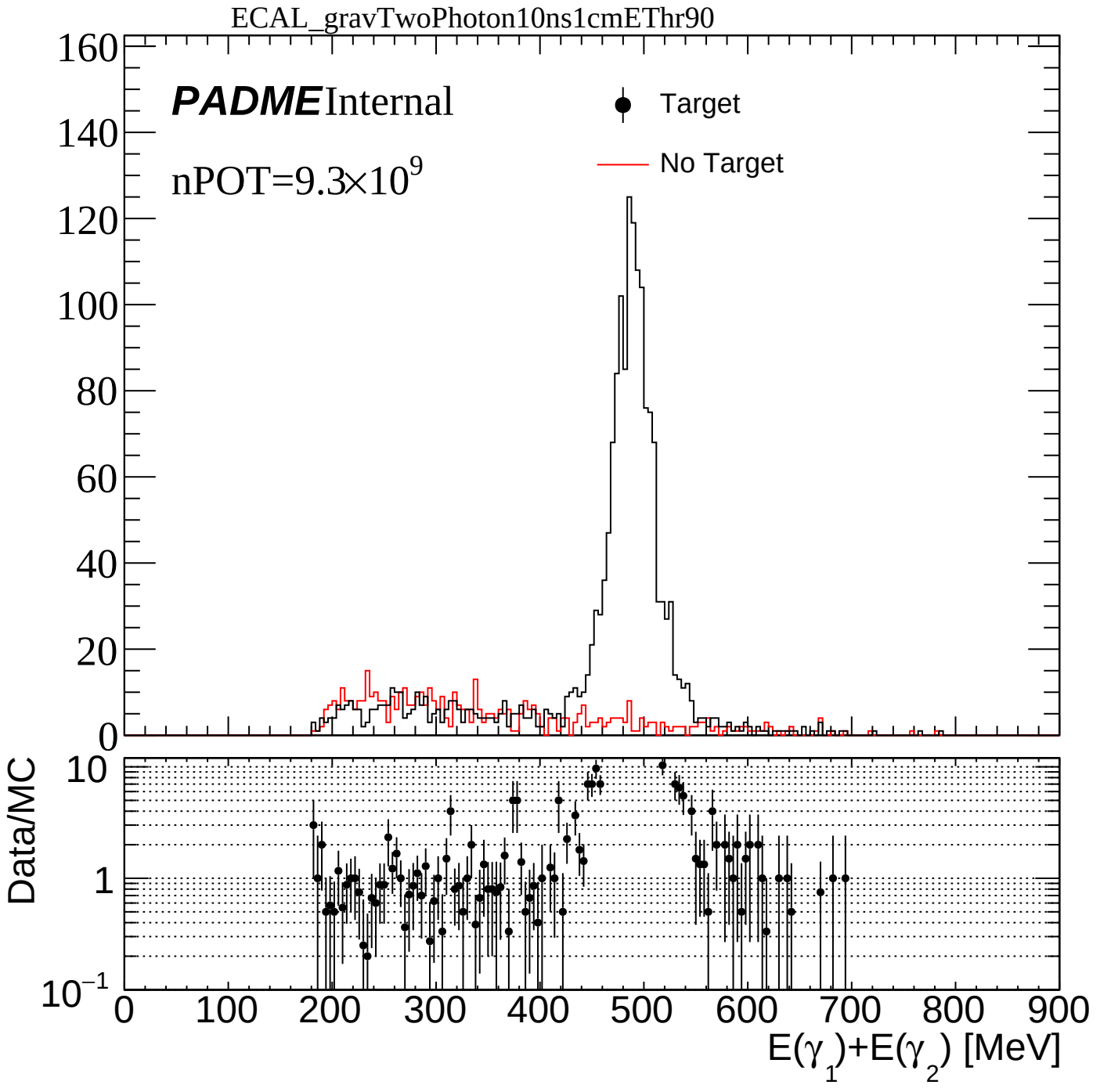

N entries 1030
UnderPeak 1354
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

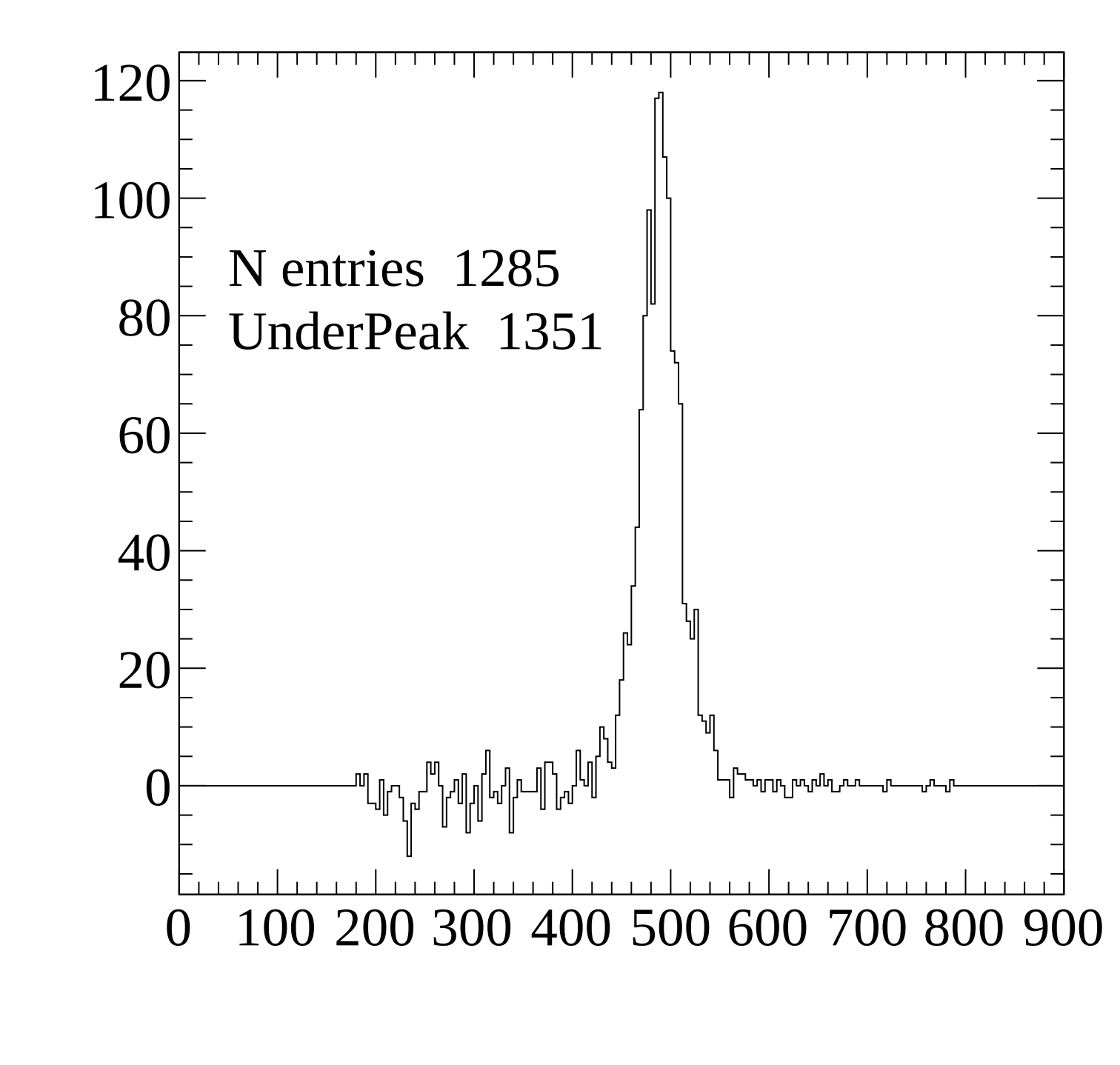

ECAL_gravTwoPhoton10ns1cmUnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

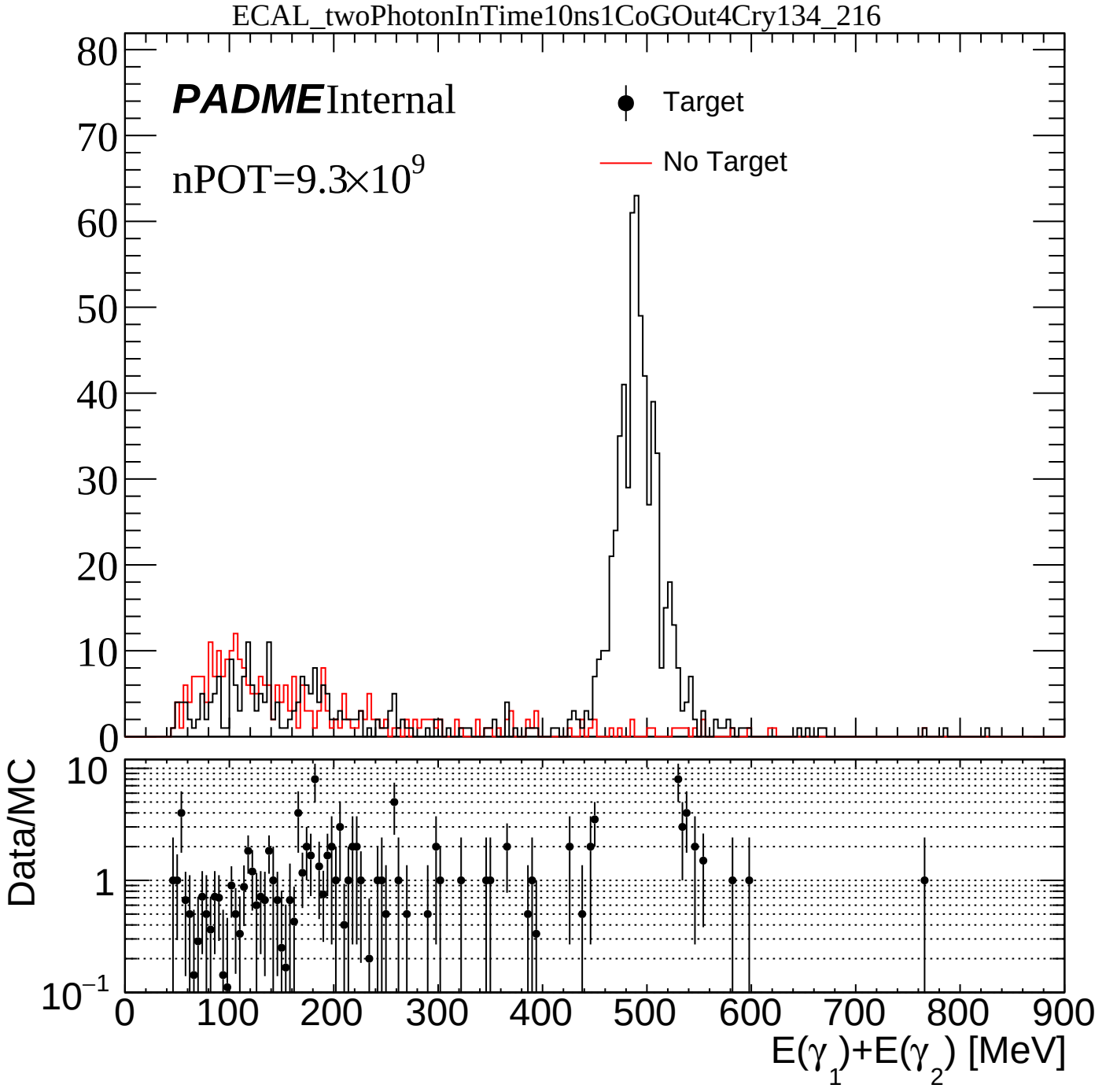

N entries 1342
UnderPeak 1353
120
100
80
60
40
20
0
0 100 200 300 400 500 600 700 800 900

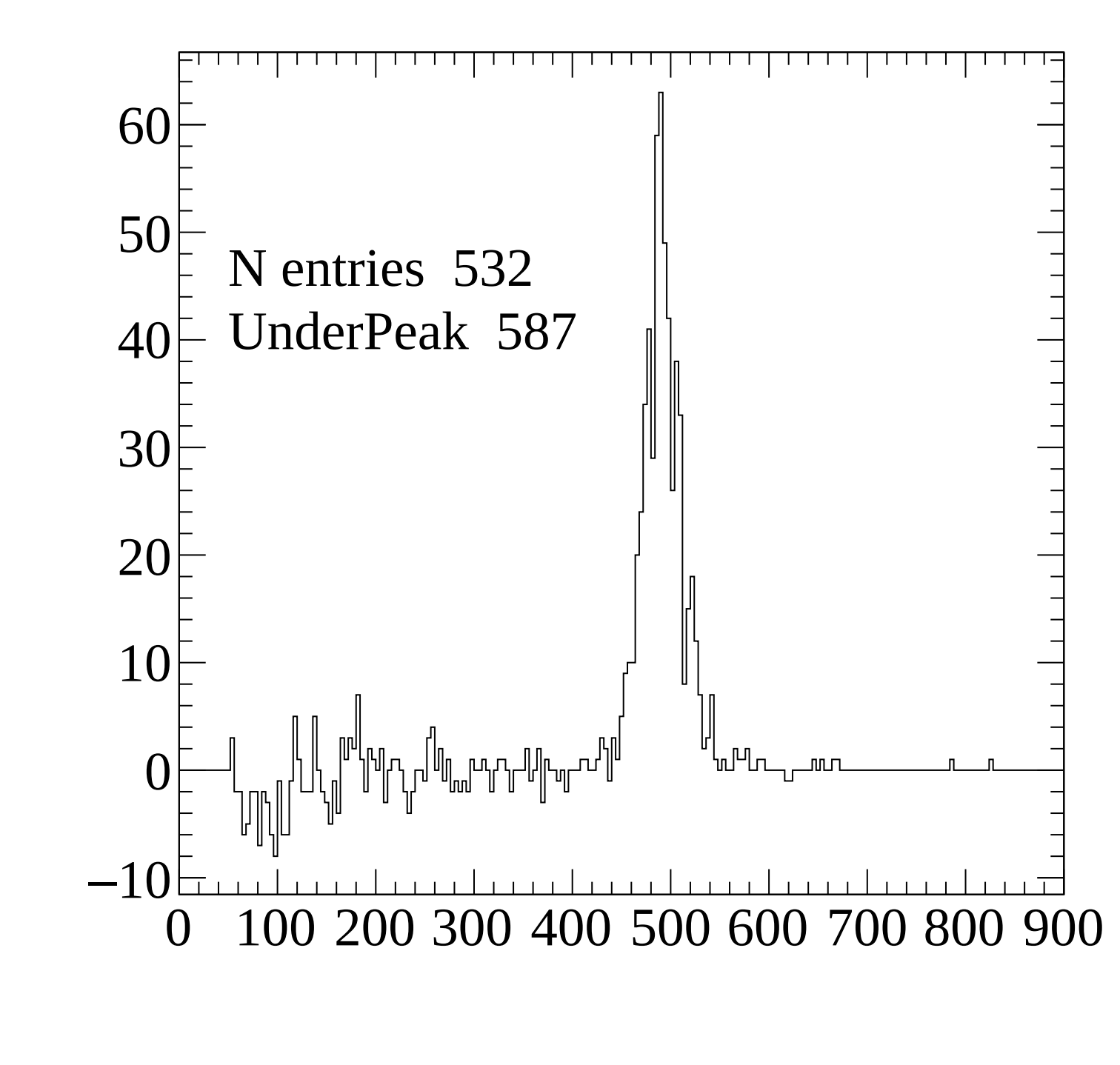

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

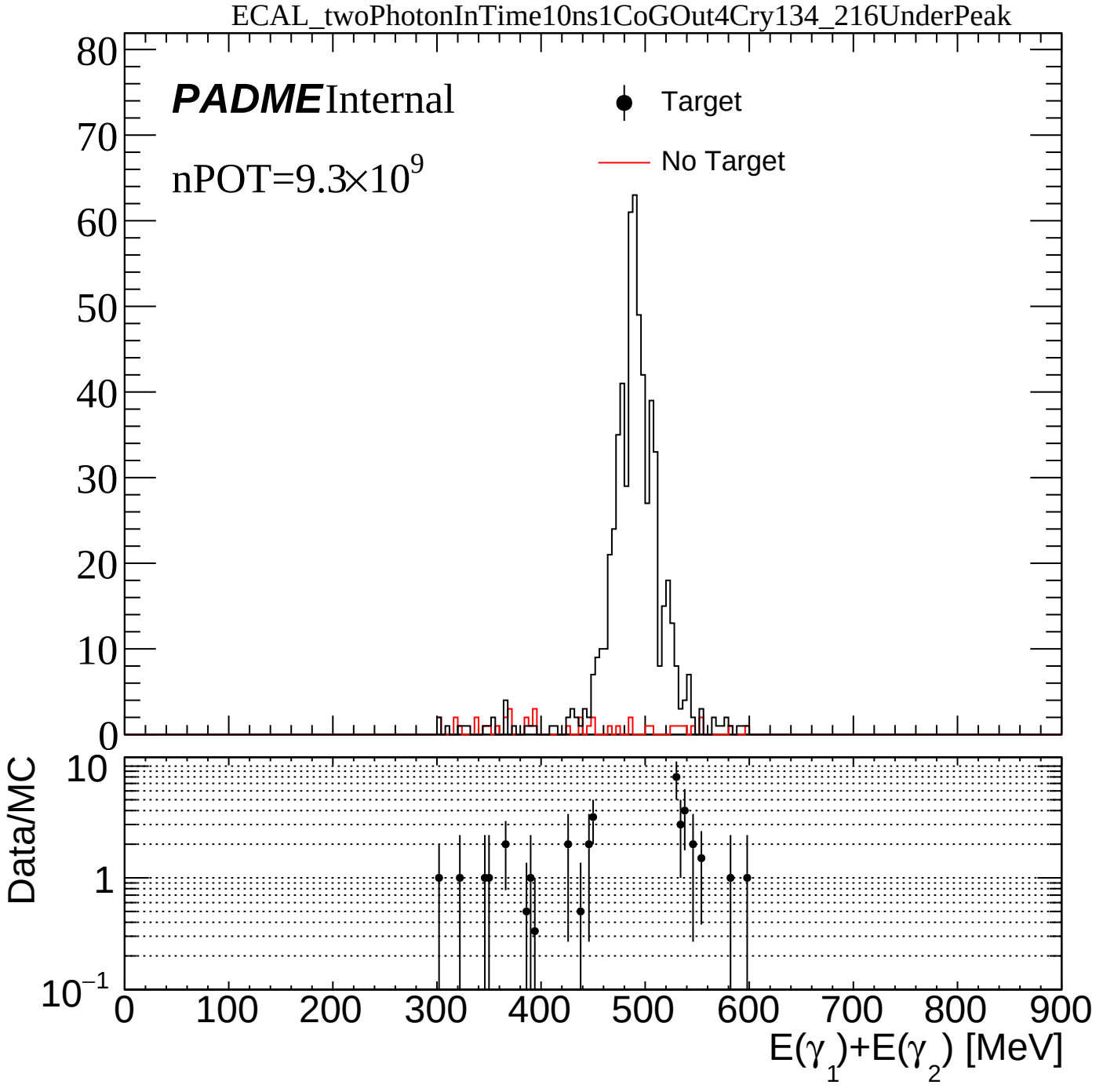

N entries 1334
UnderPeak 1349
120
100
80
60
40
20
0
0 100 200 300 400 500 600 700 800 900

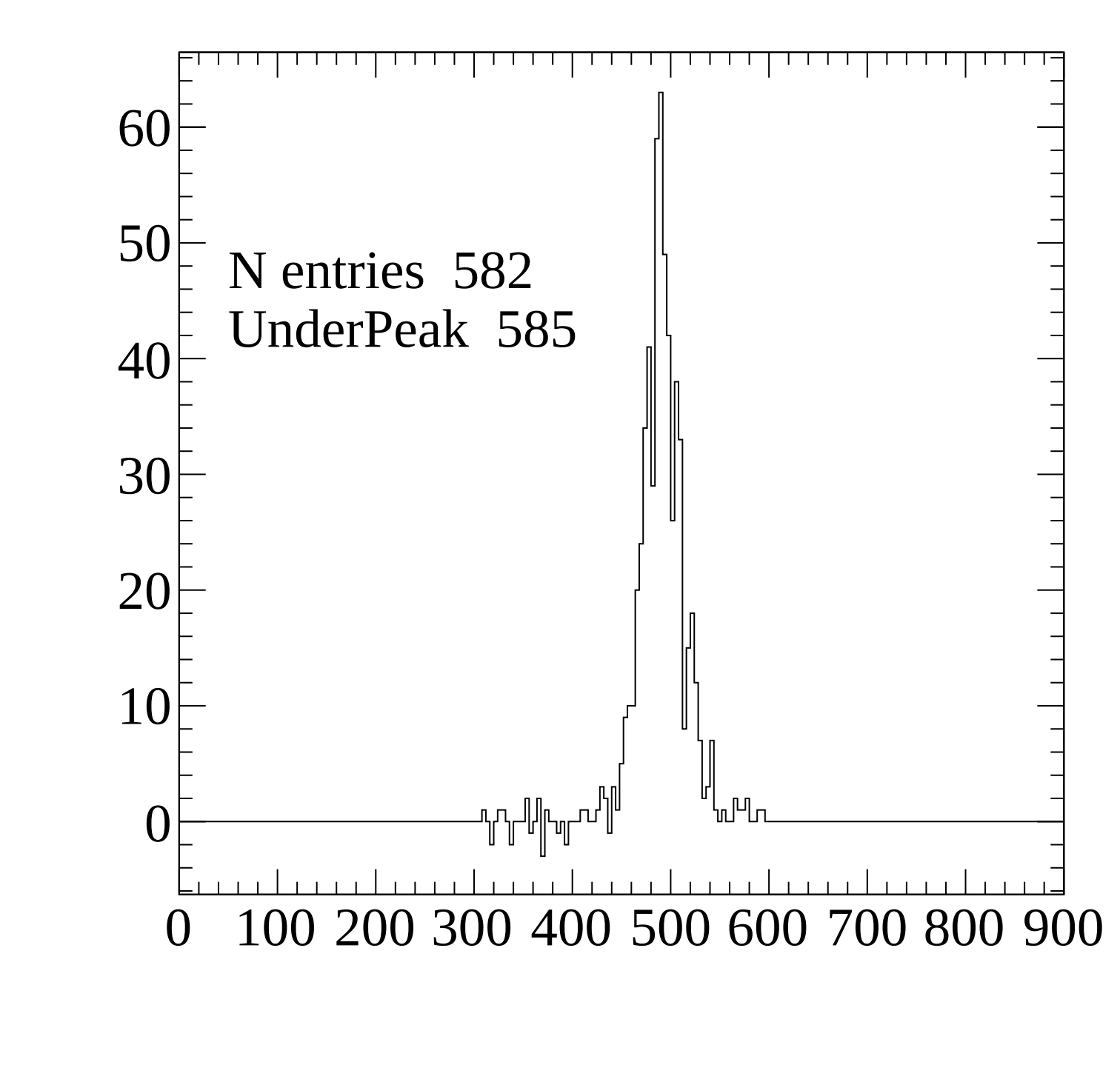

ECAL_gravTwoPhoton10ns1cmEThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

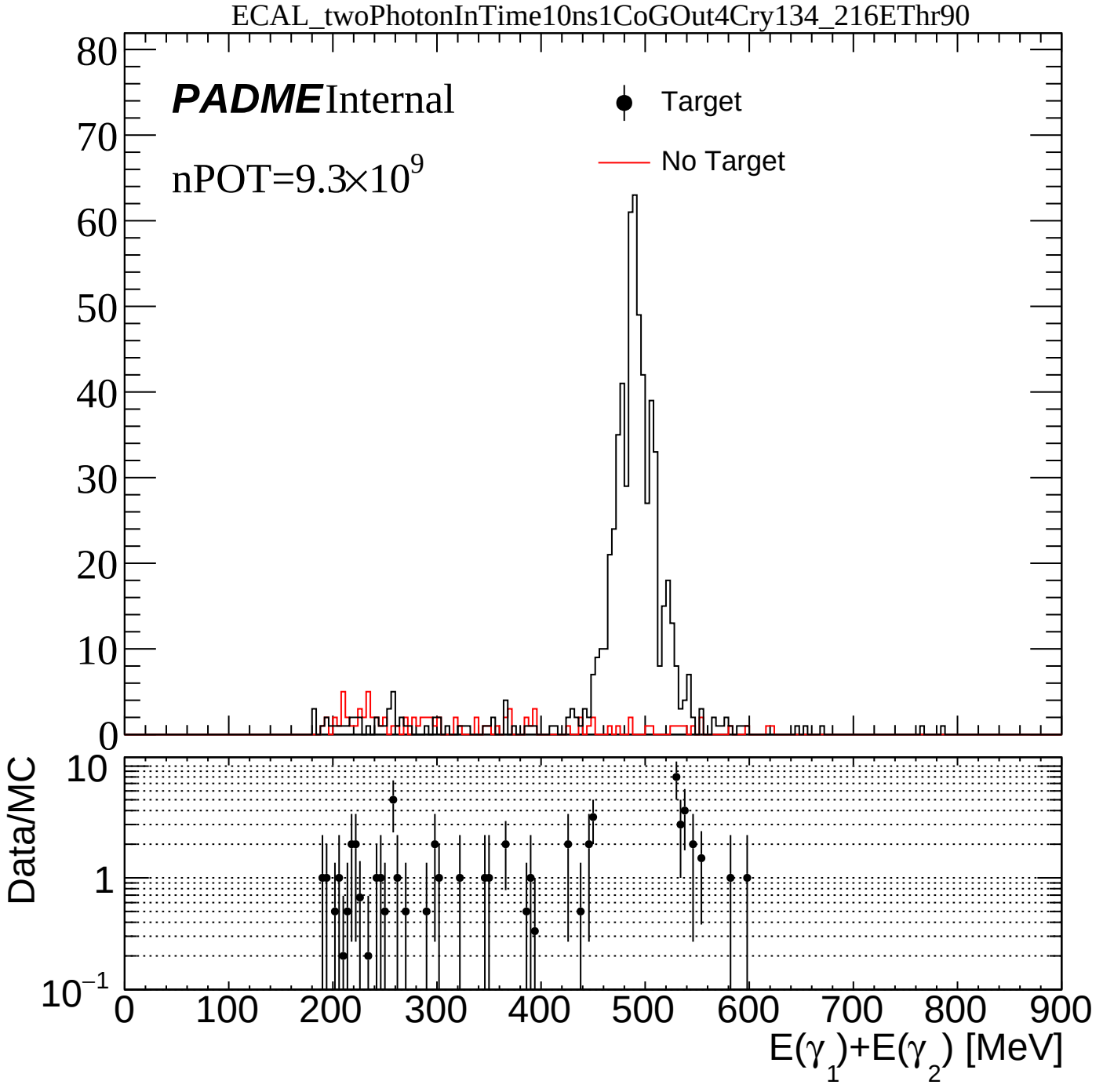

N entries 1285
UnderPeak 1351
120
100
80
60
40
20
0
0
100
200
300
400
500
600
700
800
900

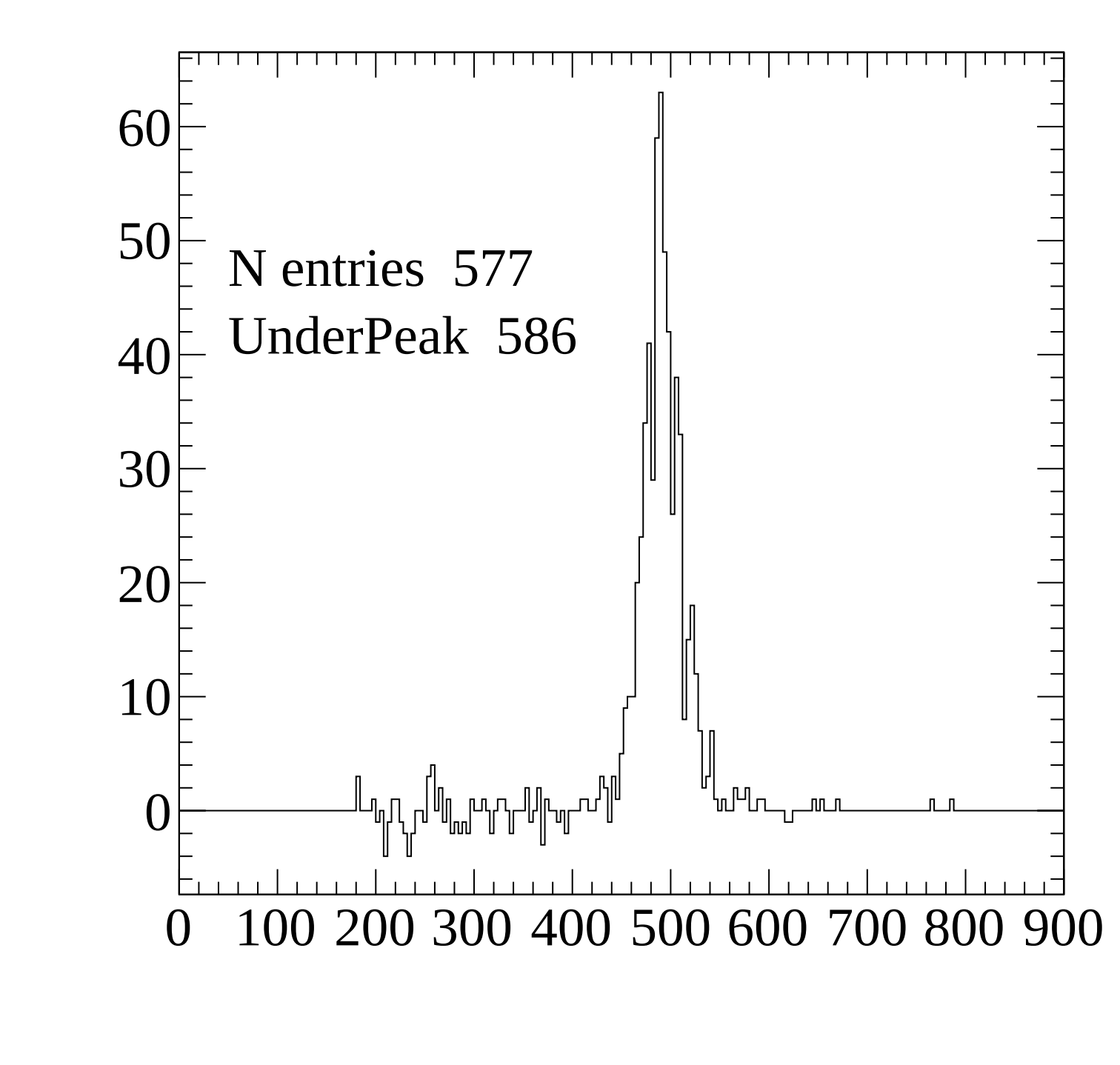

ECAL_twoPhotonInTime10ns1CoGOut4Cry134_216
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

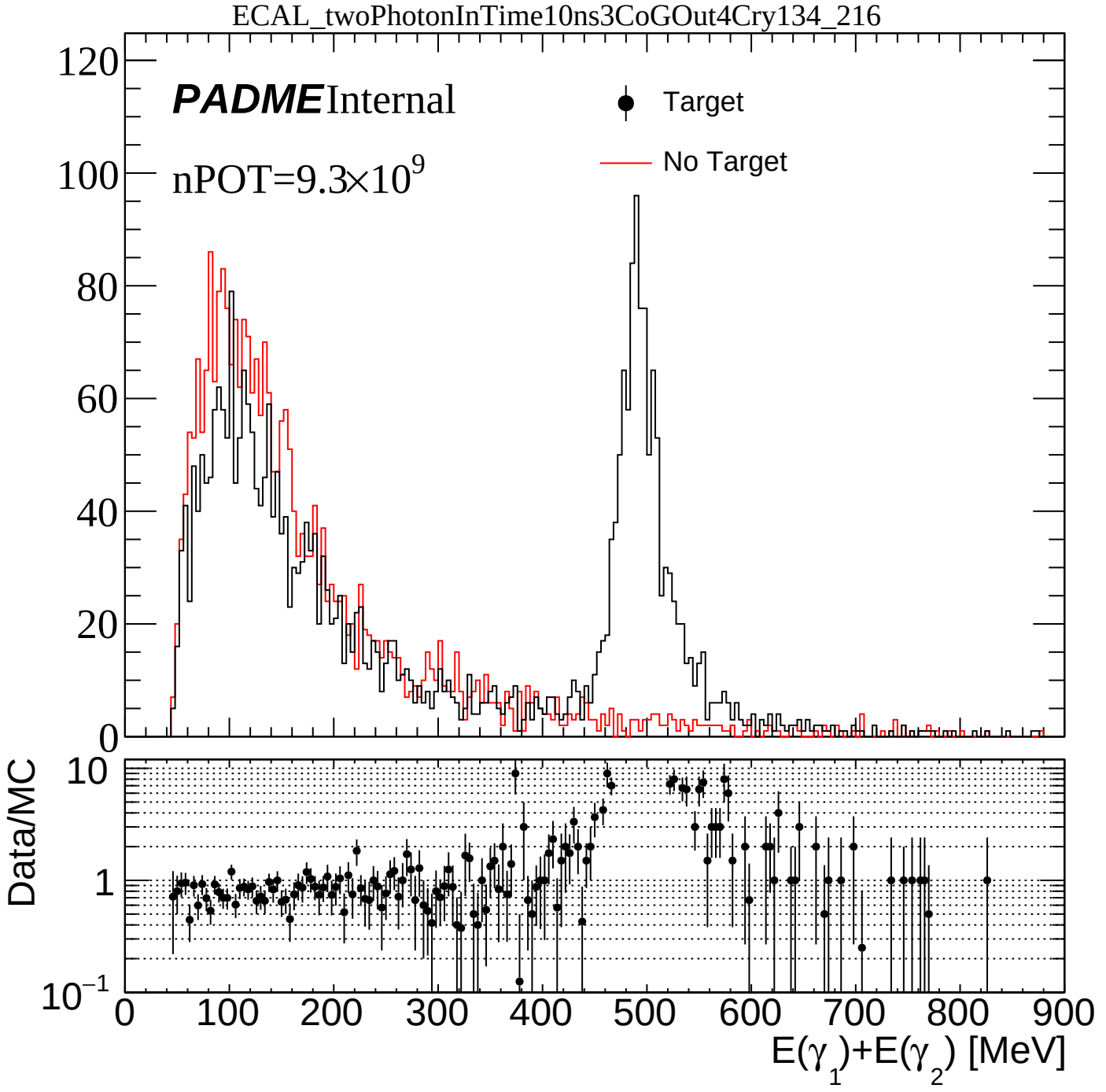

N entries 532
UnderPeak 587
60
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

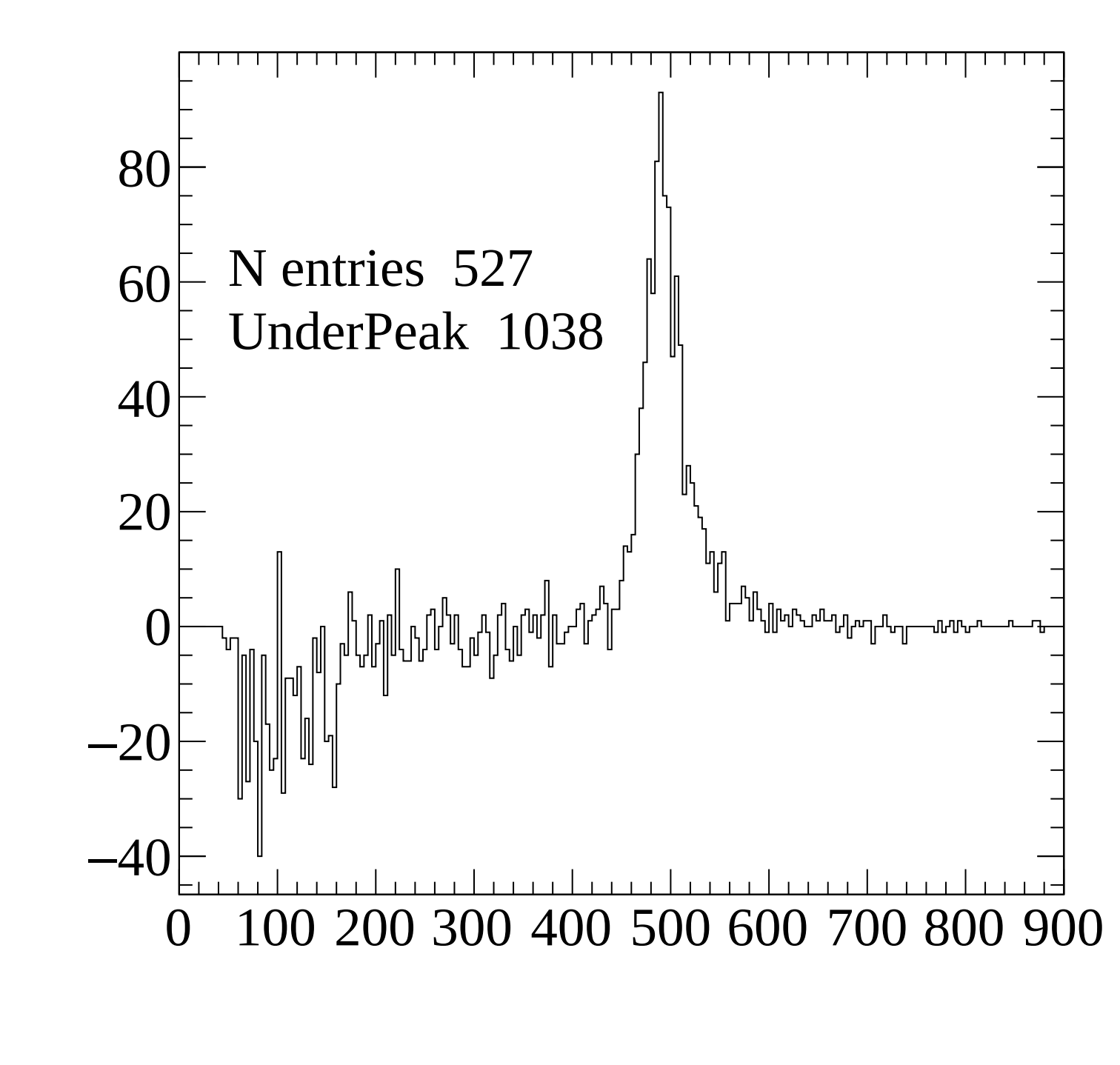

ECAL_twoPhotonInTime10ns1CoGOut4Cry134_216UnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

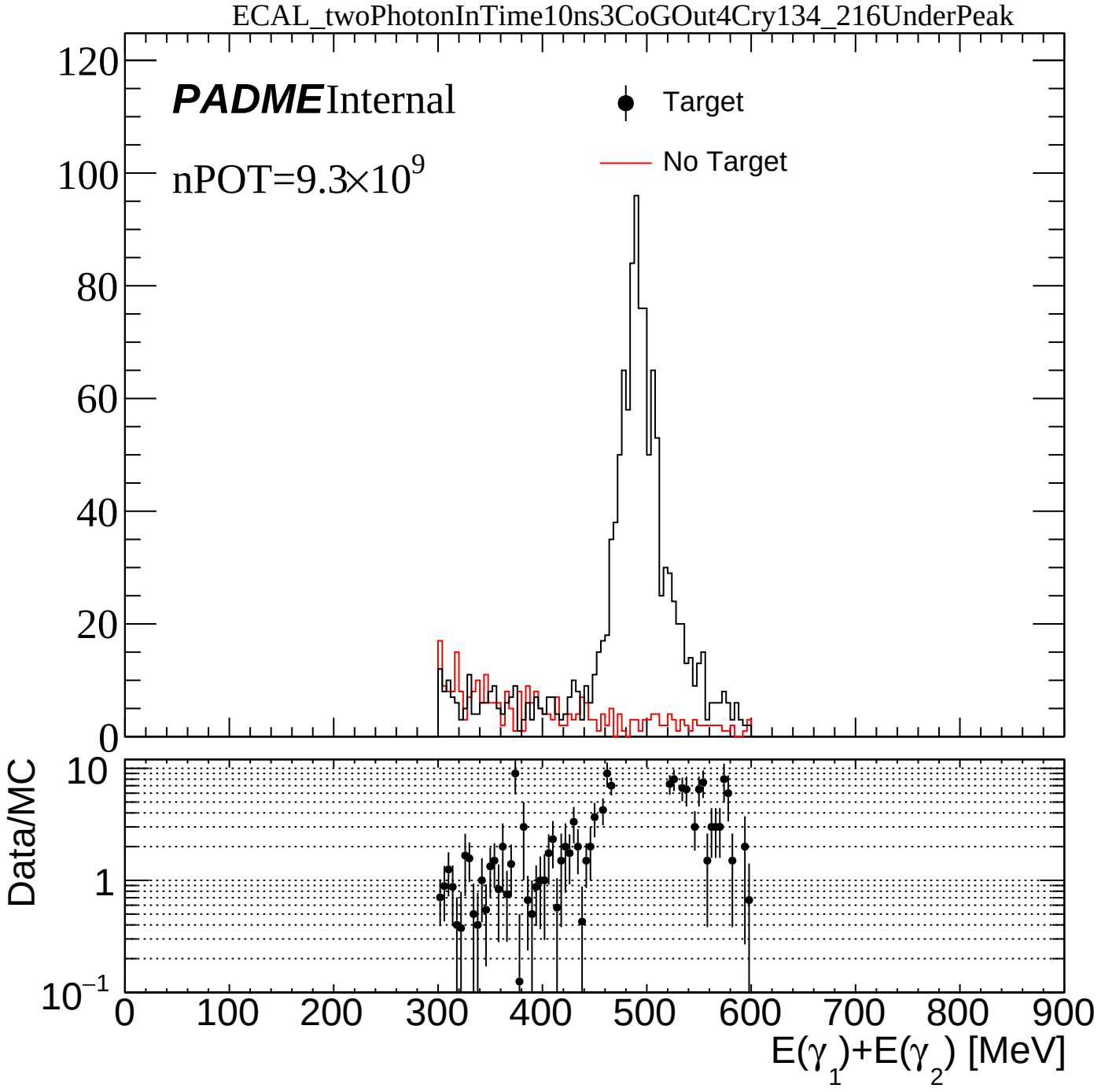

N entries 582
UnderPeak 585
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900

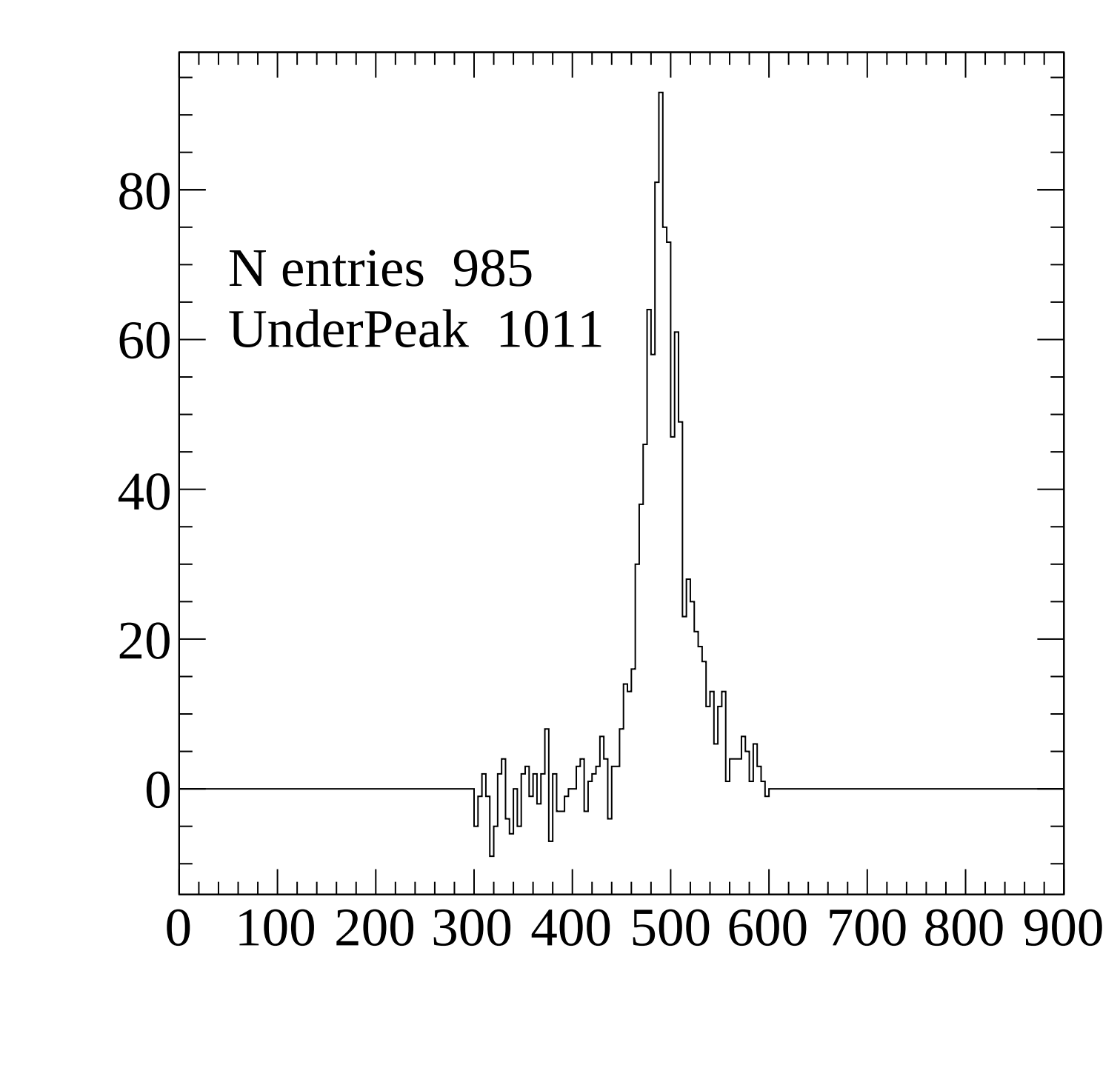

ECAL_twoPhotonInTime10ns1CoGOut4Cry134_216EThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

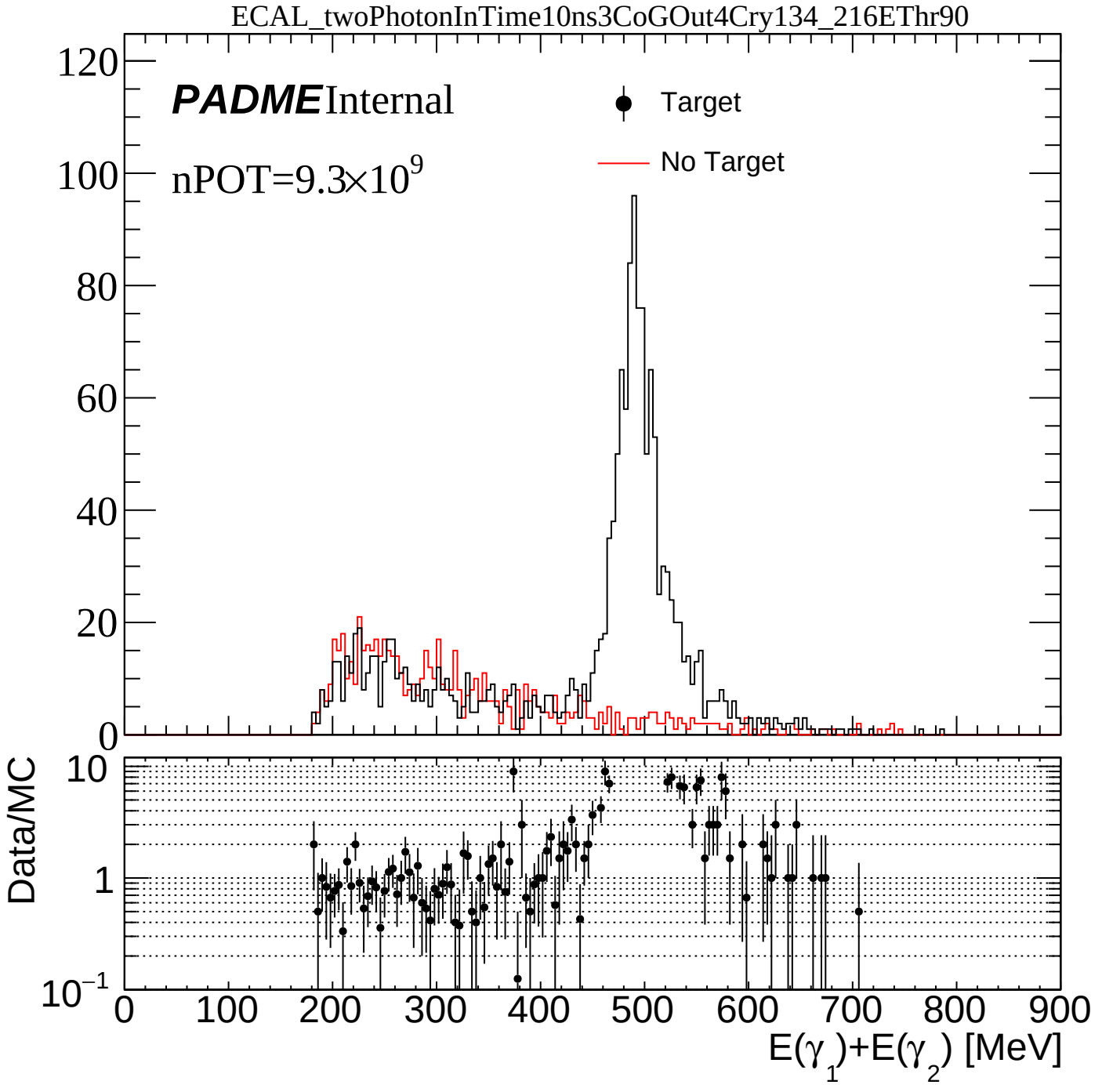

N entries 577
UnderPeak 586
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900

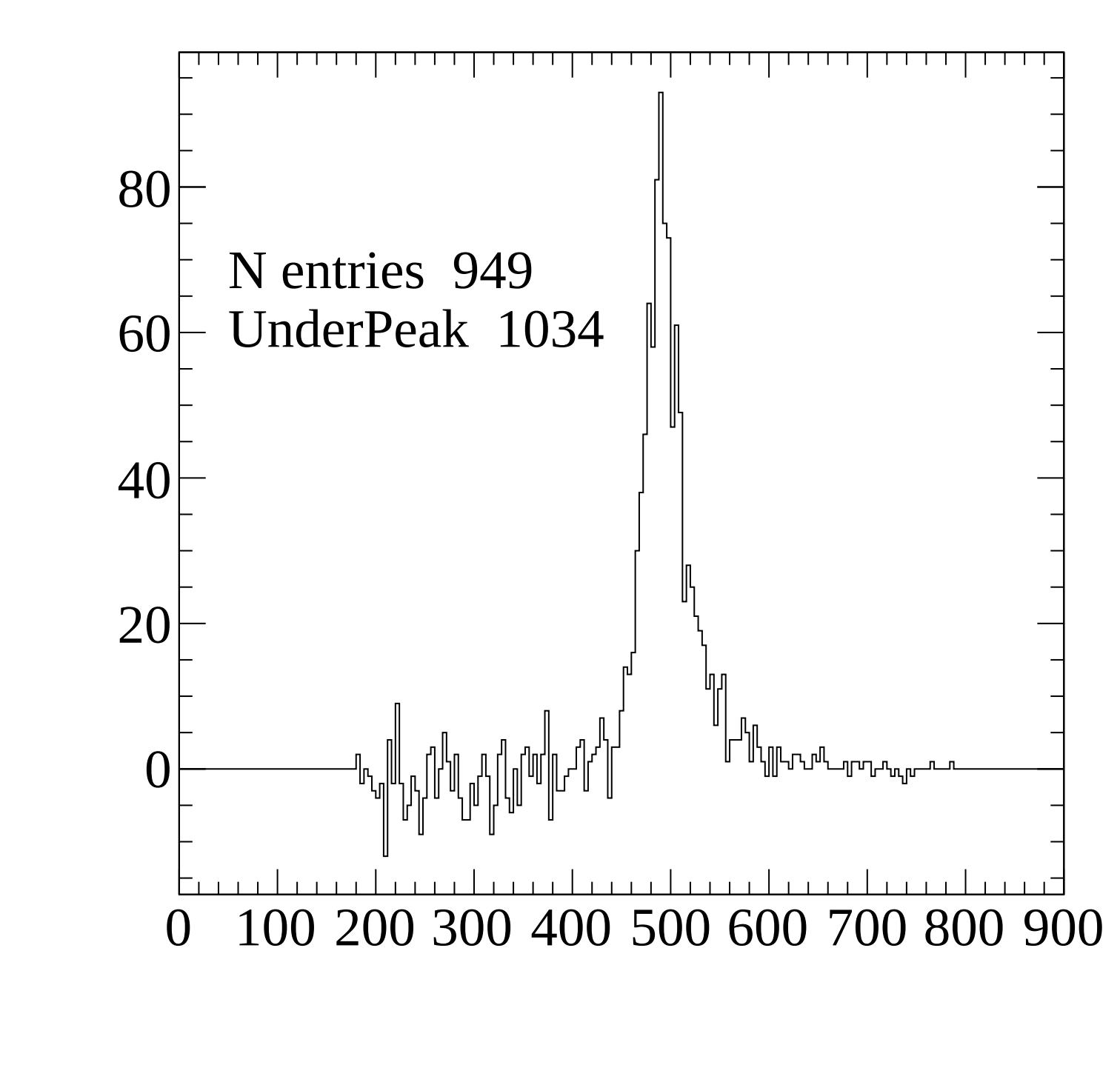

ECAL_twoPhotonInTime10ns3CoGOut4Cry134_216
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

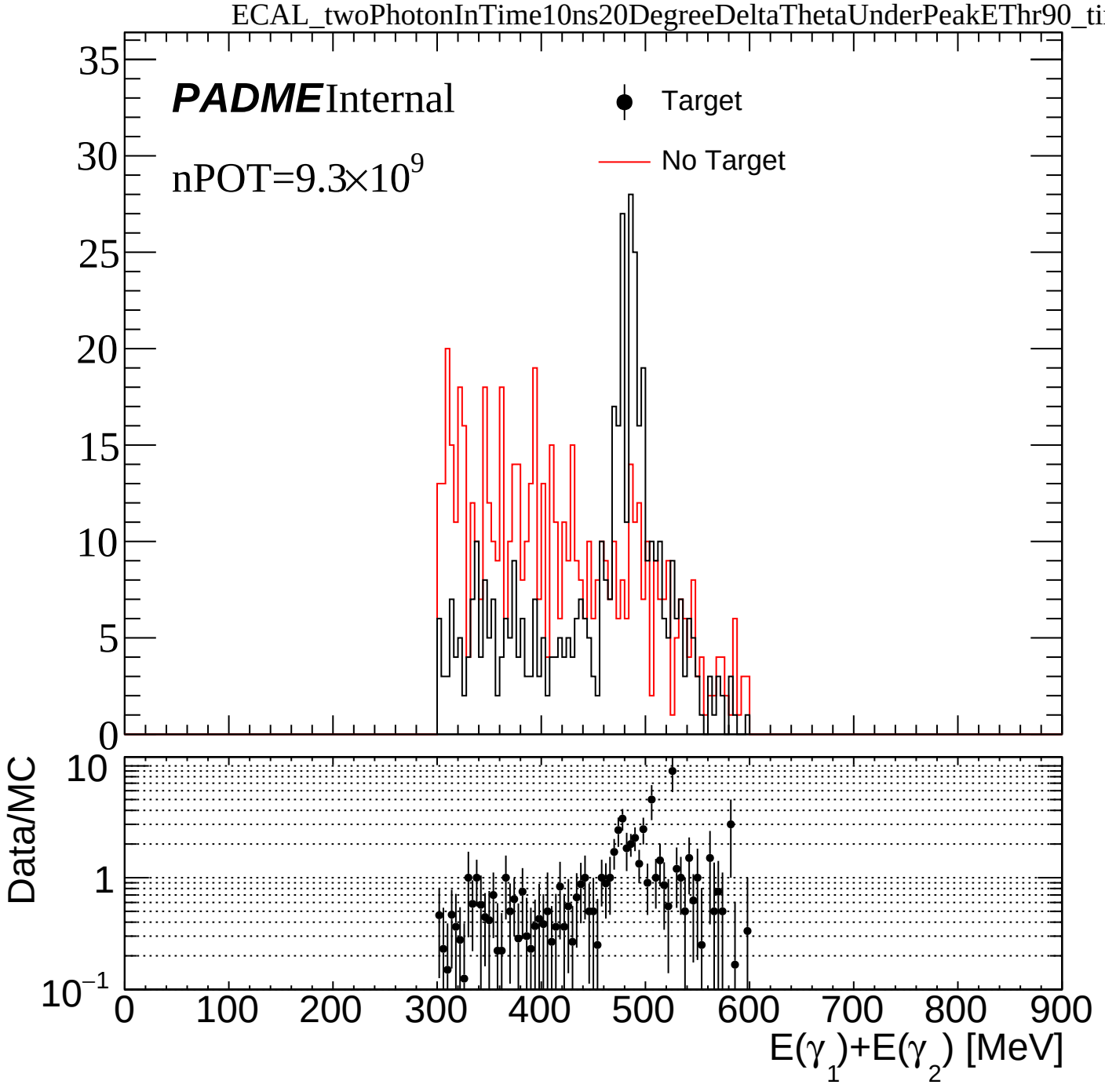

N entries 527
UnderPeak 1038
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

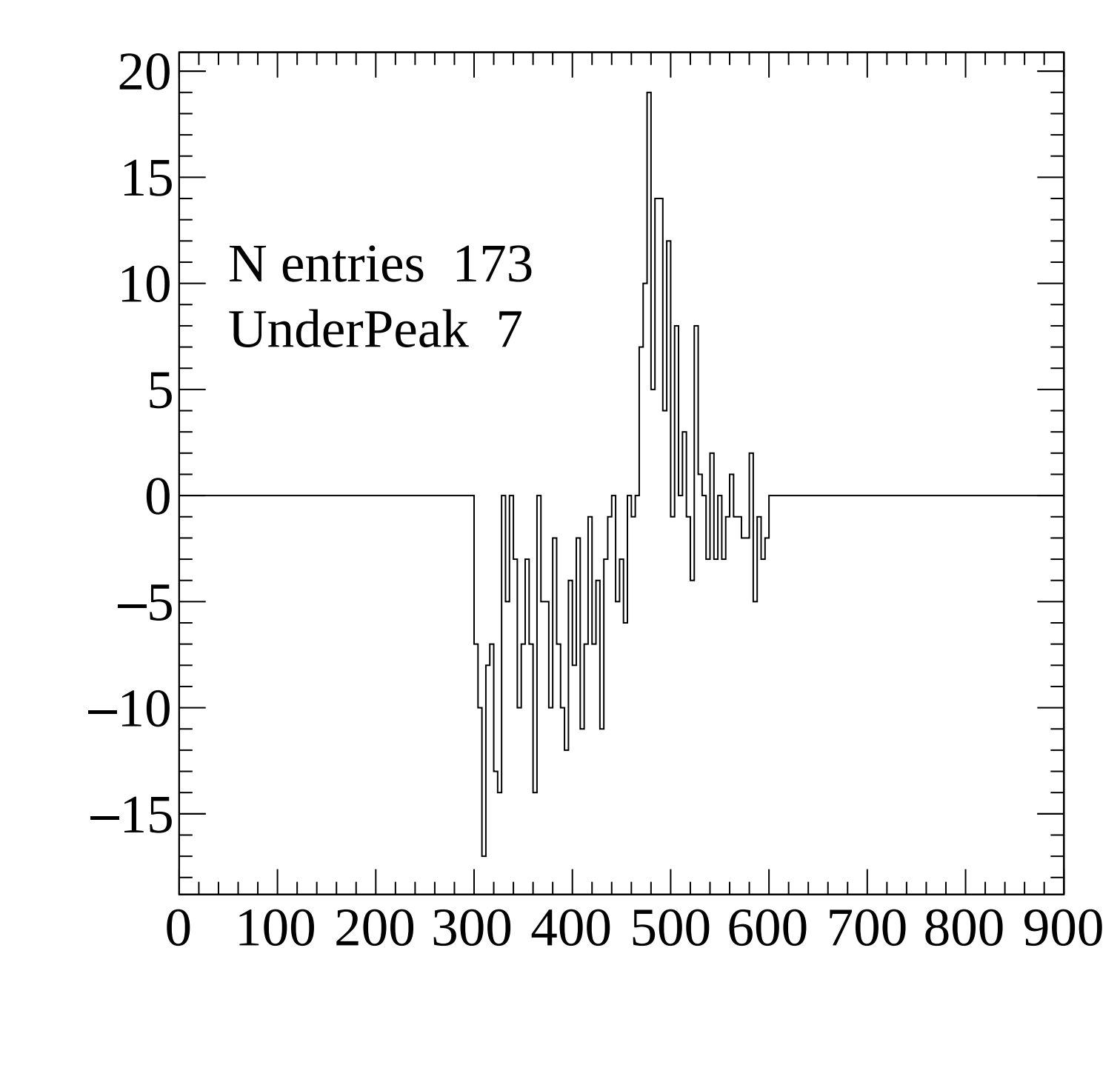

ECAL_twoPhotonInTime10ns3CoGOut4Cry134_216UnderPeak
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

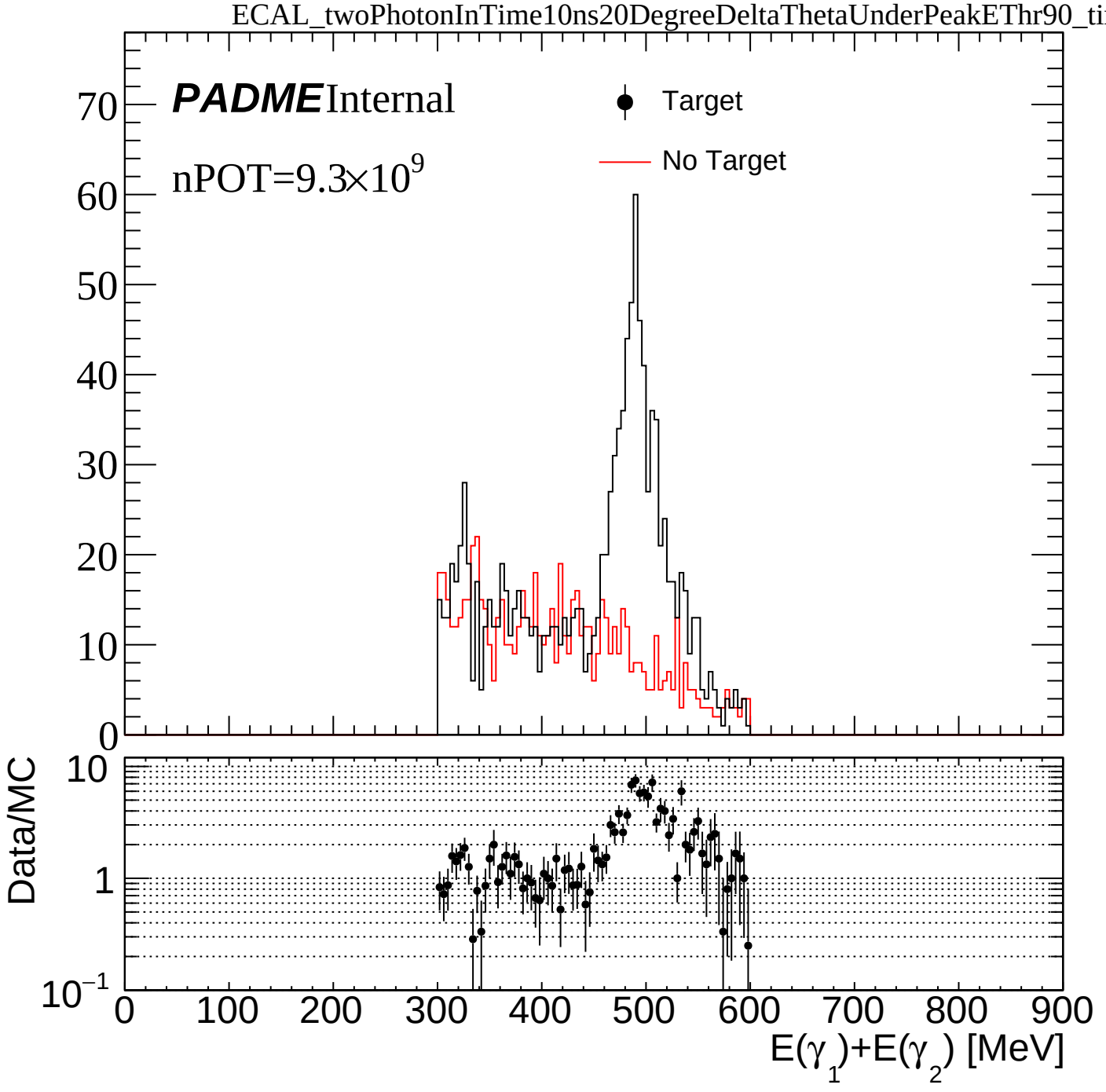

N entries 985
UnderPeak 1011
80
60
40
20
0
0
100
200
300
400
500
600
700
800
900

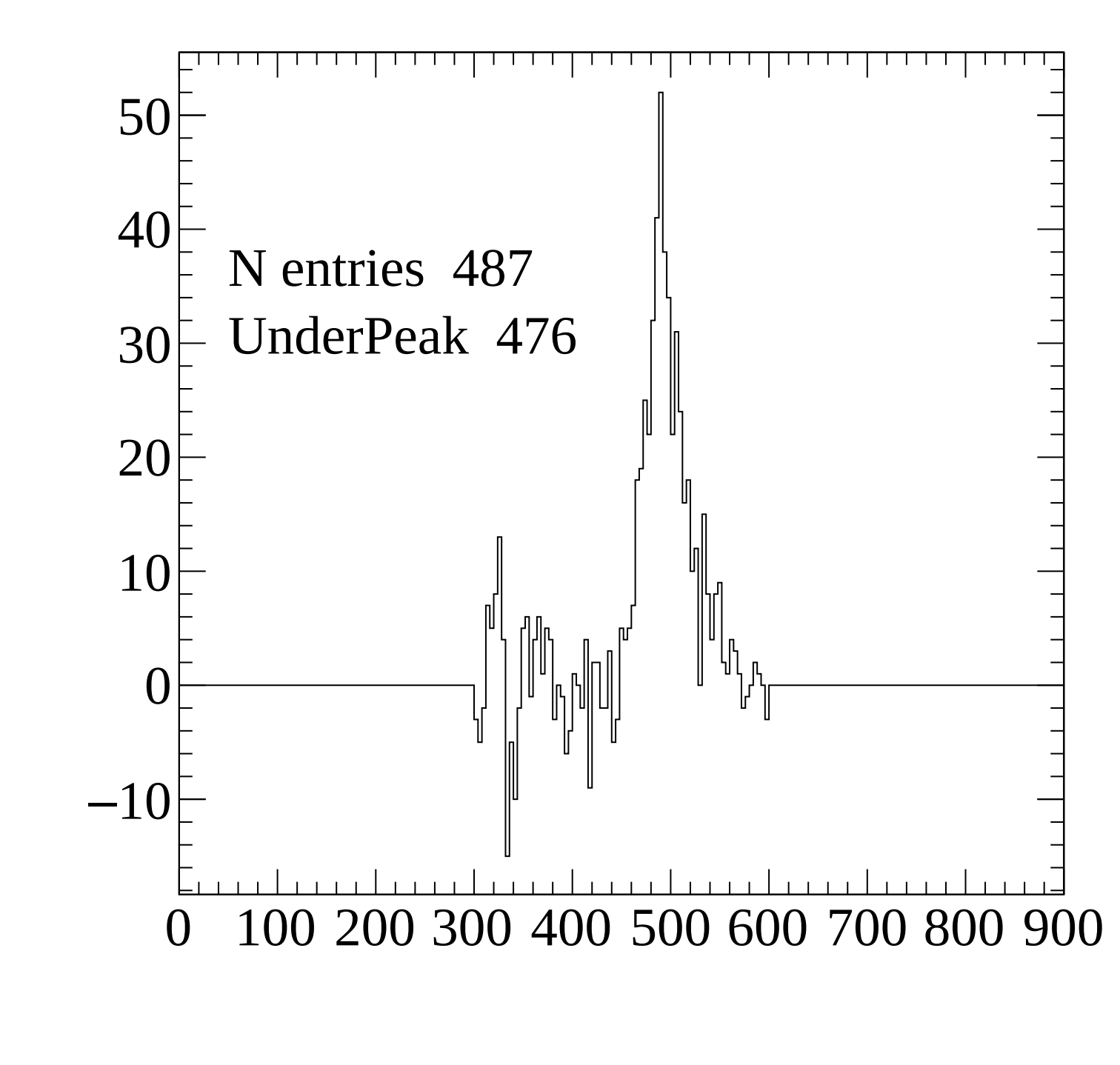

ECAL_twoPhotonInTime10ns3CoGOut4Cry134_216EThr90
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

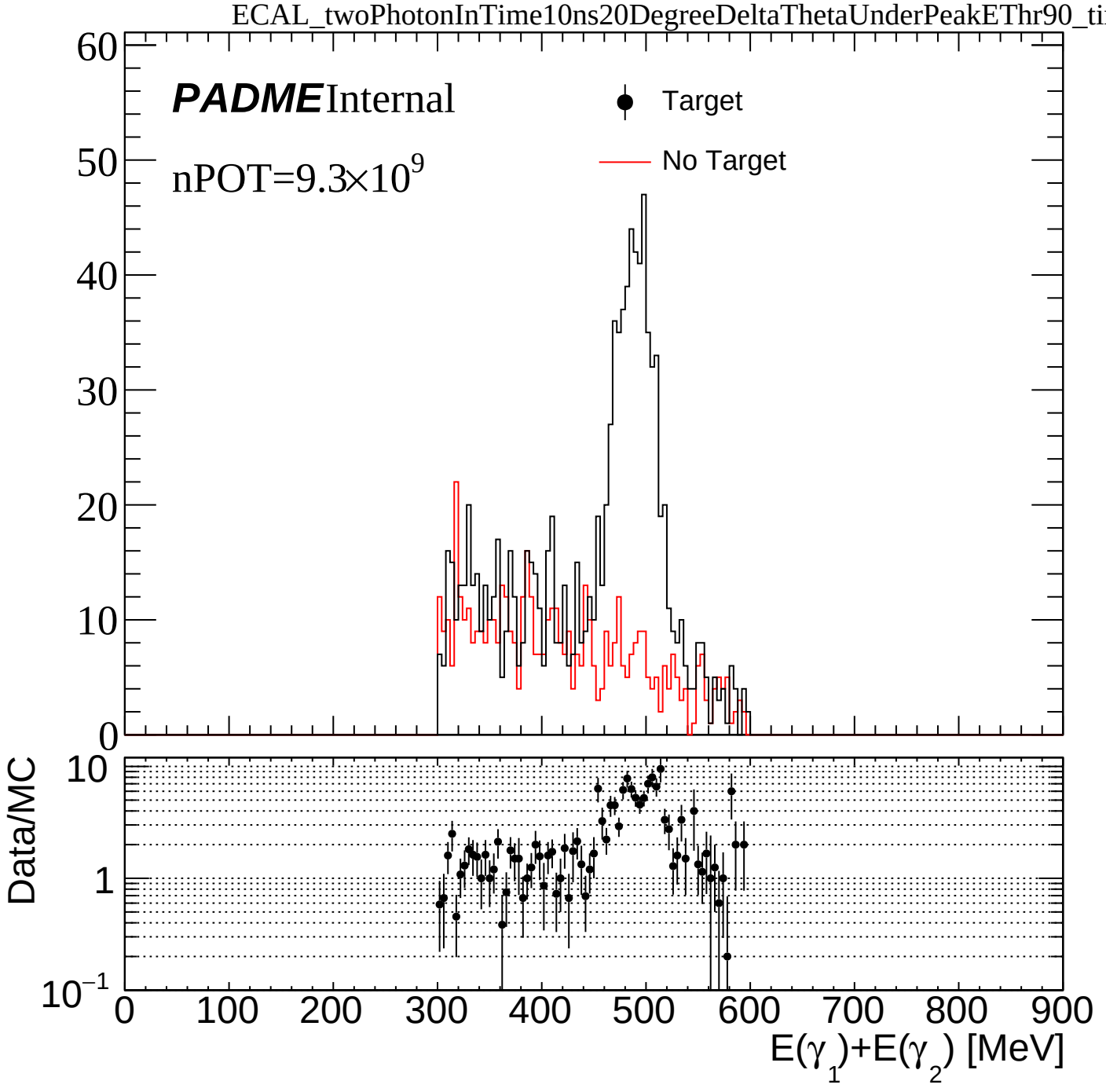

N entries 949
UnderPeak 1034
80
60
40
20
0
0
100
200
300
400
500
600
700
800
900

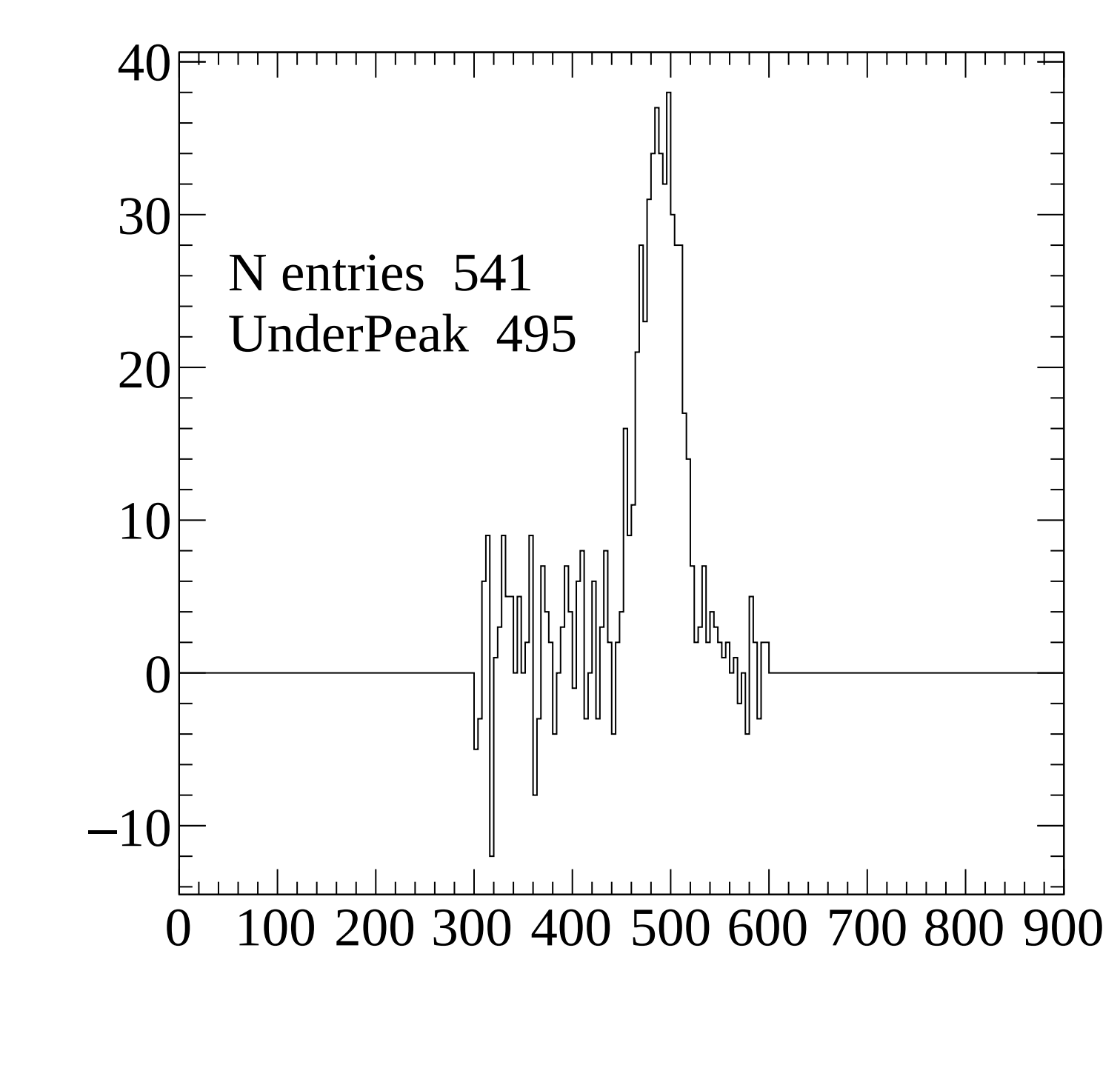

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_tim
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

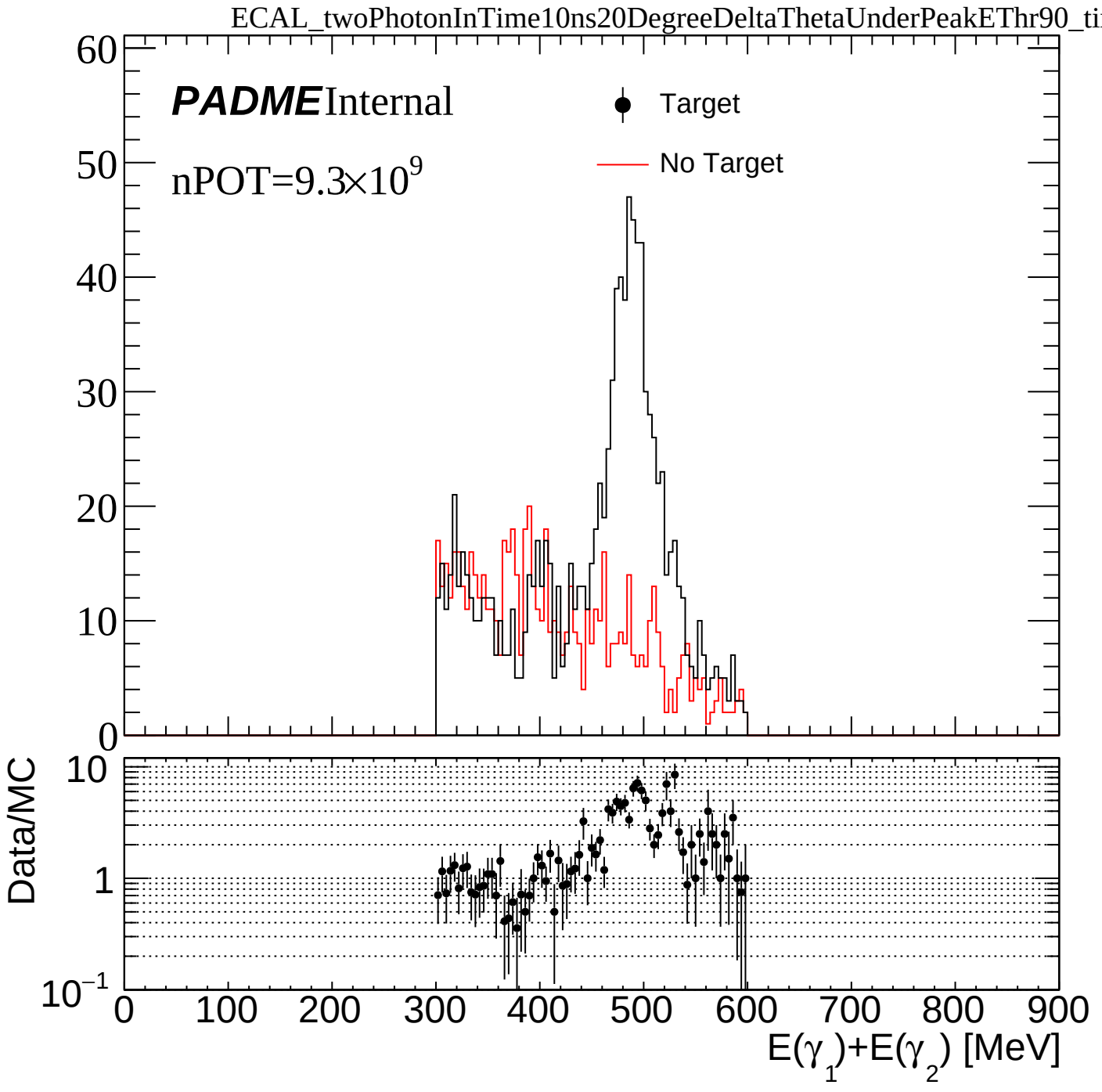

N entries 173
UnderPeak 7
20
15
10
5
0
−5
−10
−15
0
100
200
300
400
500
600
700
800
900

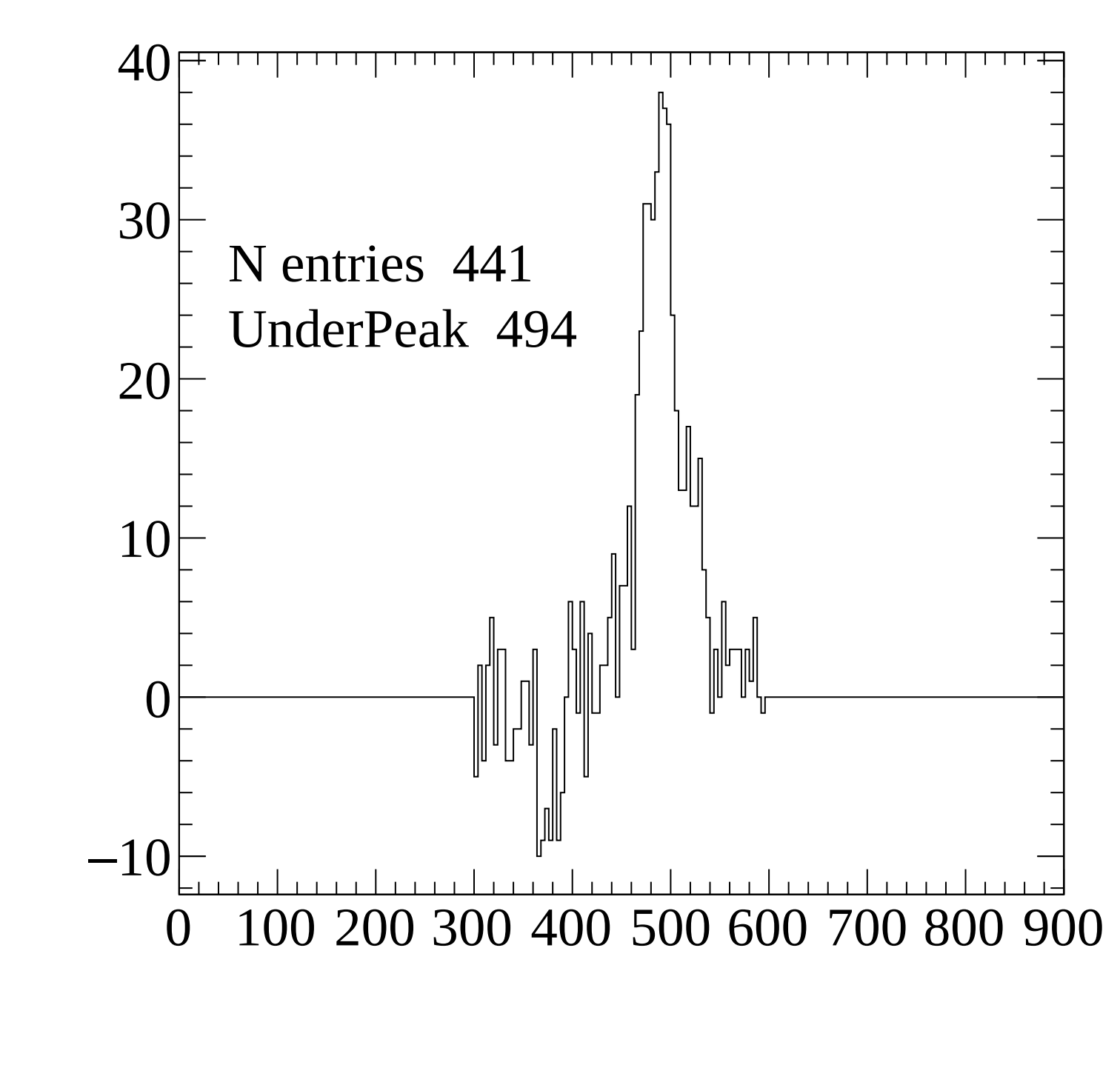

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_tim
PADME Internal
nPOT=9.3×10^9
Target
No Target
70
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

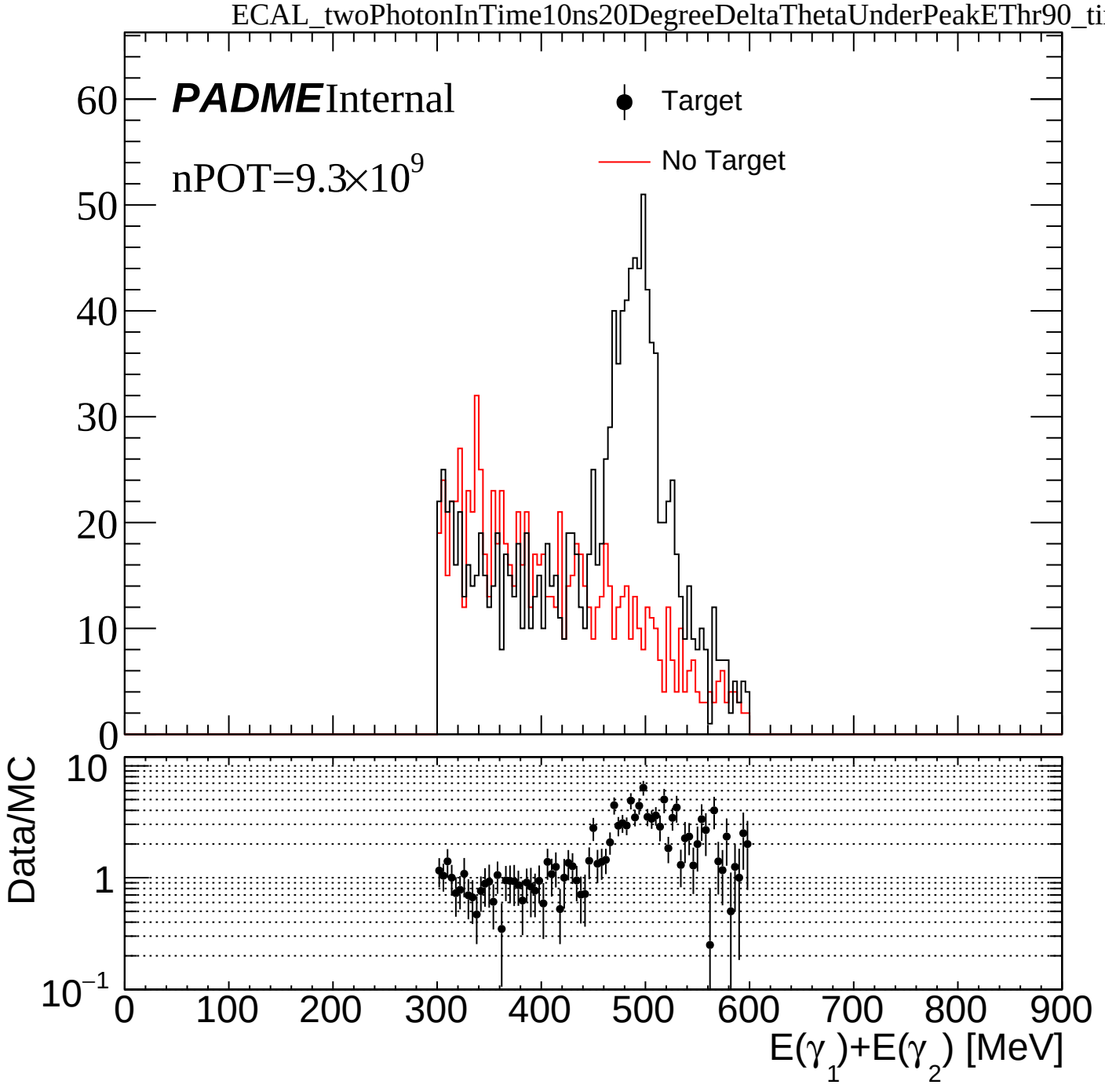

N entries 487
UnderPeak 476
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

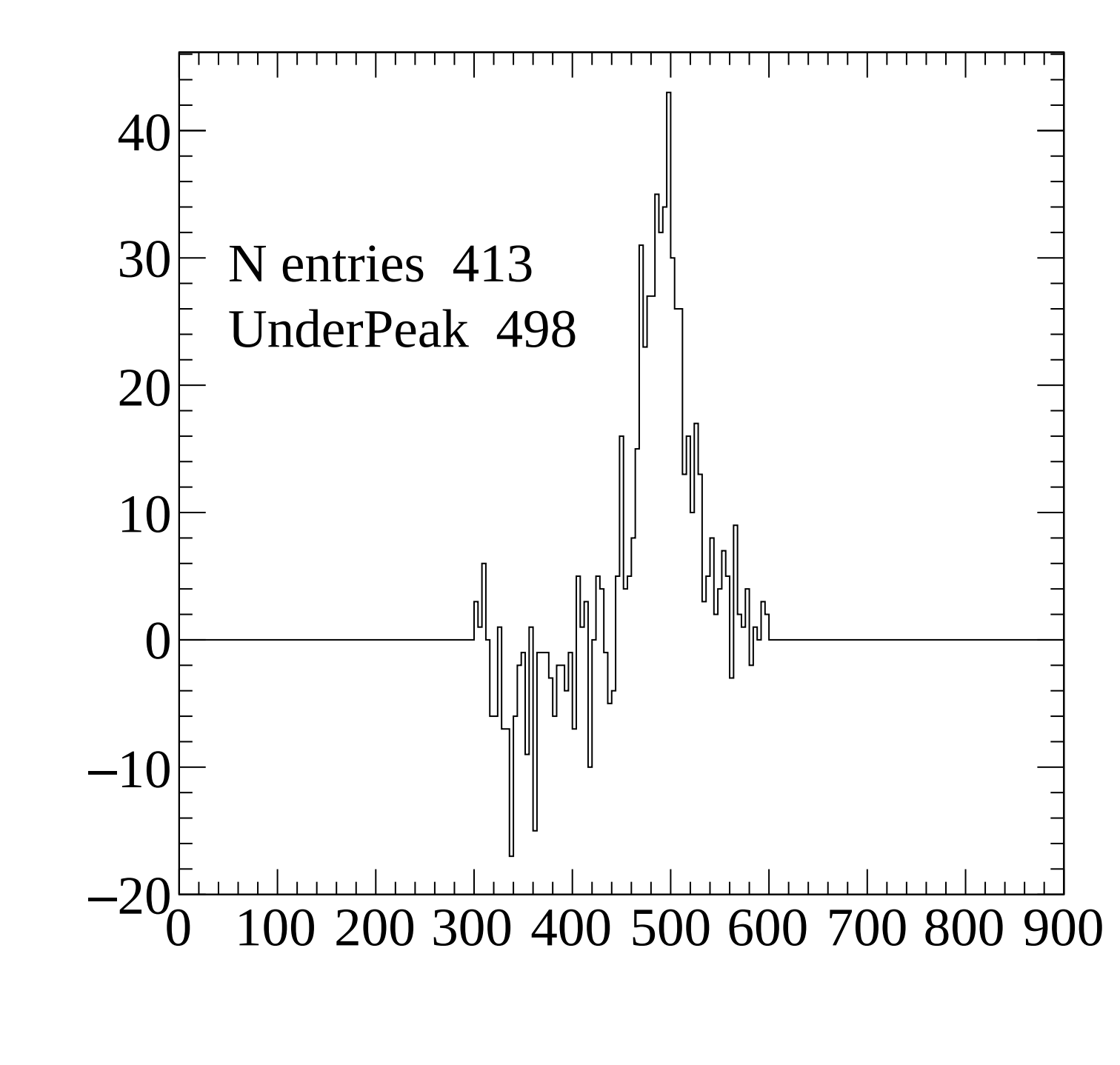

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_tim
PADME Internal
nPOT=9.3×10^9
Target
No Target
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

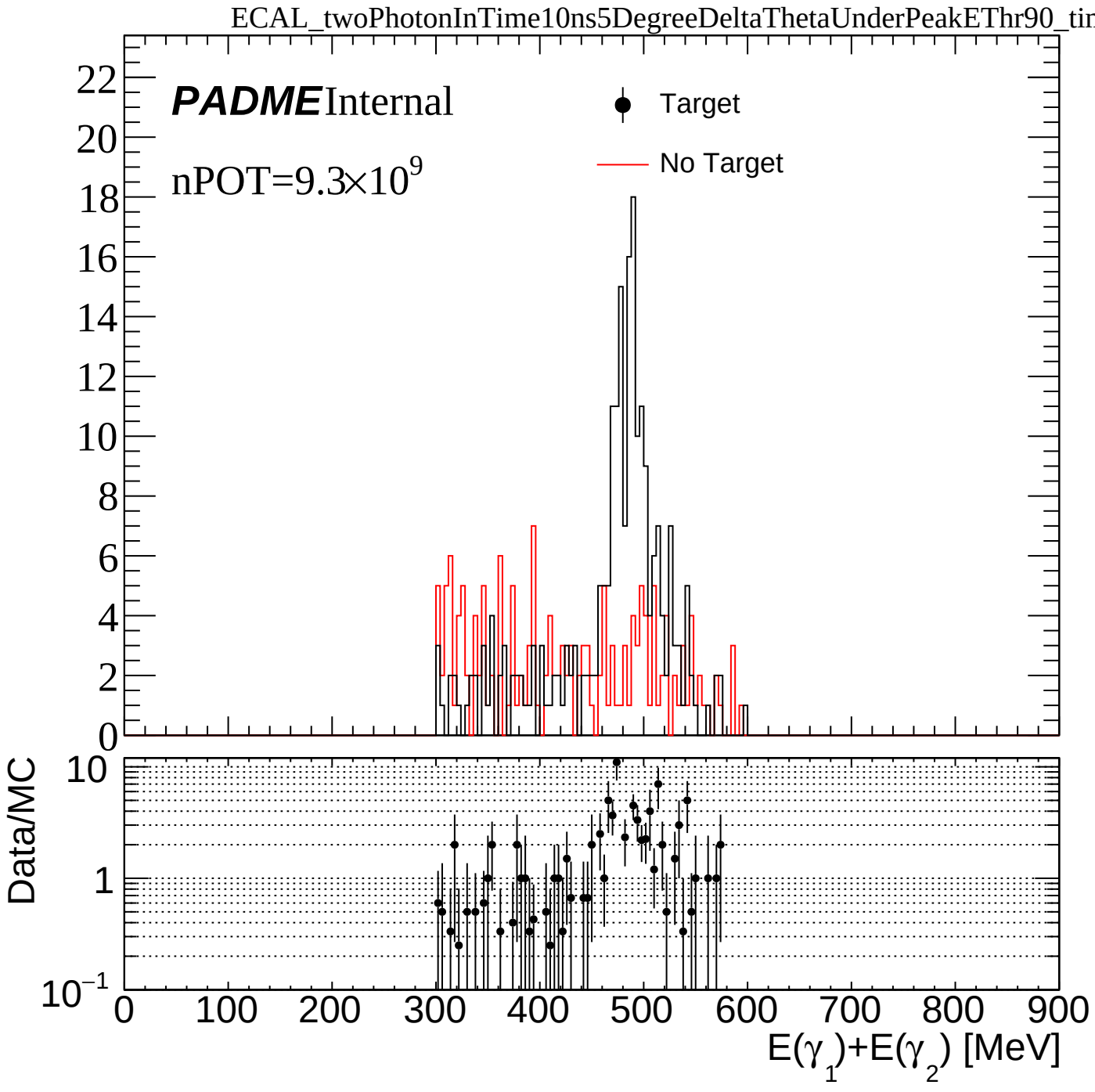

N entries 541
UnderPeak 495
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

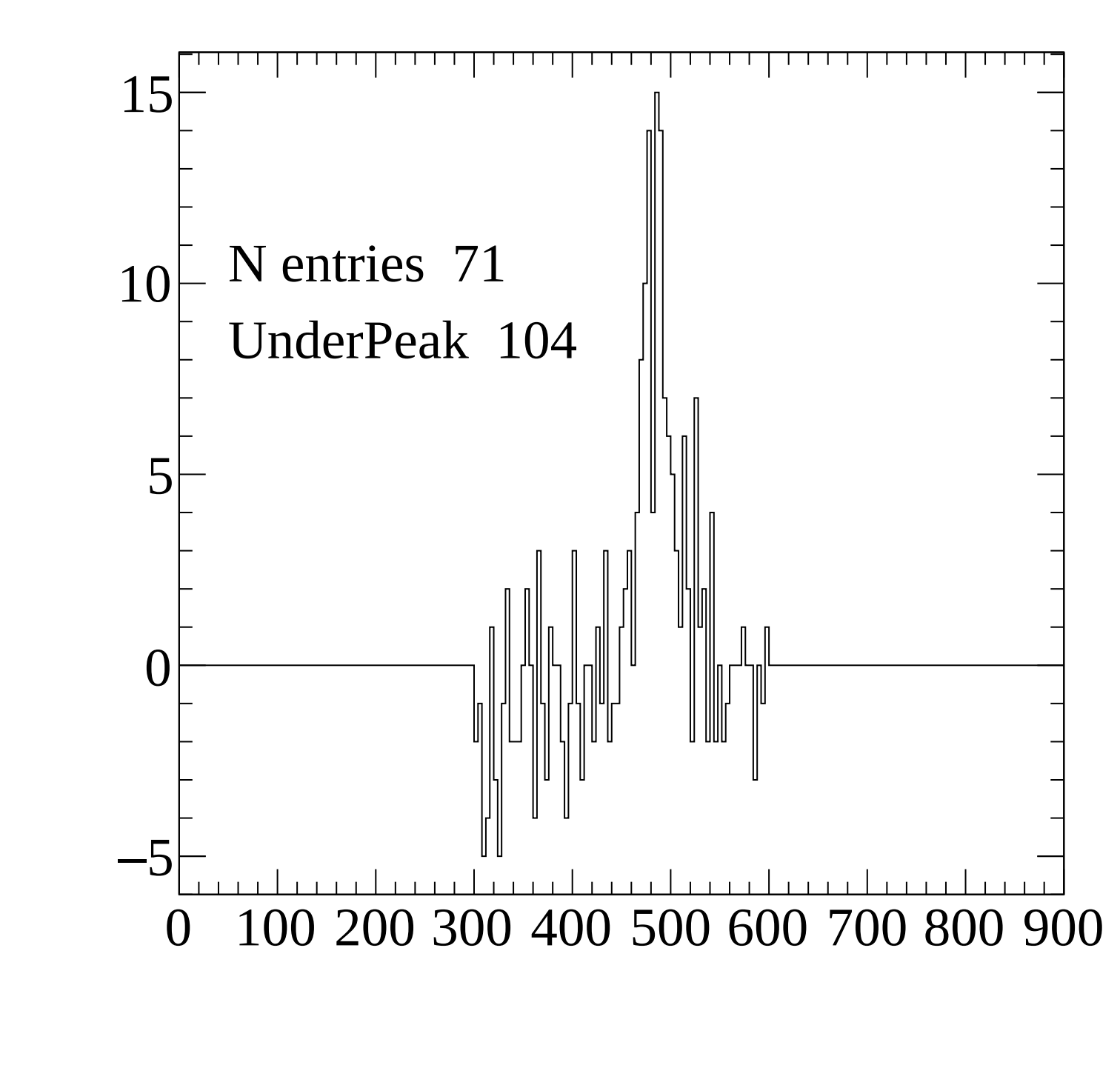

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_tim
PADME Internal
nPOT=9.3×10^9
Target
No Target
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

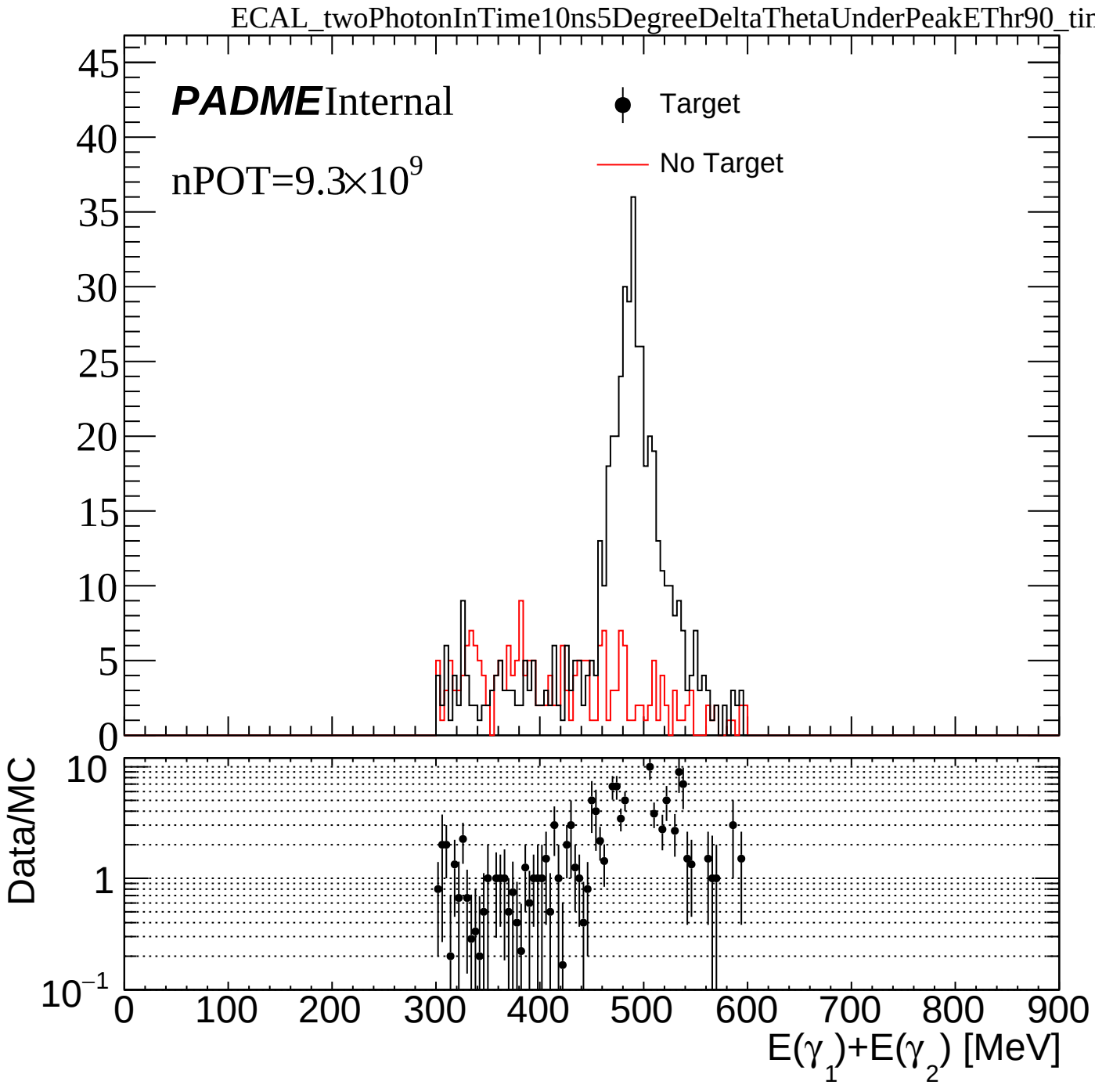

N entries 441
UnderPeak 494
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

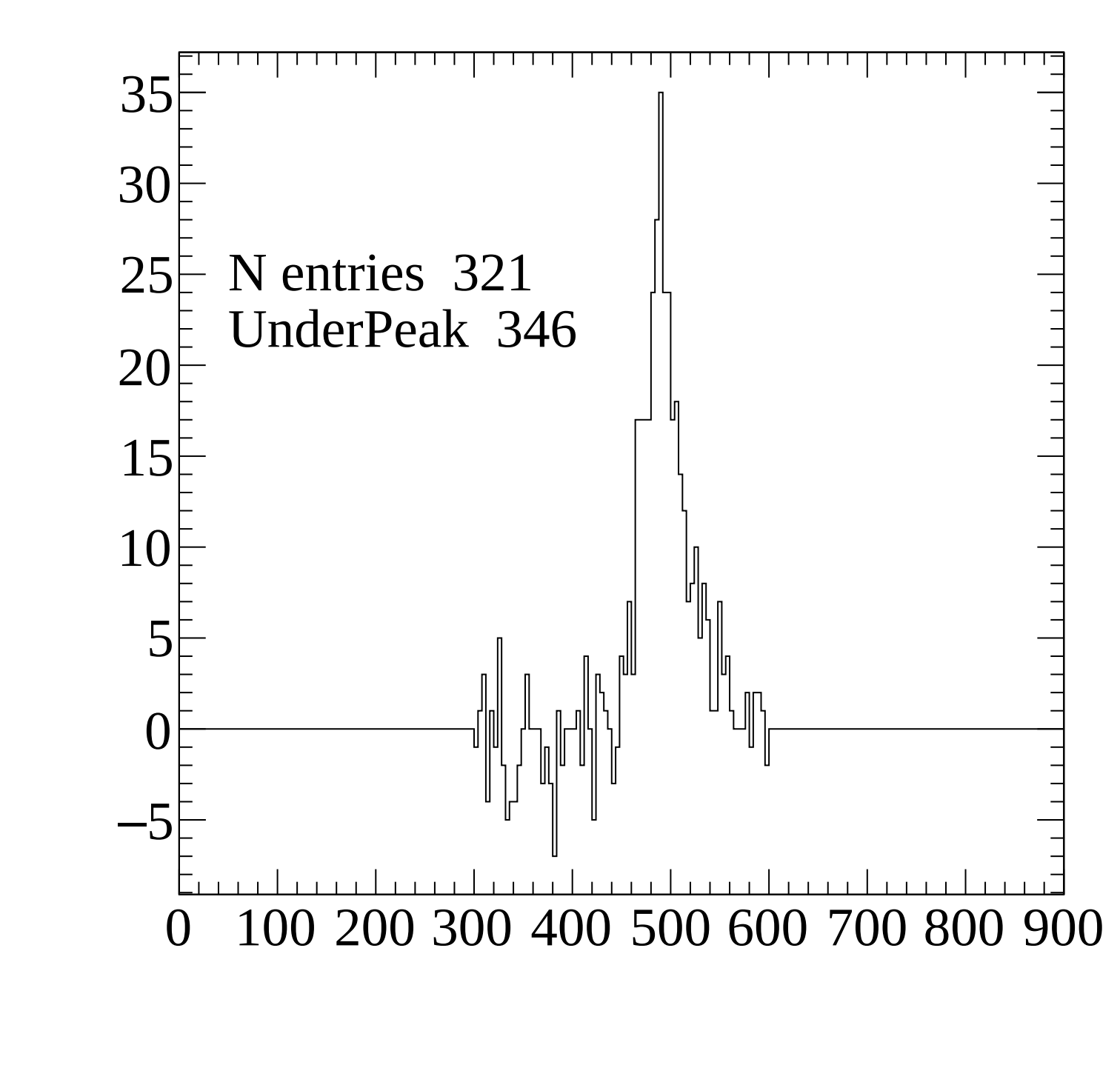

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaUnderPeakEThr90_tim
PADME Internal
nPOT=9.3×10^9
Target
No Target
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

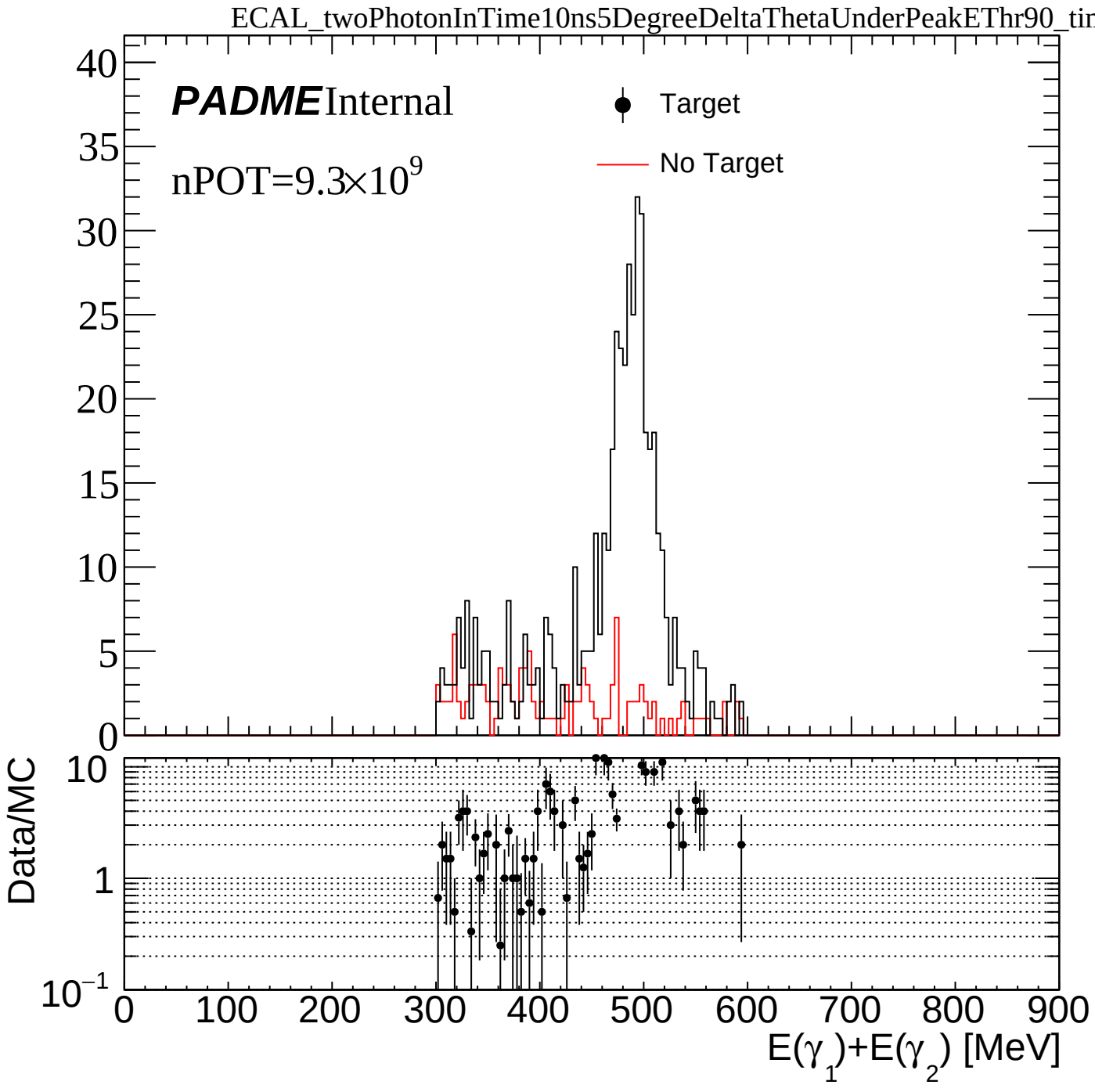

N entries 413
UnderPeak 498
40
30
20
10
0
−10
−20
0
100
200
300
400
500
600
700
800
900

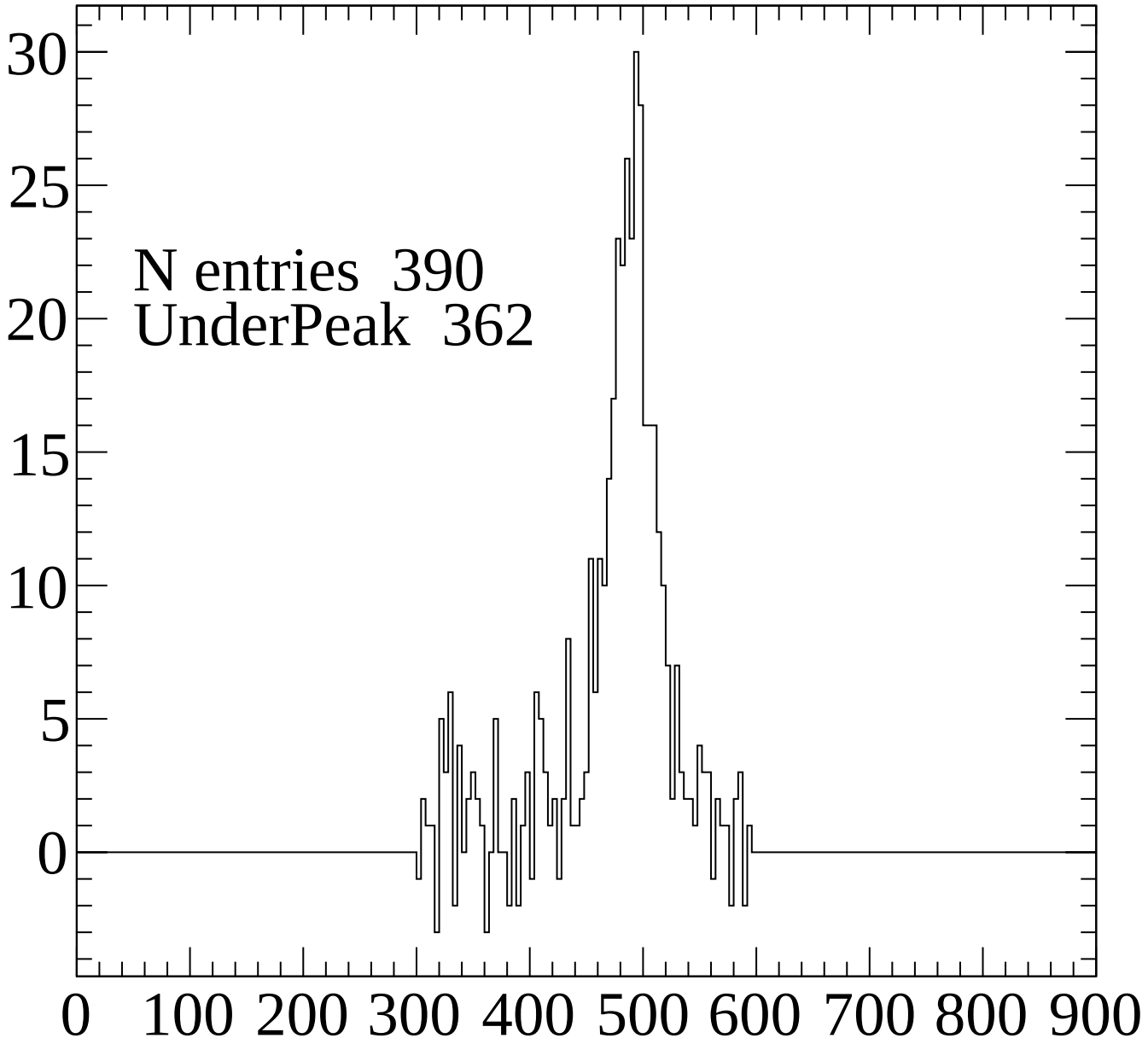

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90_time
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

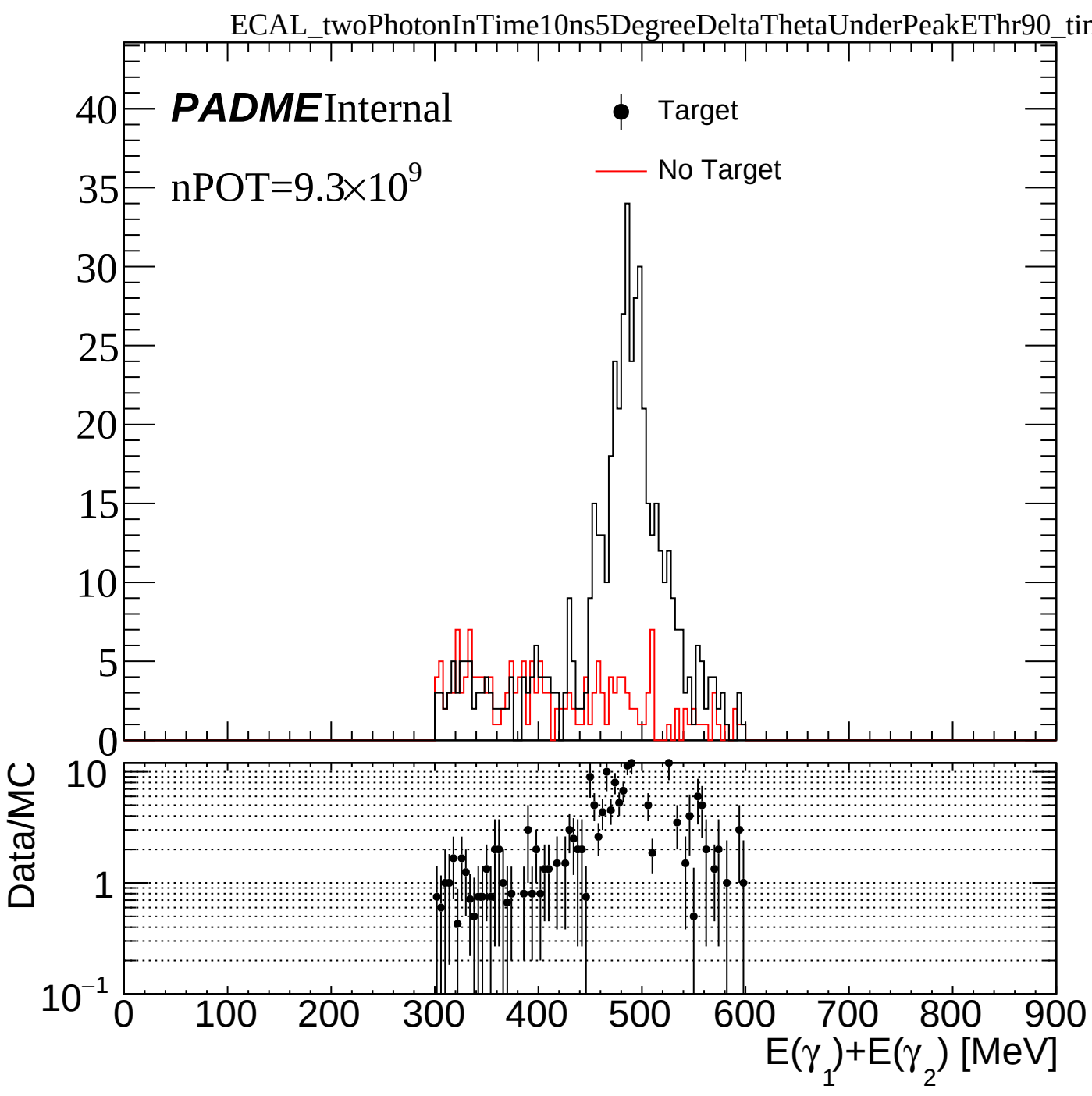

N entries 71
UnderPeak 104
15
10
5
0
−5
0
100
200
300
400
500
600
700
800
900

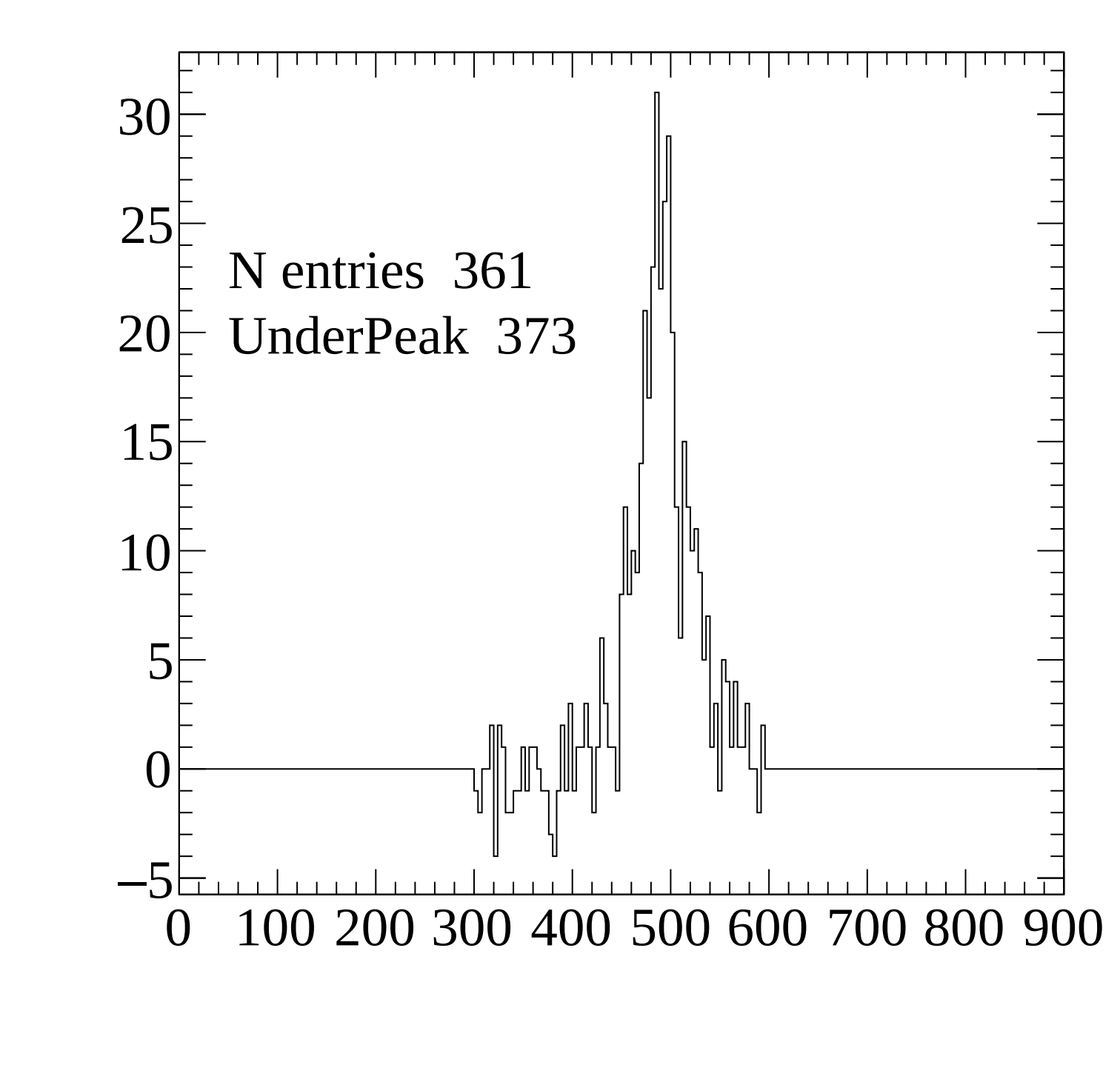

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90_time
PADME Internal
nPOT=9.3×10^9
Target
No Target
45
40
35
30
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

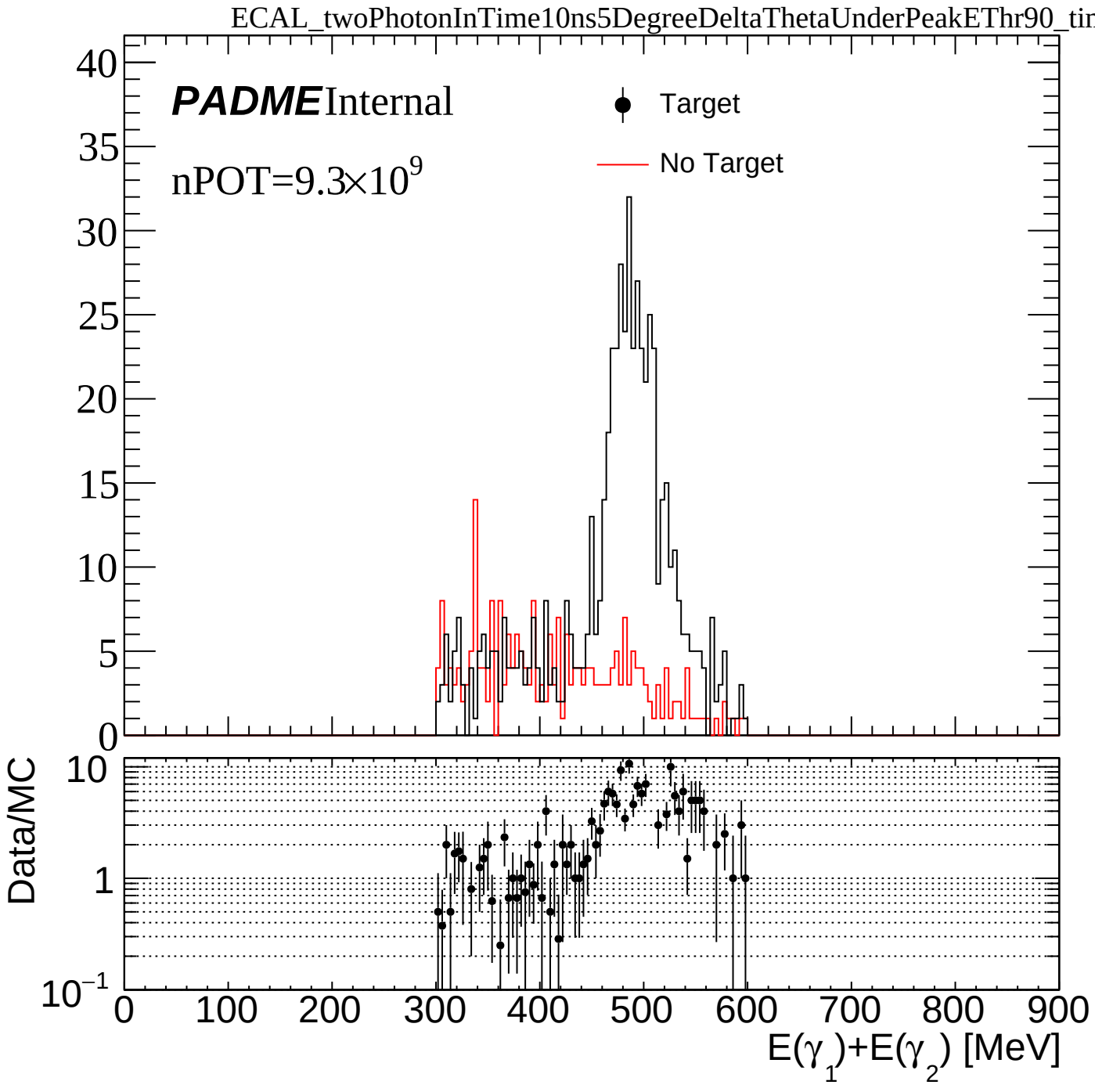

N entries 321
UnderPeak 346
35
30
25
20
15
10
5
0
−5
0
100
200
300
400
500
600
700
800
900

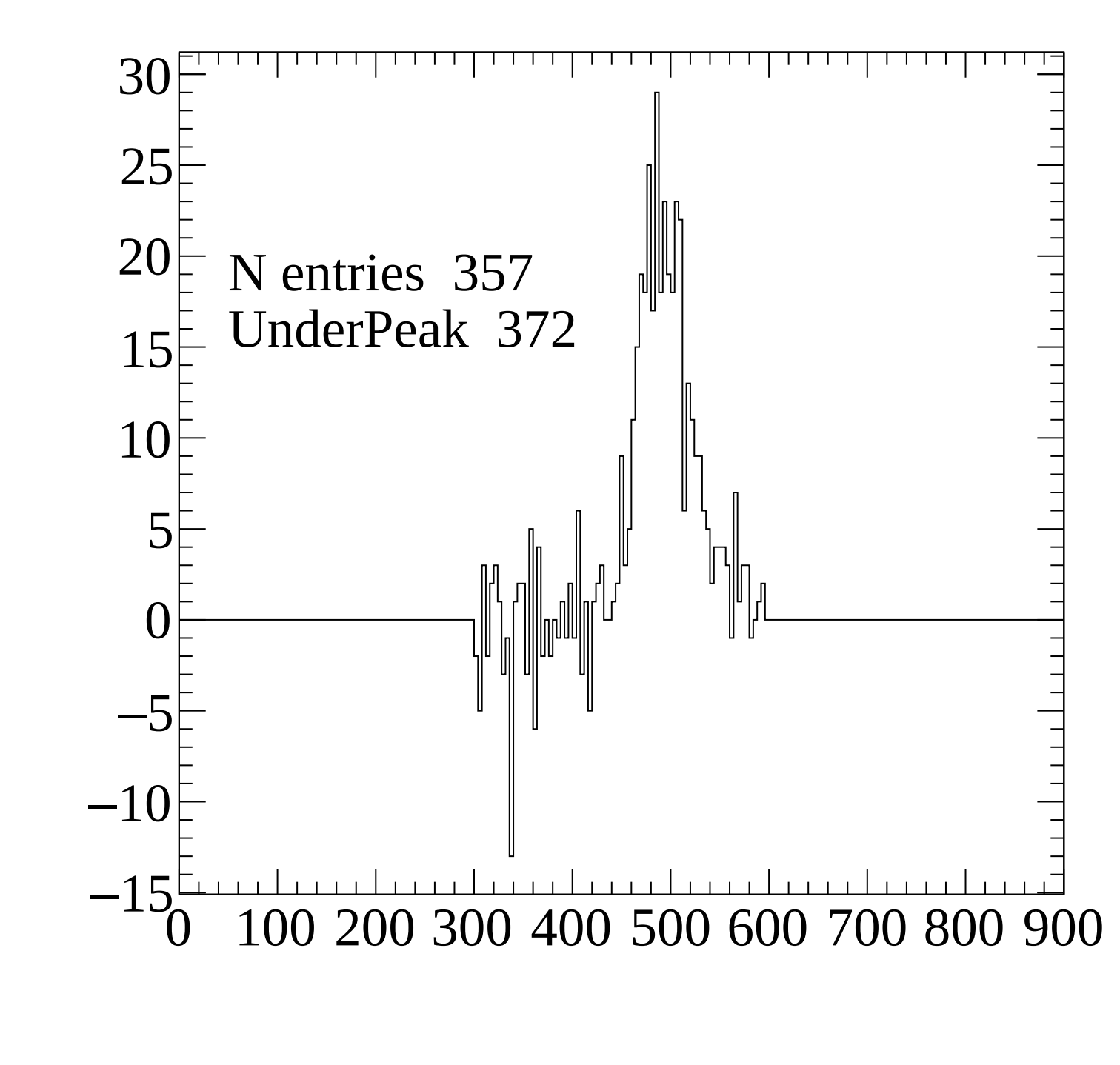

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90_time
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

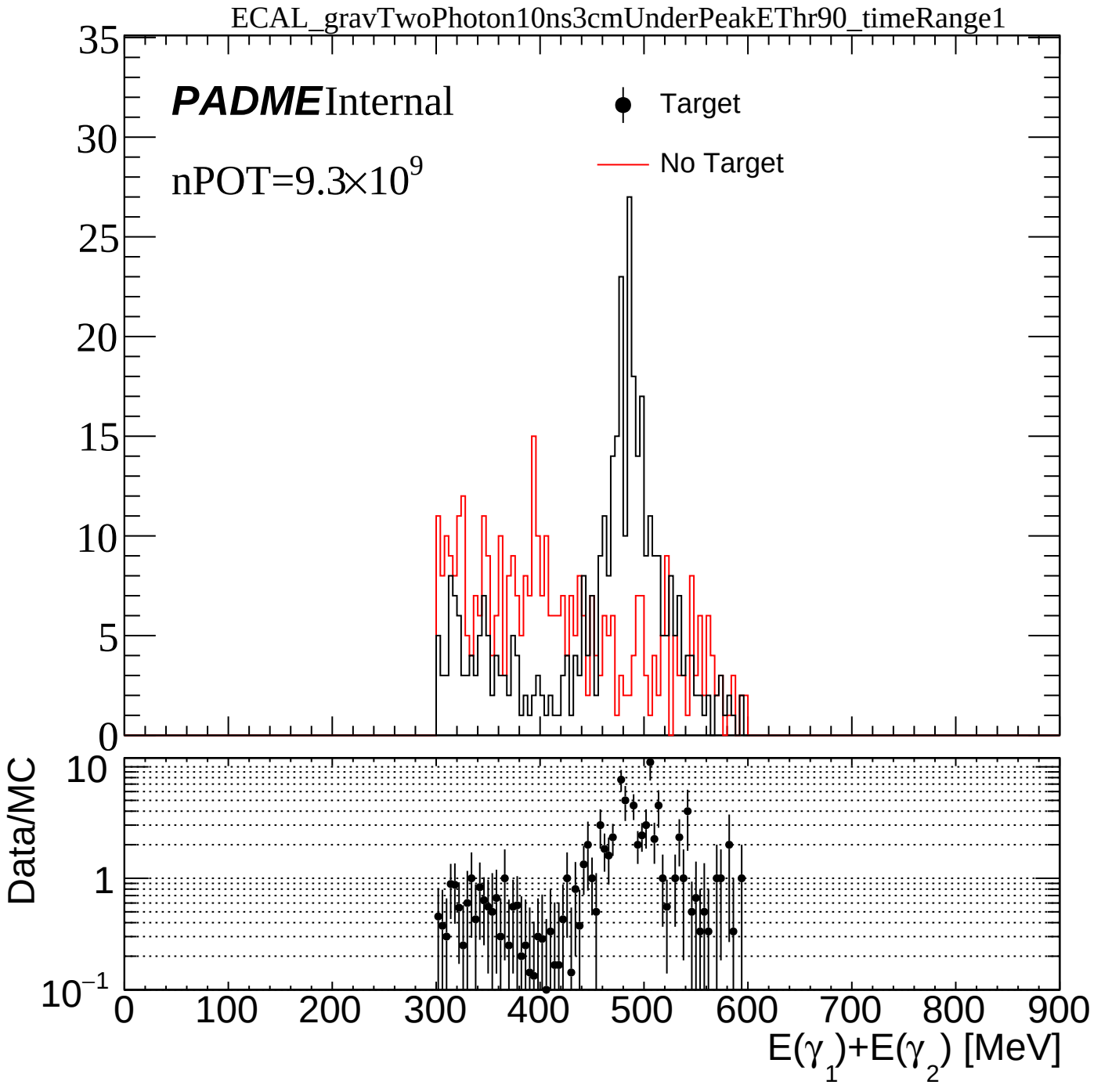

N entries 390
UnderPeak 362
30
25
20
15
10
5
0
0 100 200 300 400 500 600 700 800 900

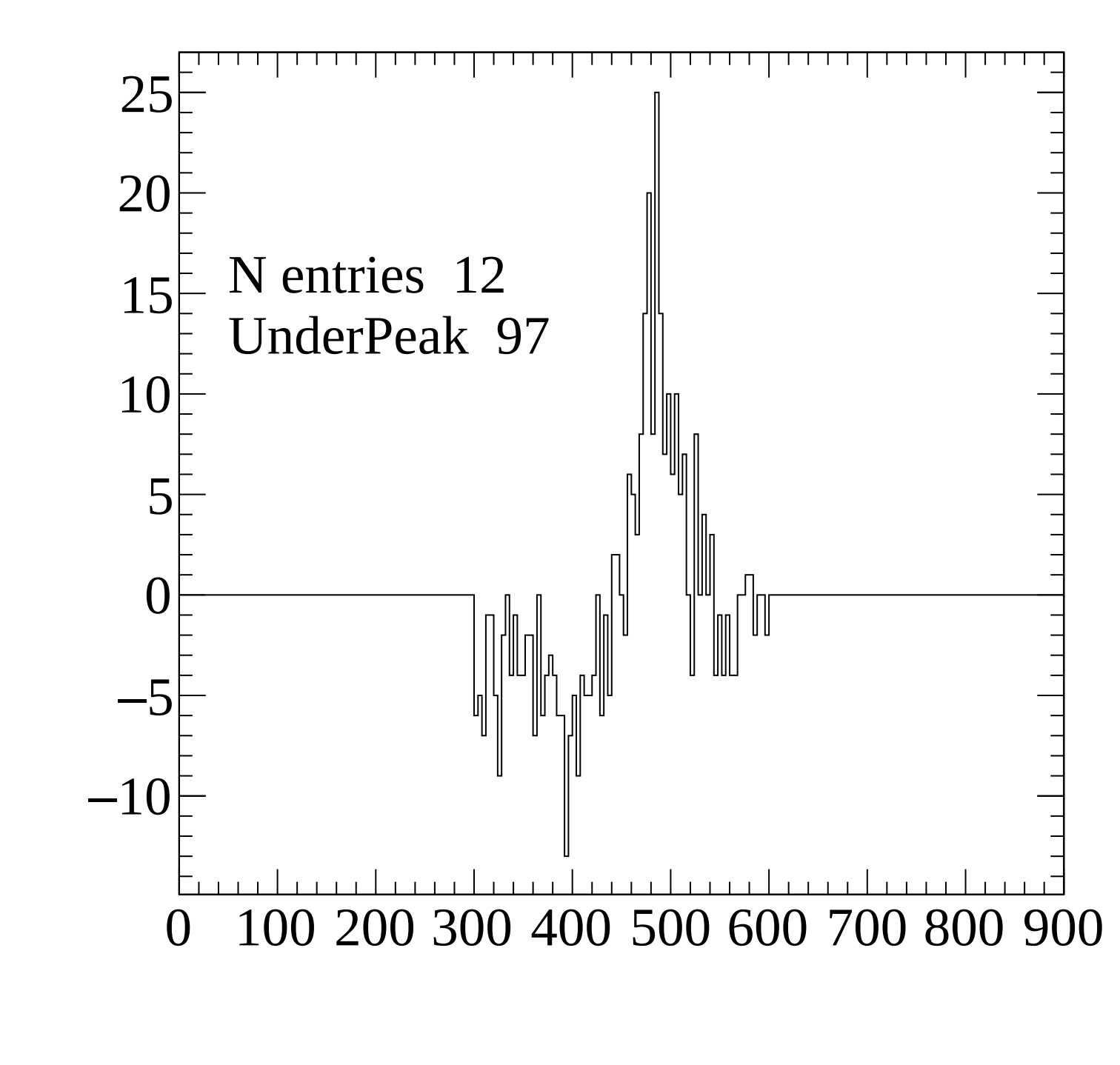

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90_time
PADME Internal
nPOT=9.3×10^9
Target
No Target
40
35
30
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

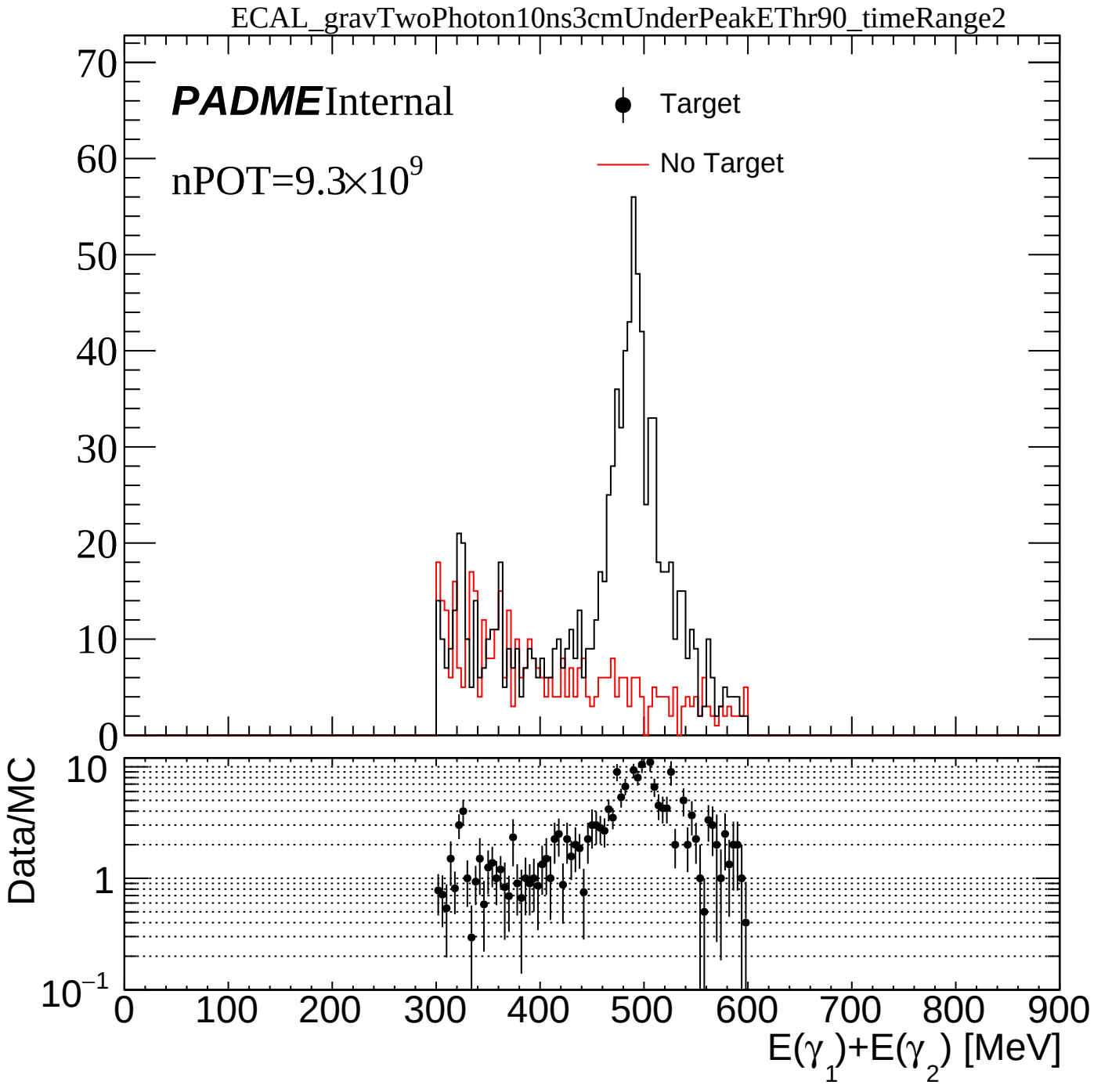

N entries 361
UnderPeak 373
30
25
20
15
10
5
0
−5
0
100
200
300
400
500
600
700
800
900

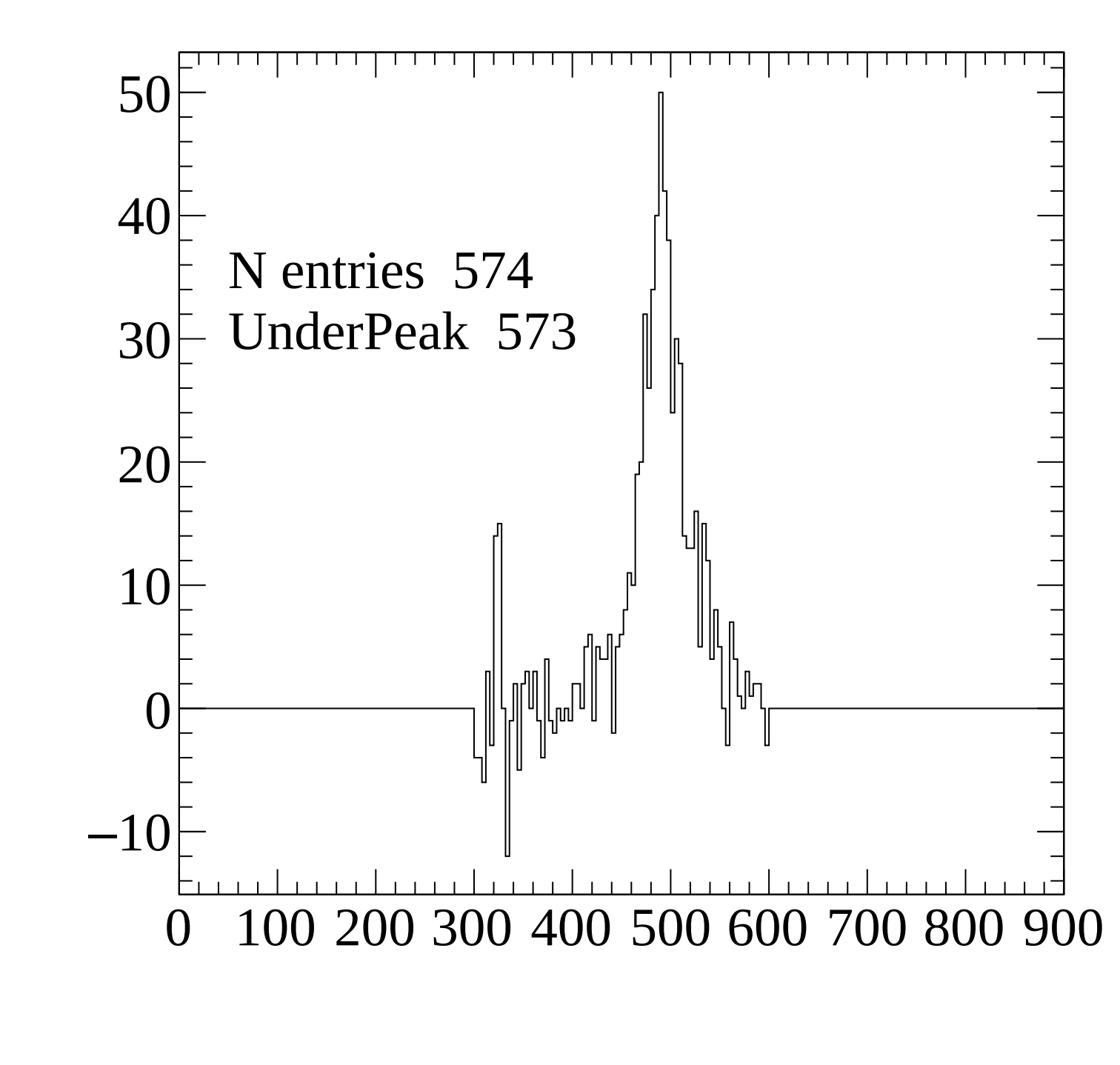

ECAL_twoPhotonInTime10ns5DegreeDeltaThetaUnderPeakEThr90_time
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

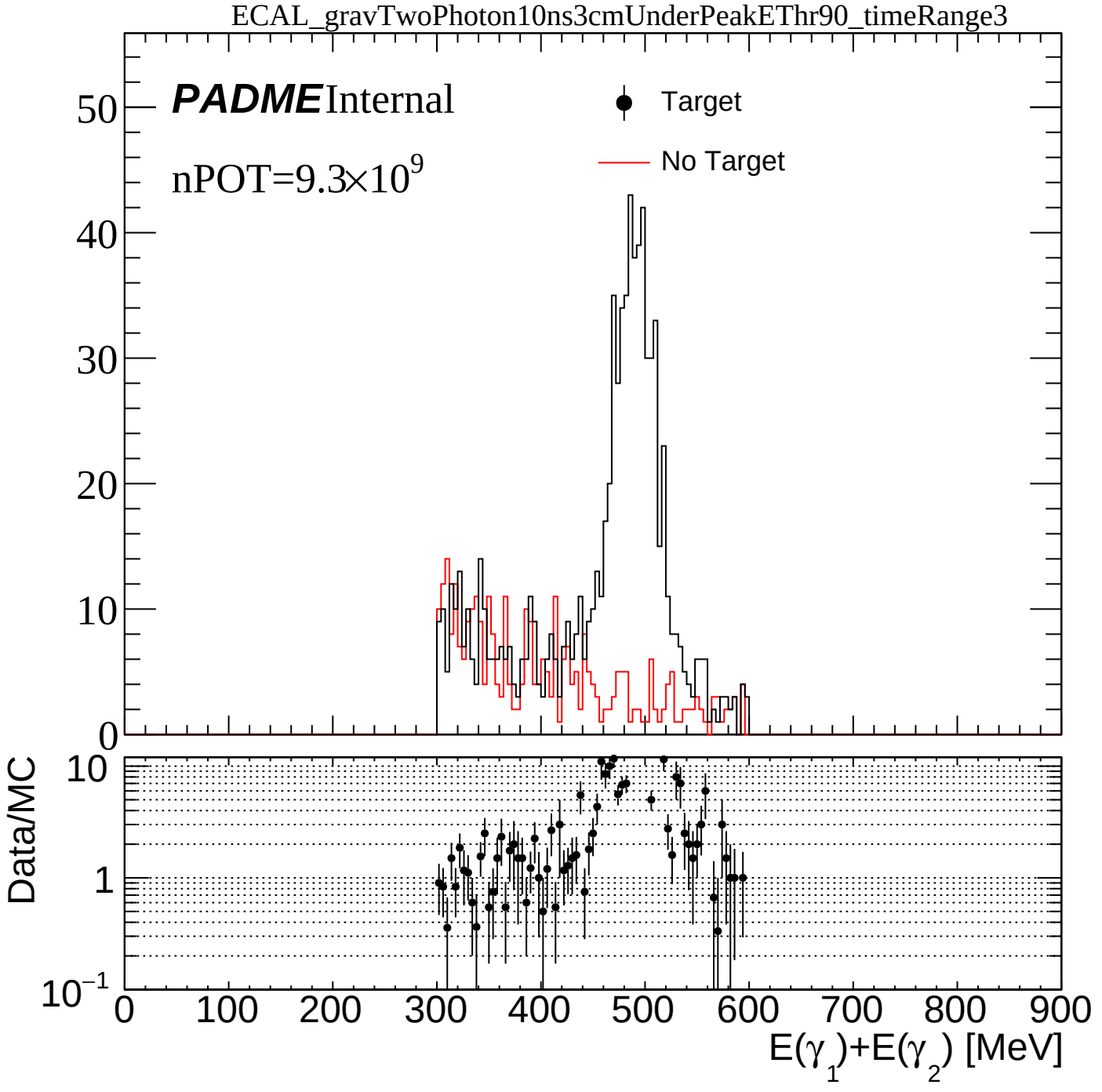

N entries 357
UnderPeak 372
30
25
20
15
10
5
0
−5
−10
−15
0
100
200
300
400
500
600
700
800
900

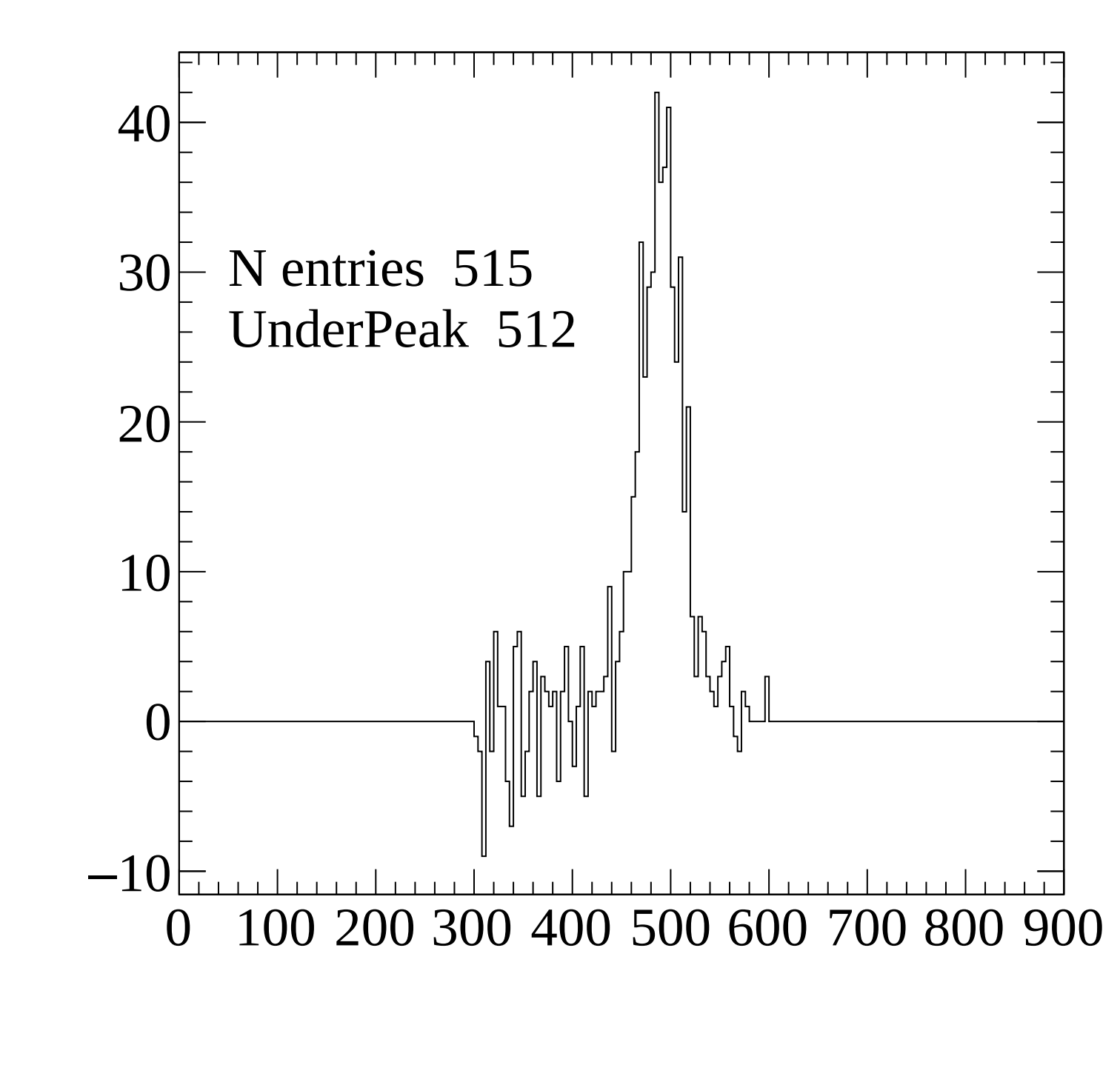

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_timeRange1
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

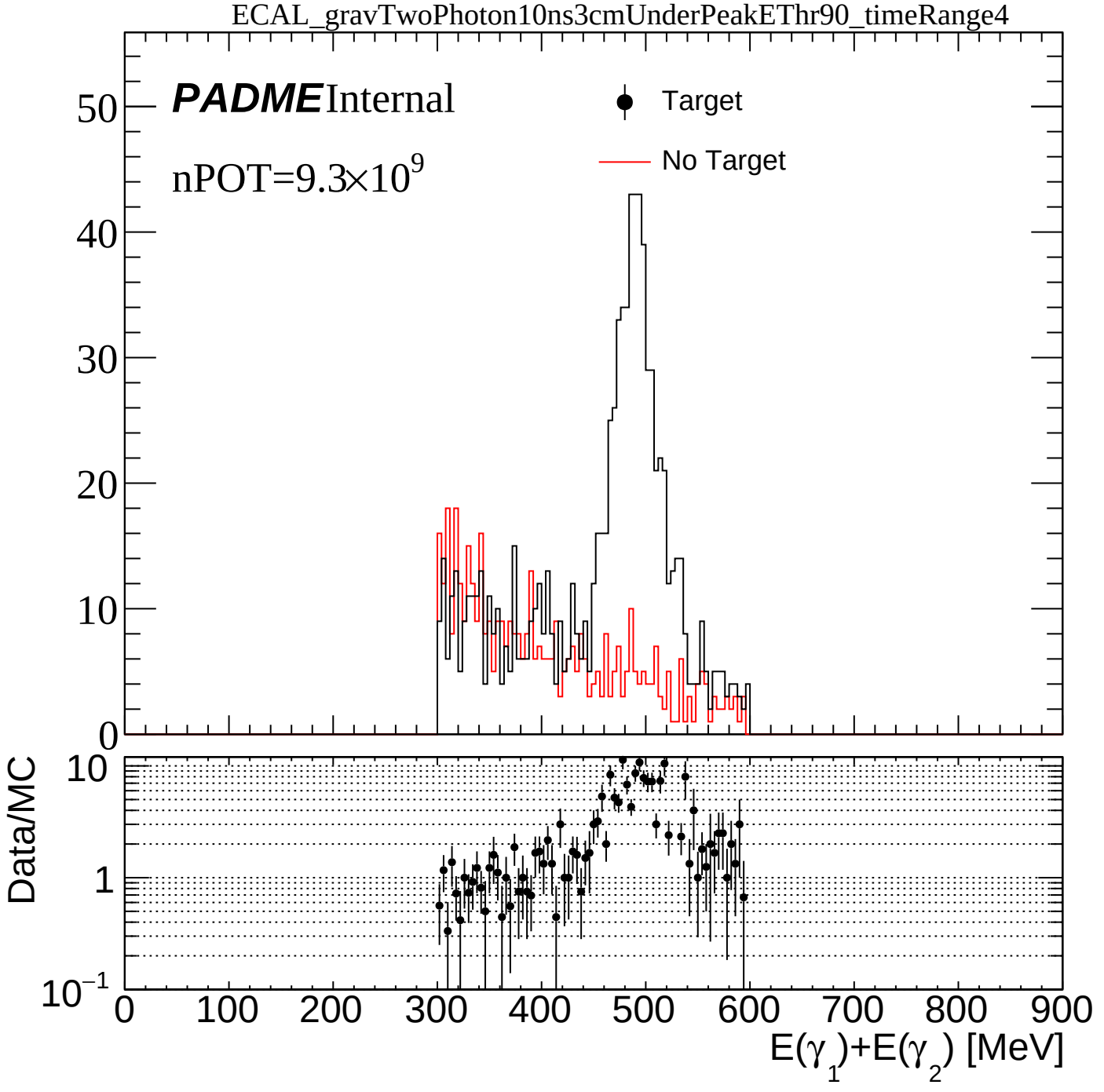

N entries 12
UnderPeak 97
25
20
15
10
5
0
−5
−10
0
100
200
300
400
500
600
700
800
900

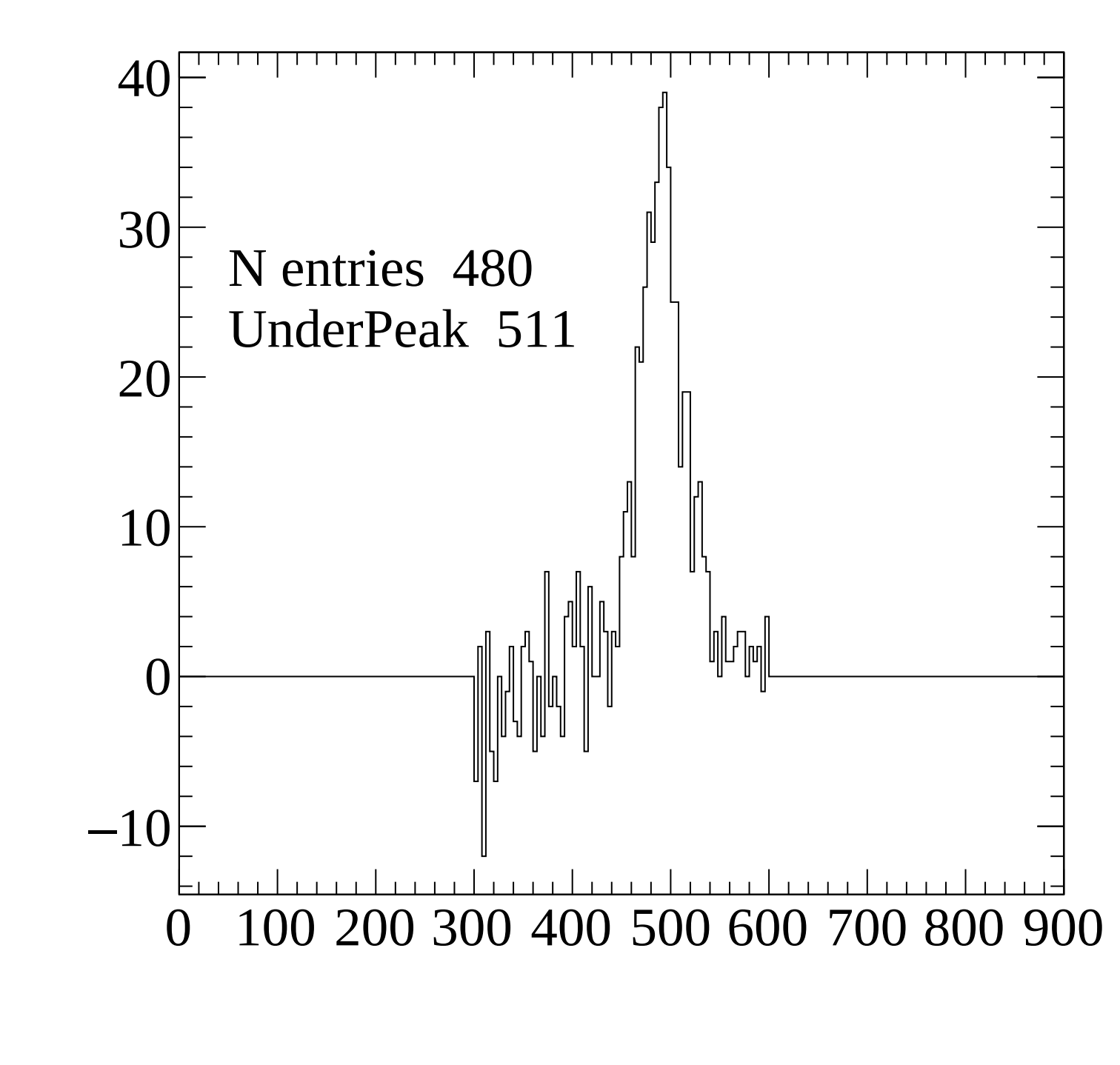

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_timeRange2
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

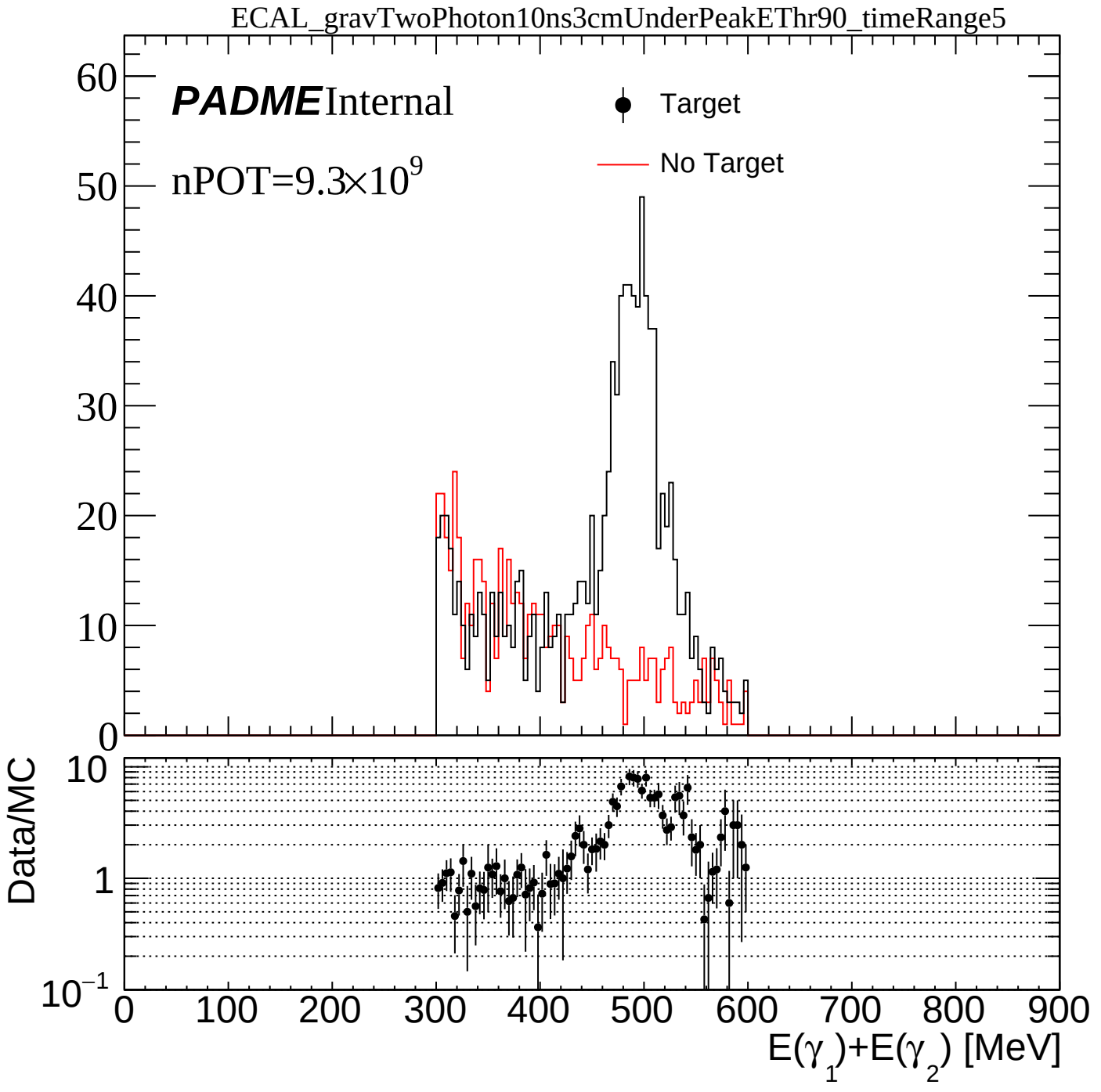

N entries 574
UnderPeak 573
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

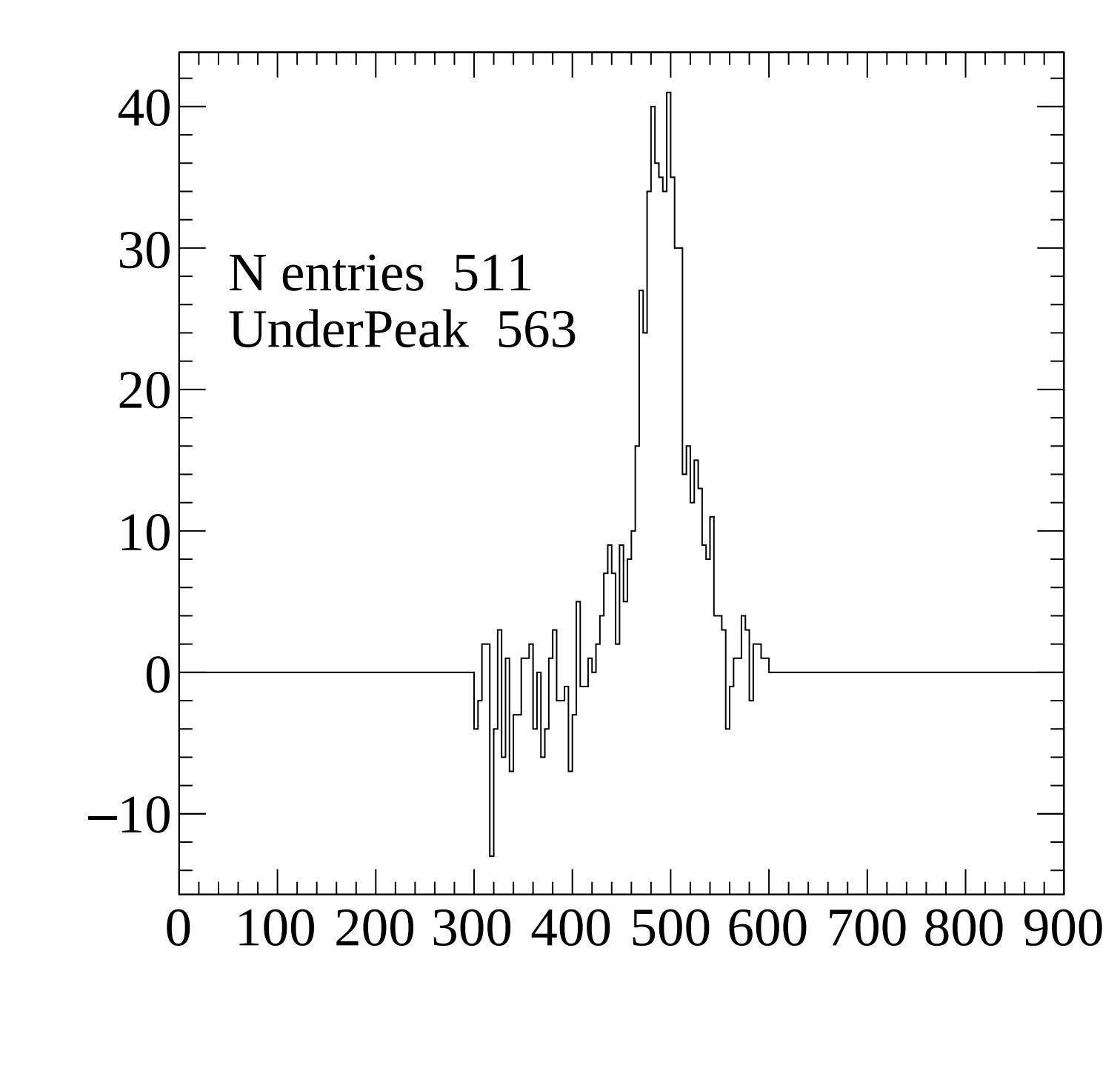

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_timeRange3
PADME Internal
nPOT=9.3×10^9
Target
No Target
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

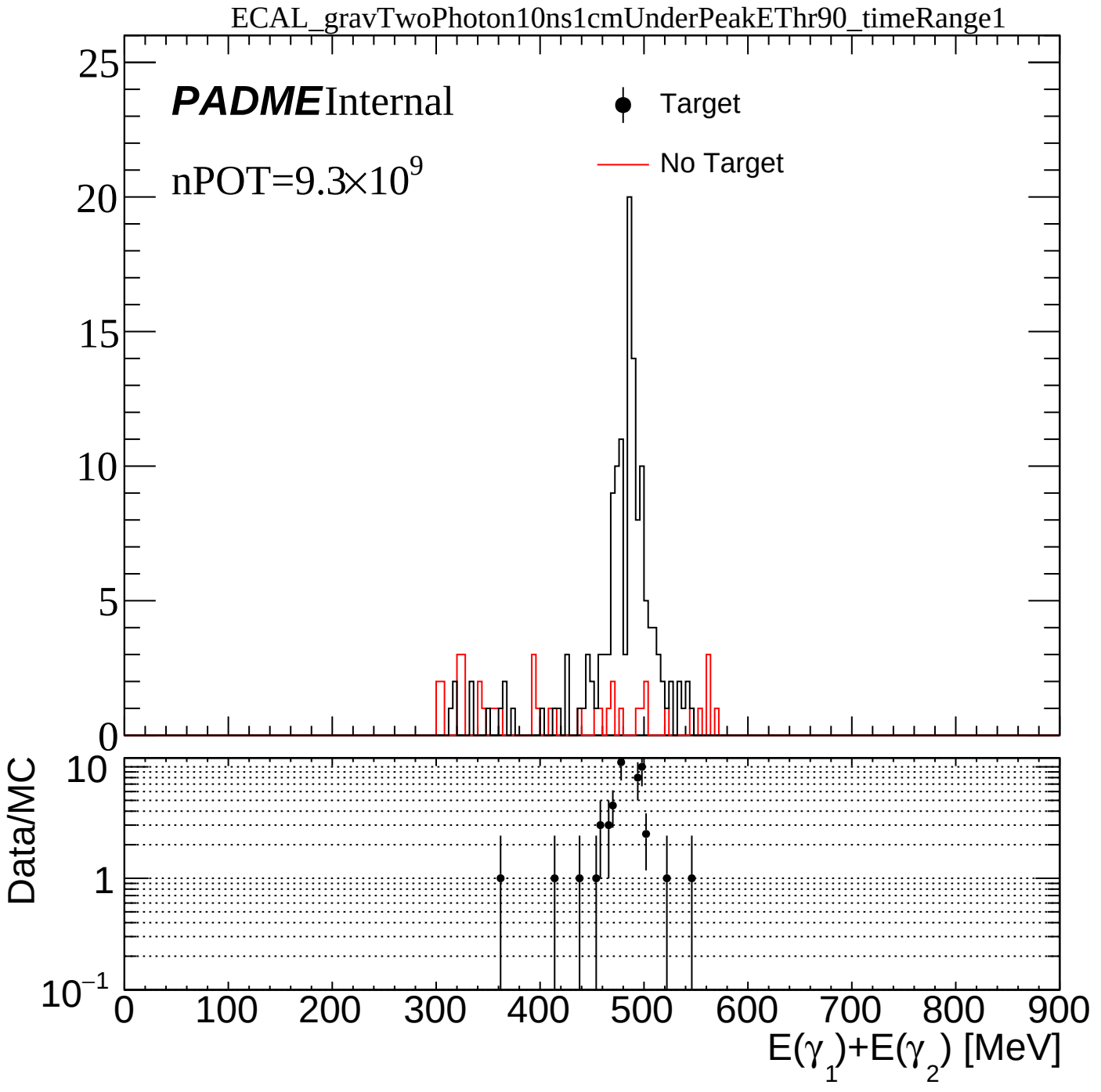

N entries 515
UnderPeak 512
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

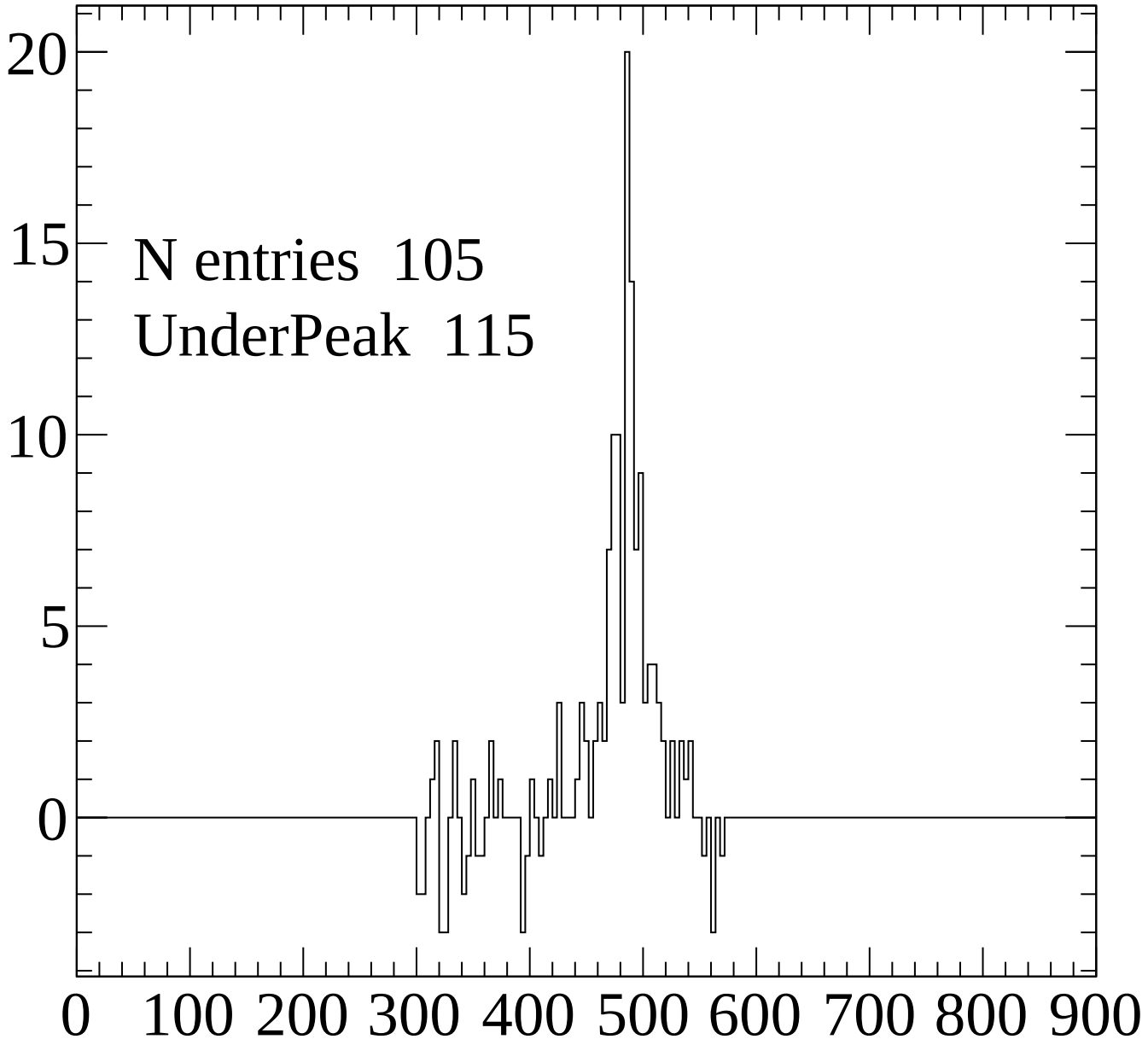

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_timeRange4
PADME Internal
nPOT=9.3×10^9
Target
No Target
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

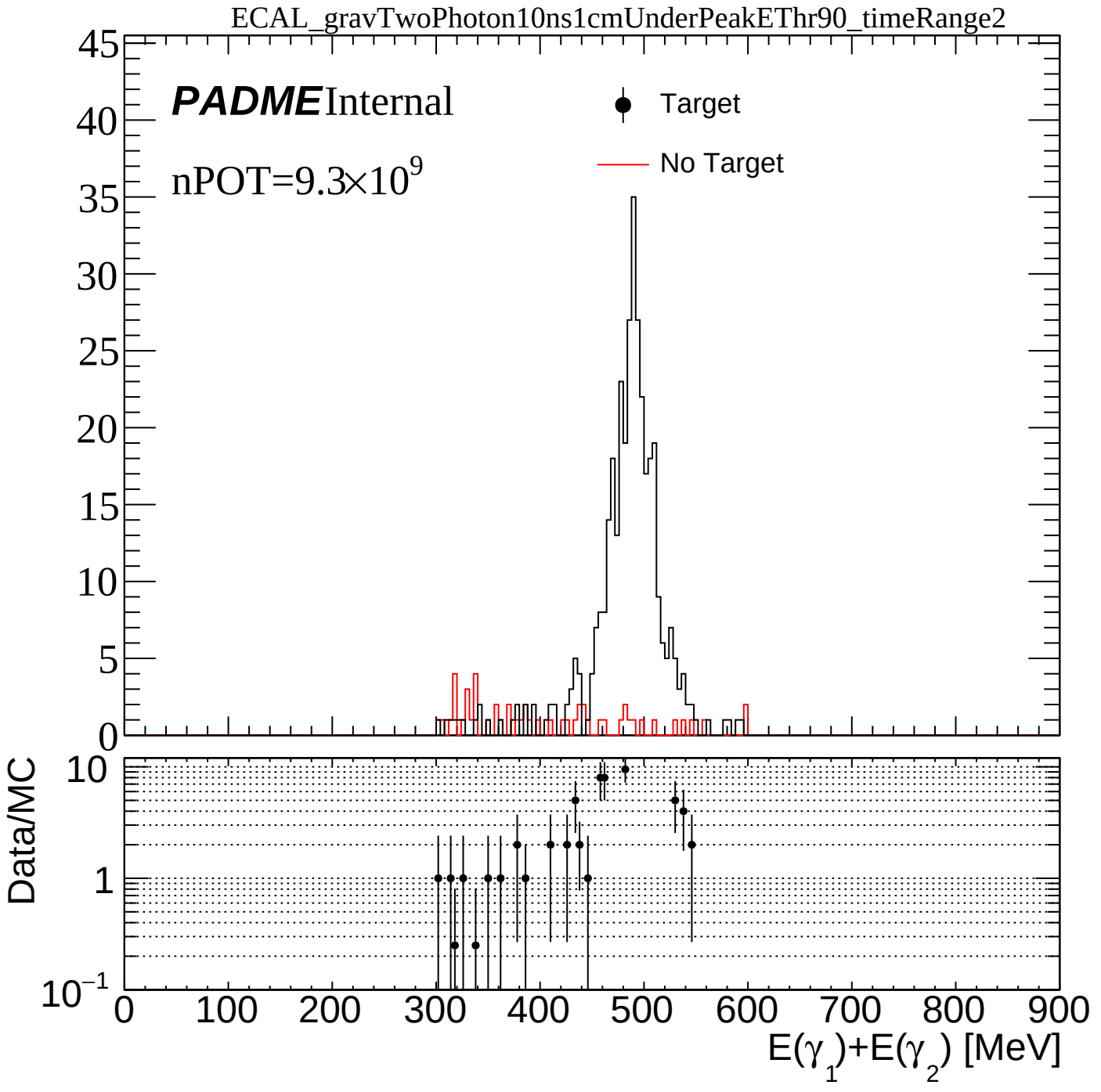

N entries 480
UnderPeak 511
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

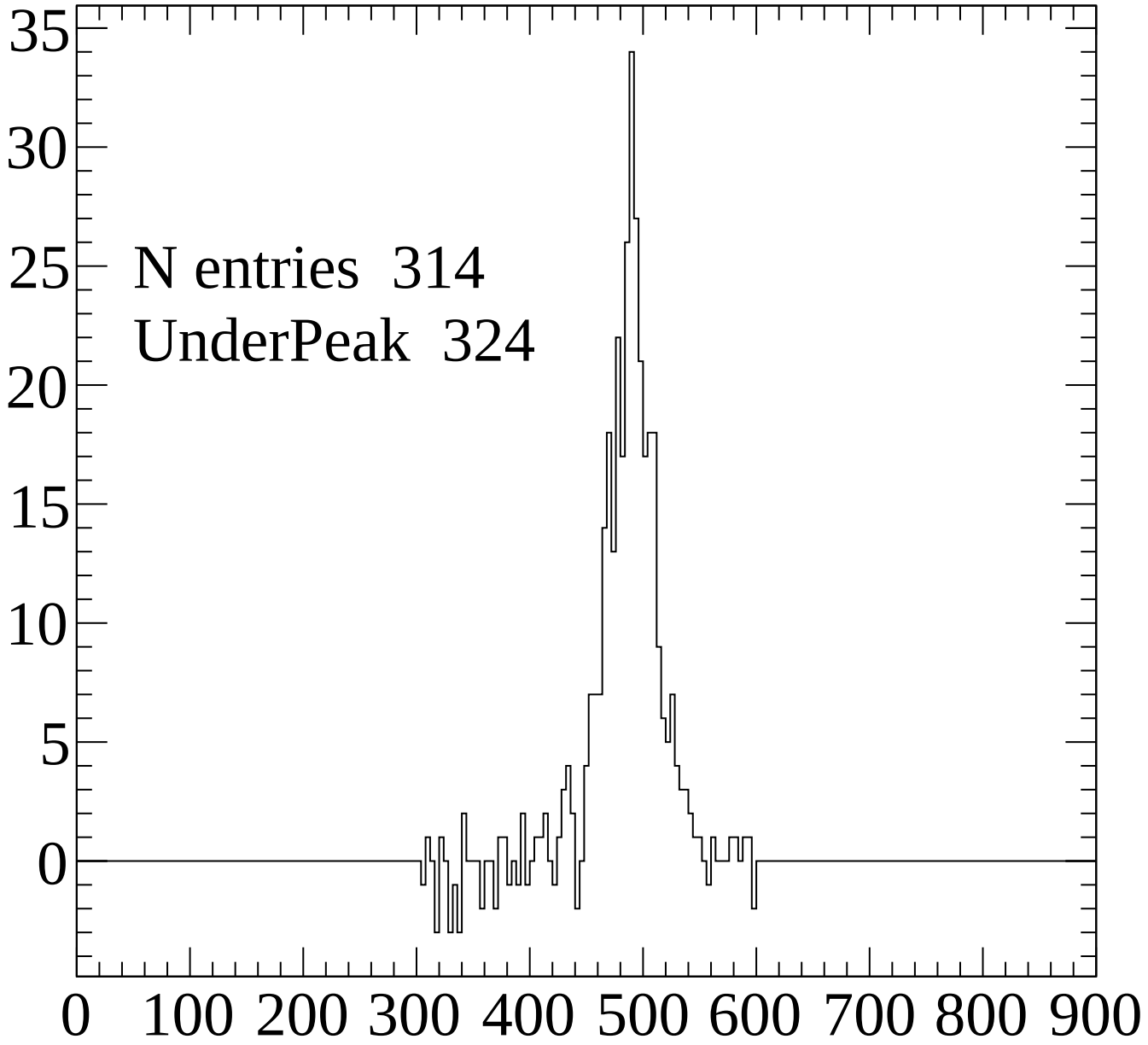

ECAL_gravTwoPhoton10ns3cmUnderPeakEThr90_timeRange5
PADME Internal
nPOT=9.3×10^9
Target
No Target
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

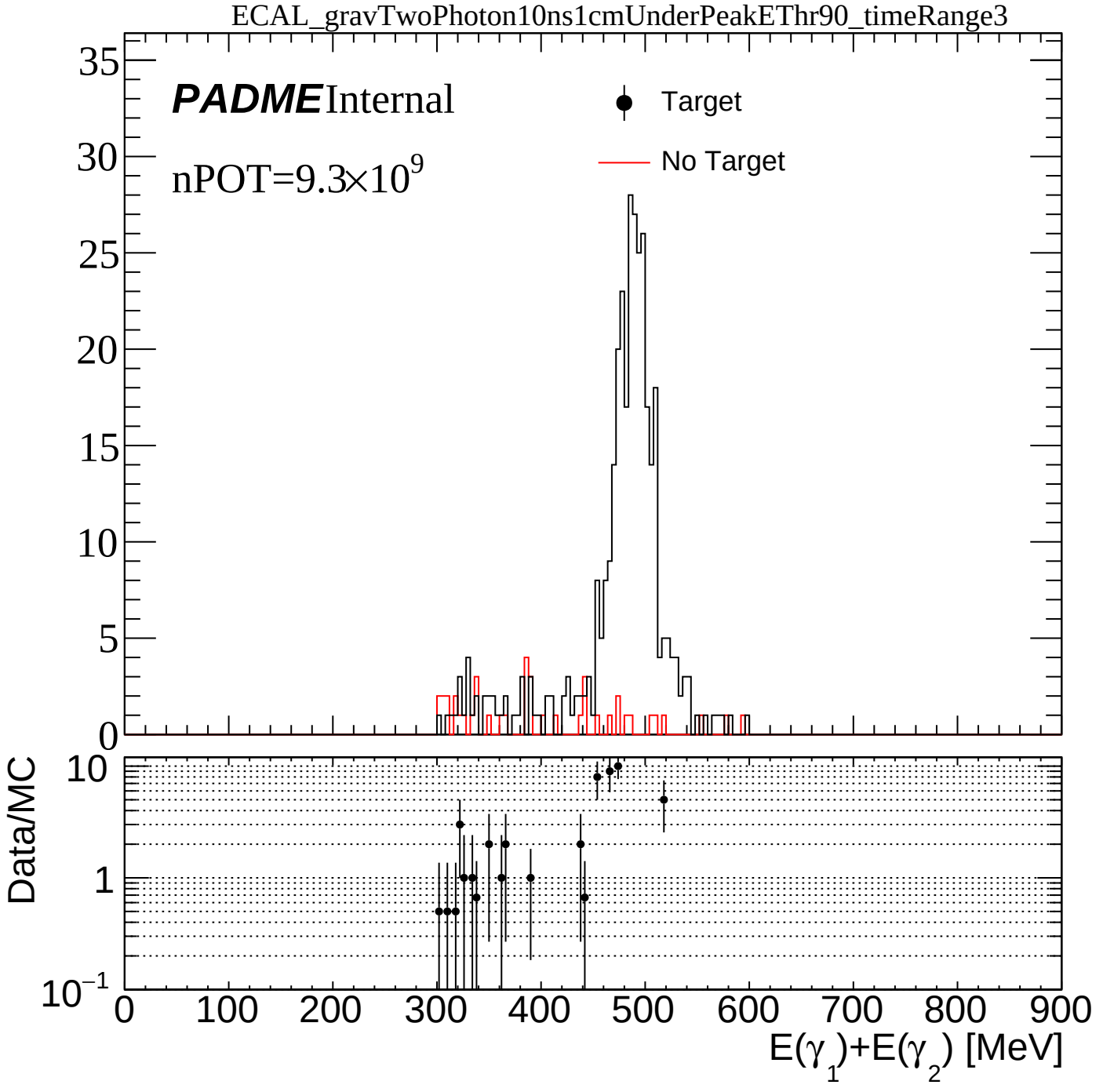

N entries 511
UnderPeak 563
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

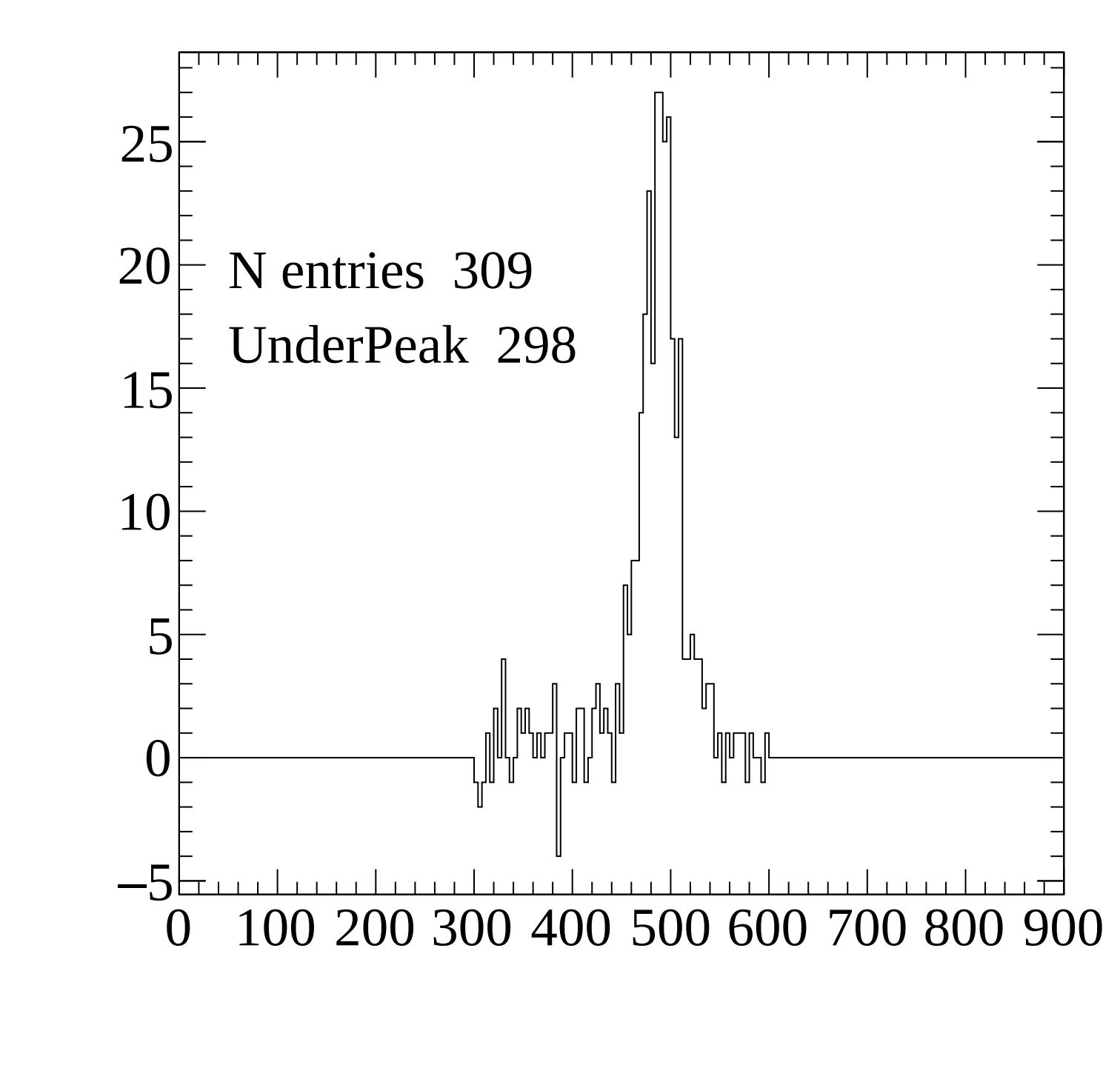

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90_timeRange1
PADME Internal
nPOT=9.3×10^9
Target
No Target
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

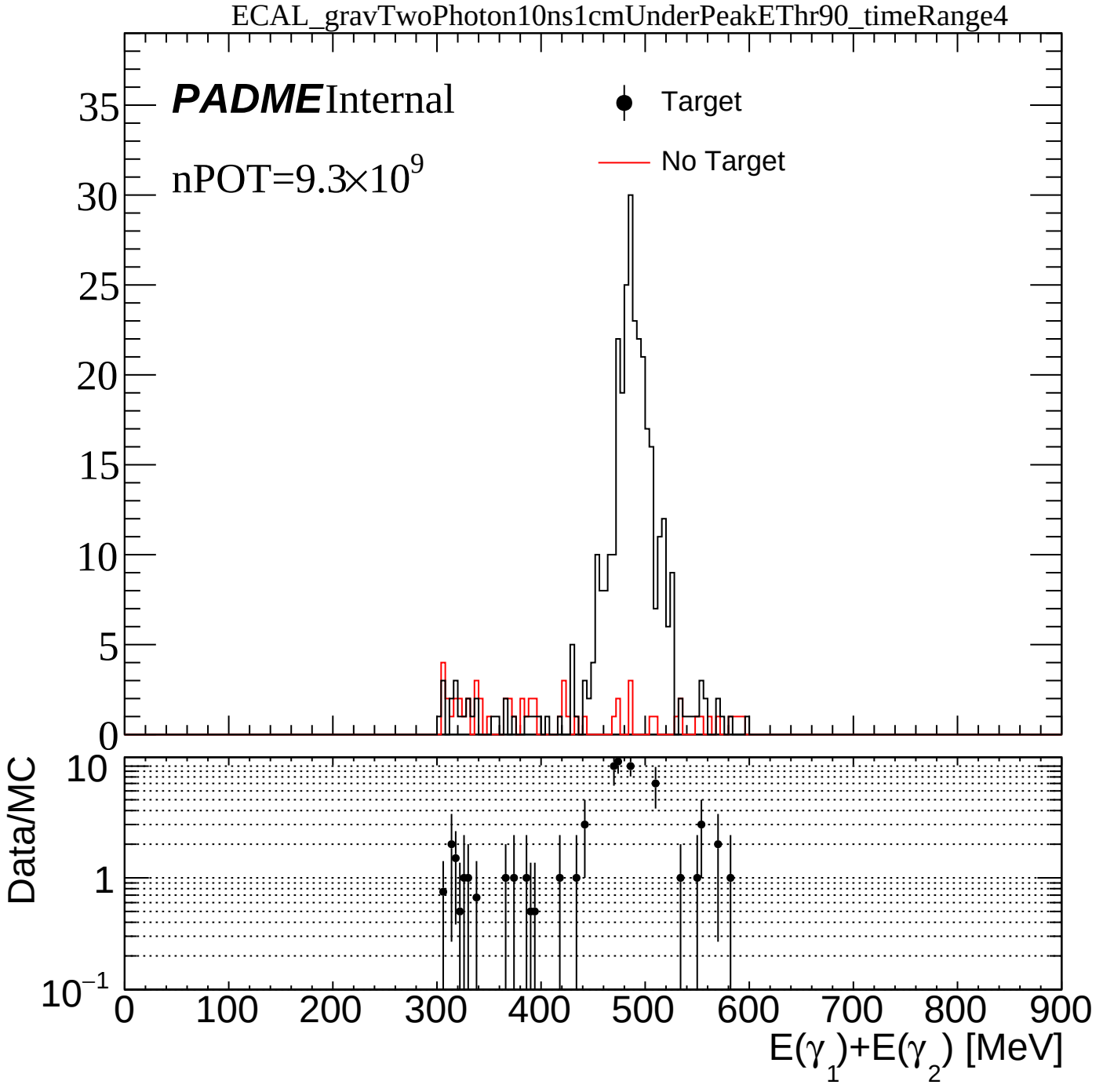

N entries 105
UnderPeak 115
20
15
10
5
0
0 100 200 300 400 500 600 700 800 900

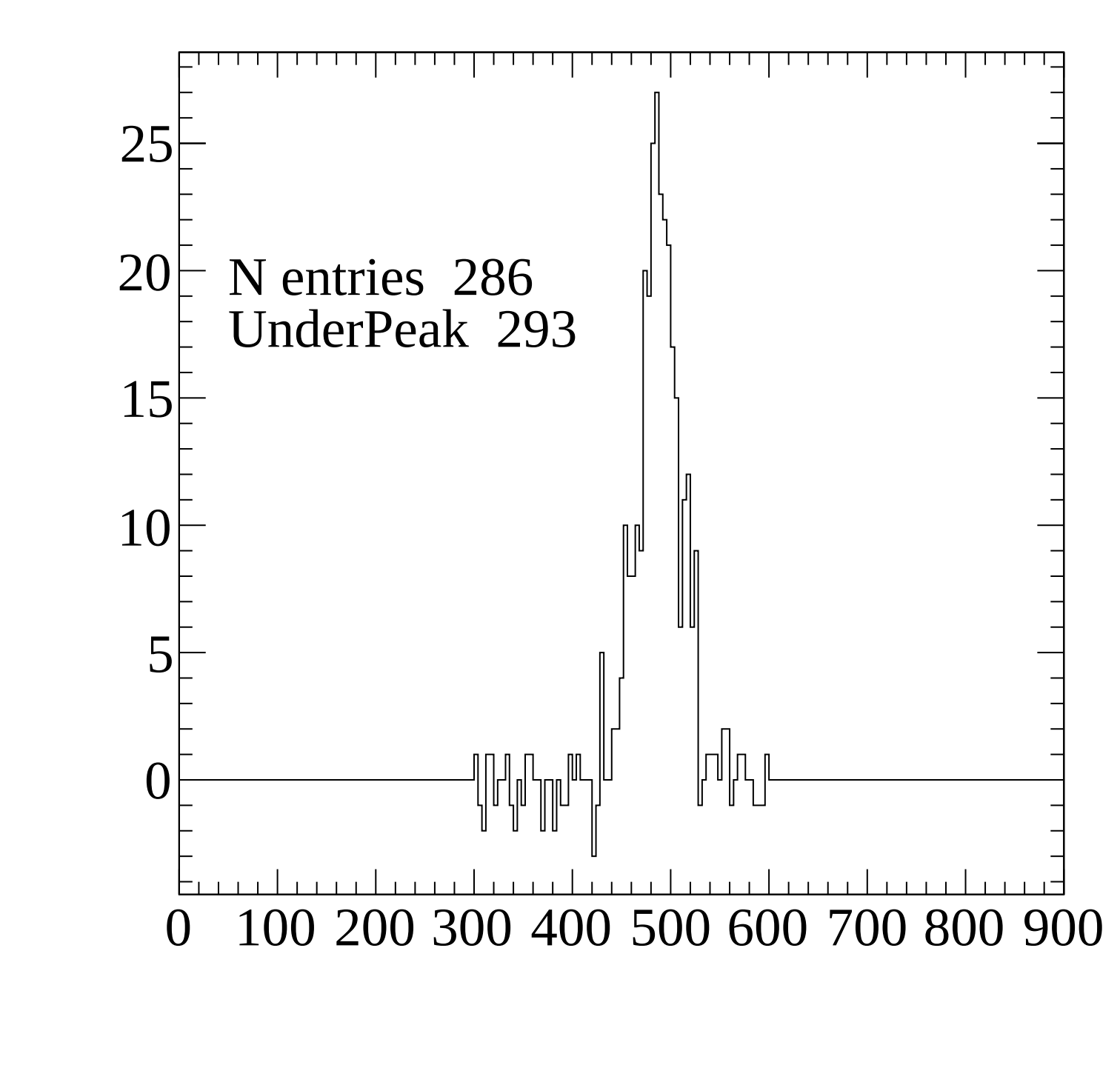

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90_timeRange2
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

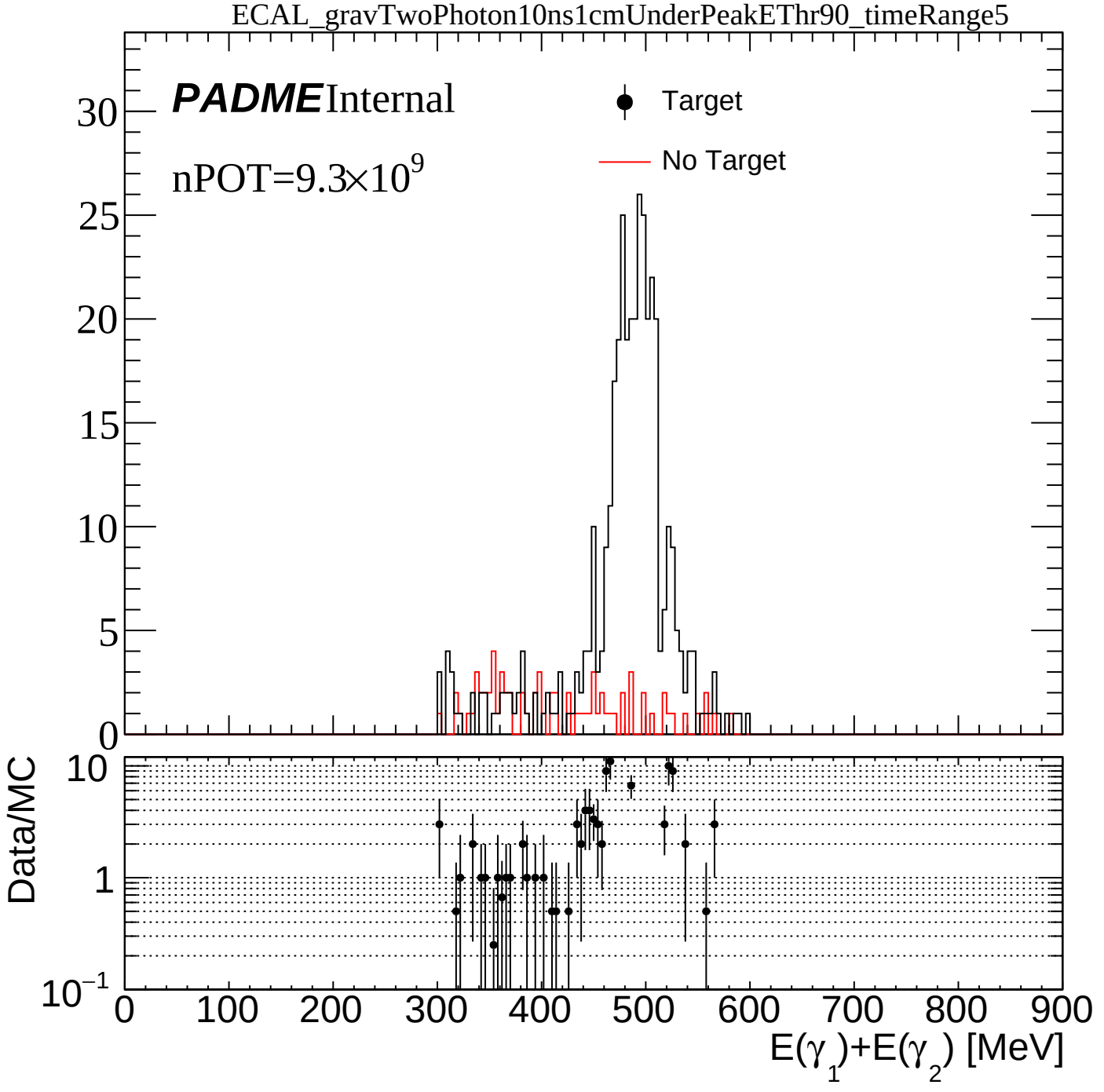

N entries 314
UnderPeak 324
35
30
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
900

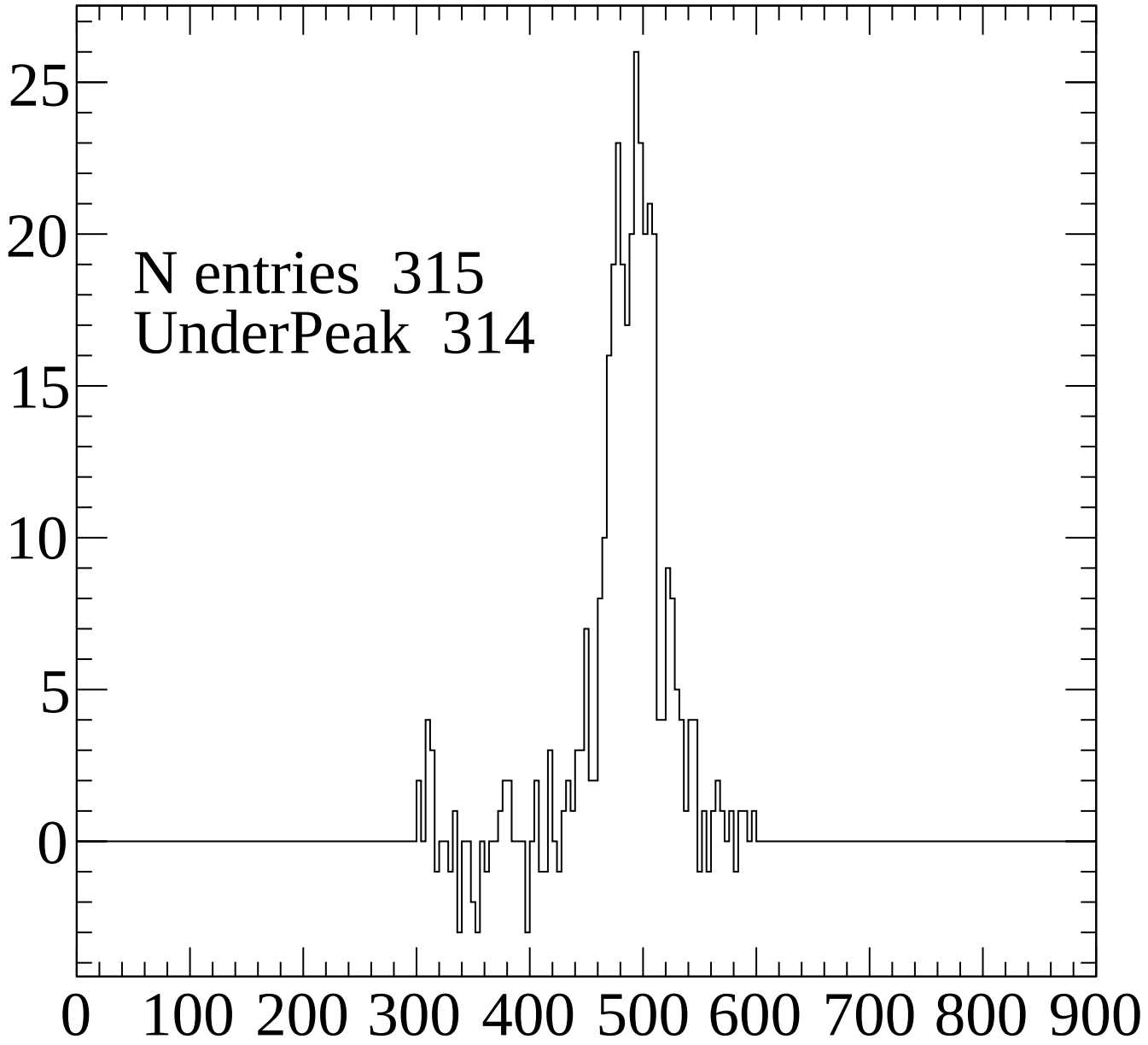

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90_timeRange3
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

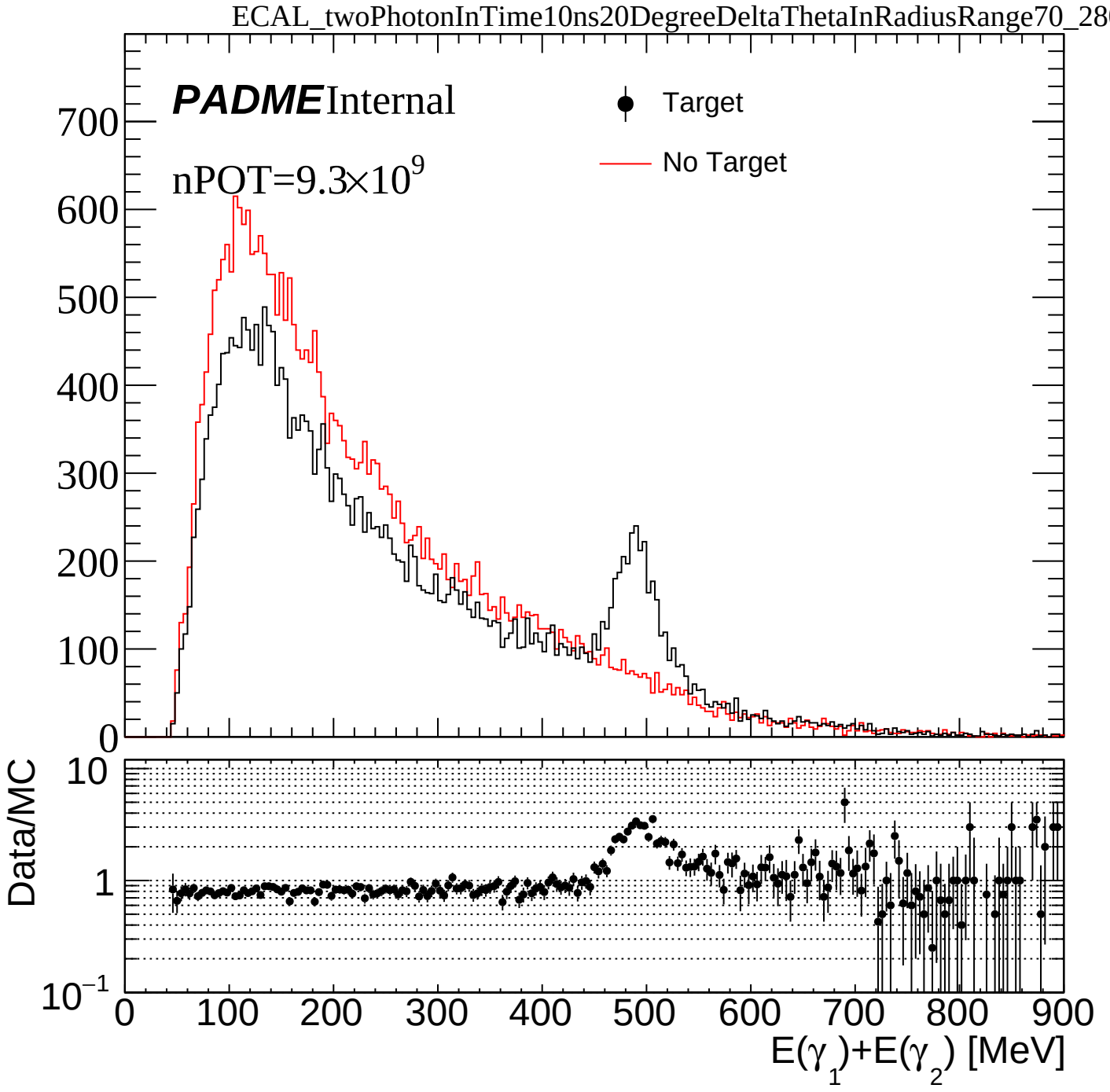

N entries 309
UnderPeak 298
25
20
15
10
5
0
−5
0
100
200
300
400
500
600
700
800
900

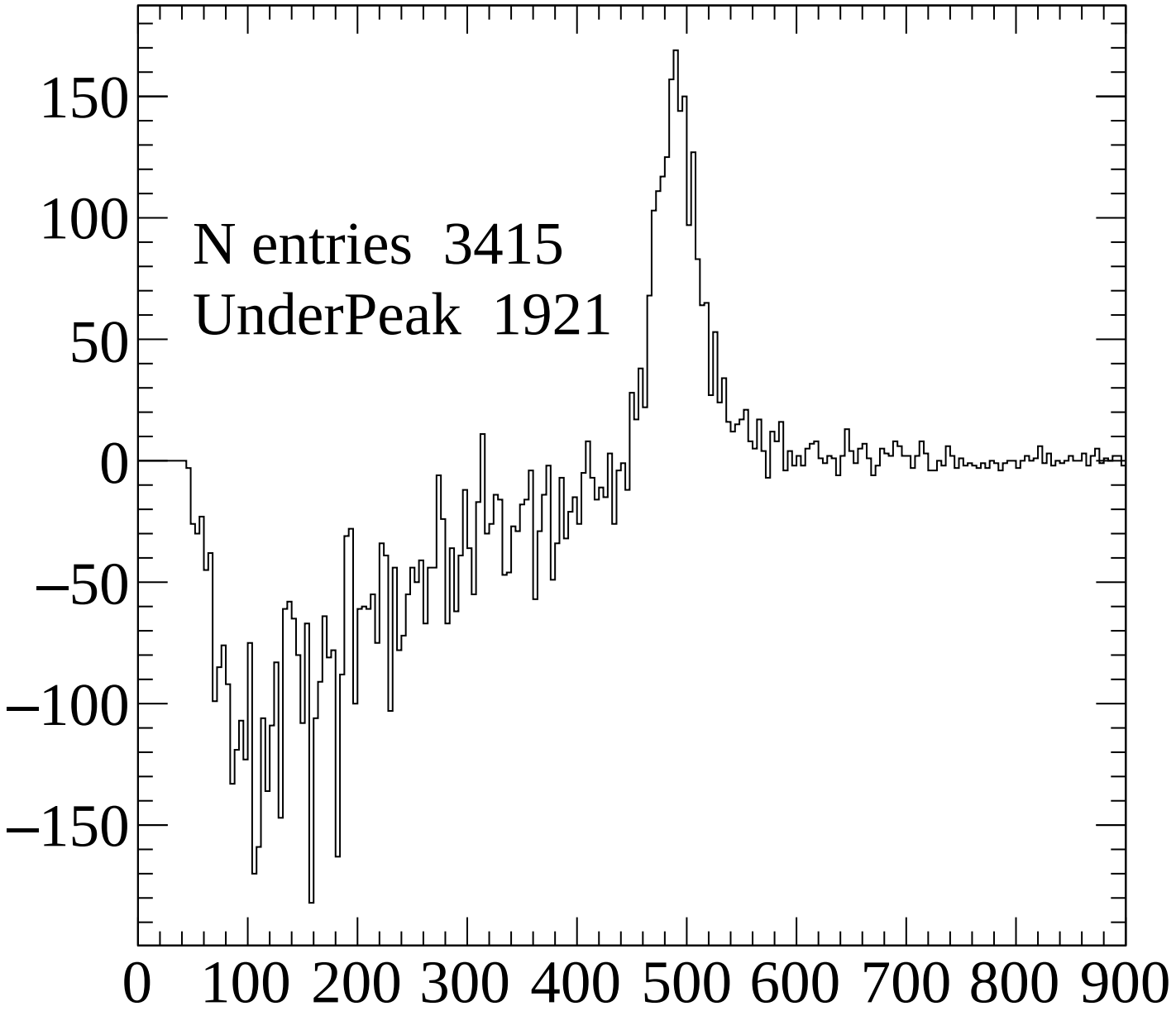

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90_timeRange4
PADME Internal
nPOT=9.3×10^9
Target
No Target
35
30
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

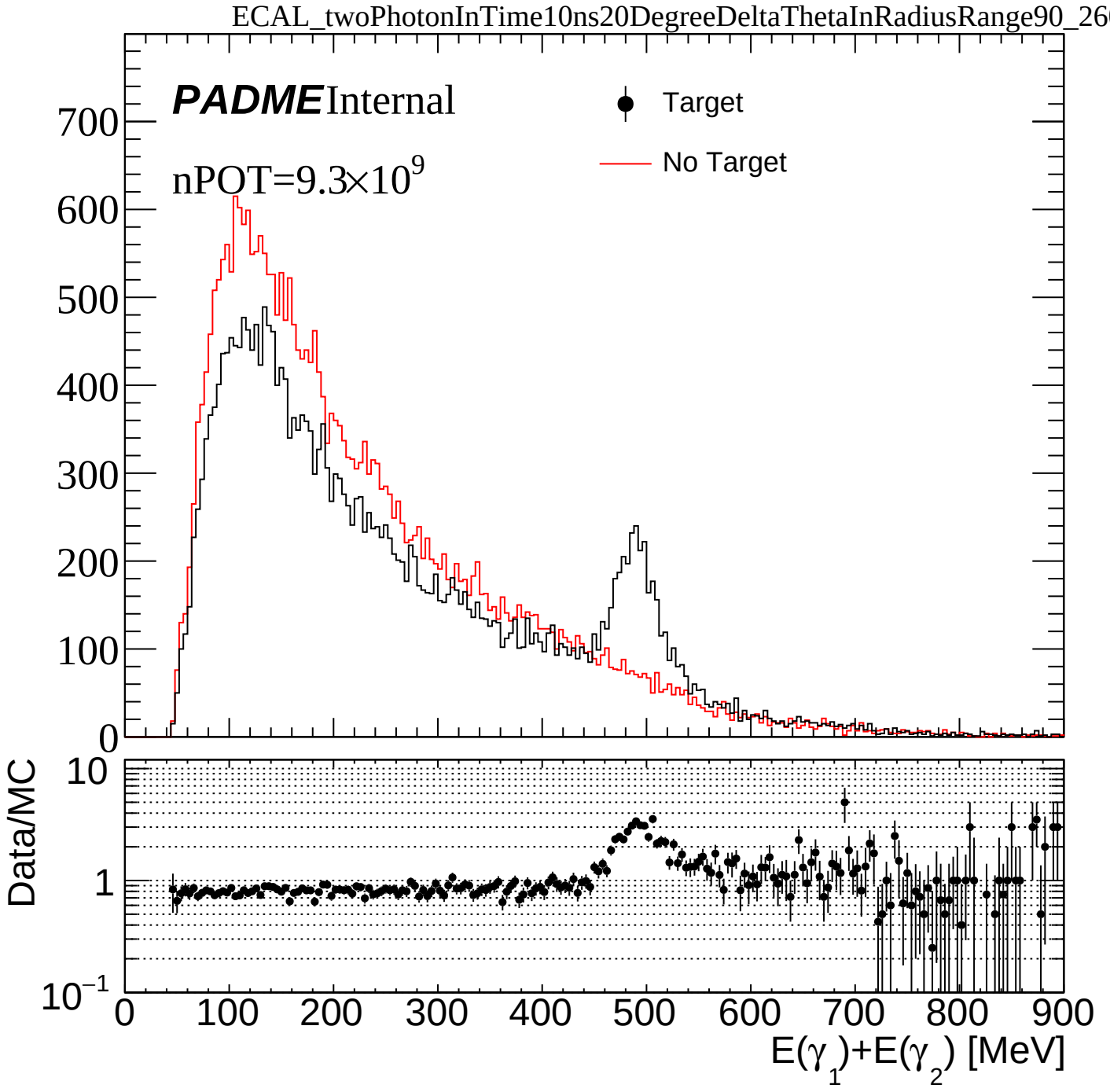

N entries 286
UnderPeak 293
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
900

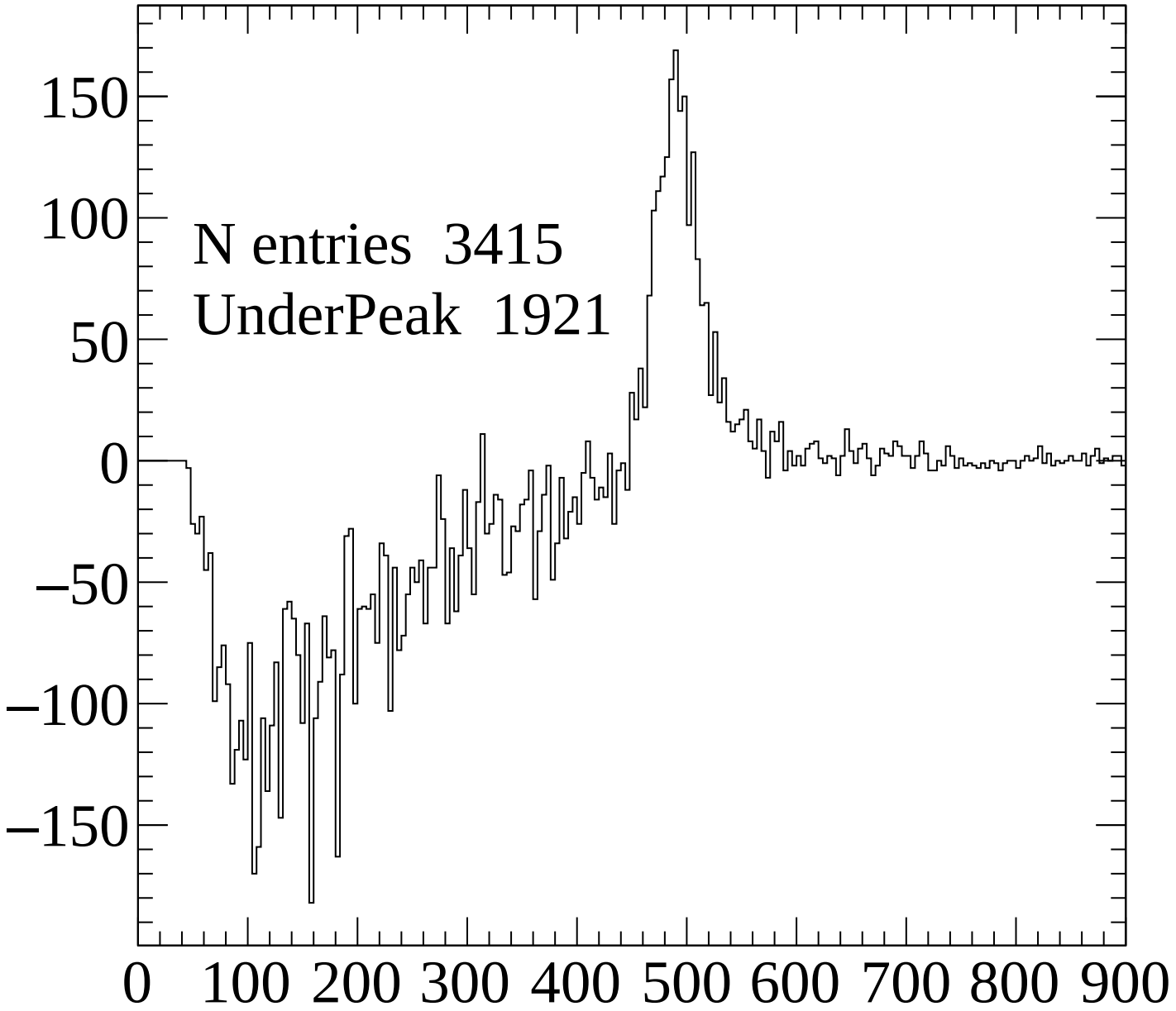

ECAL_gravTwoPhoton10ns1cmUnderPeakEThr90_timeRange5
PADME Internal
nPOT=9.3×10^9
Target
No Target
30
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

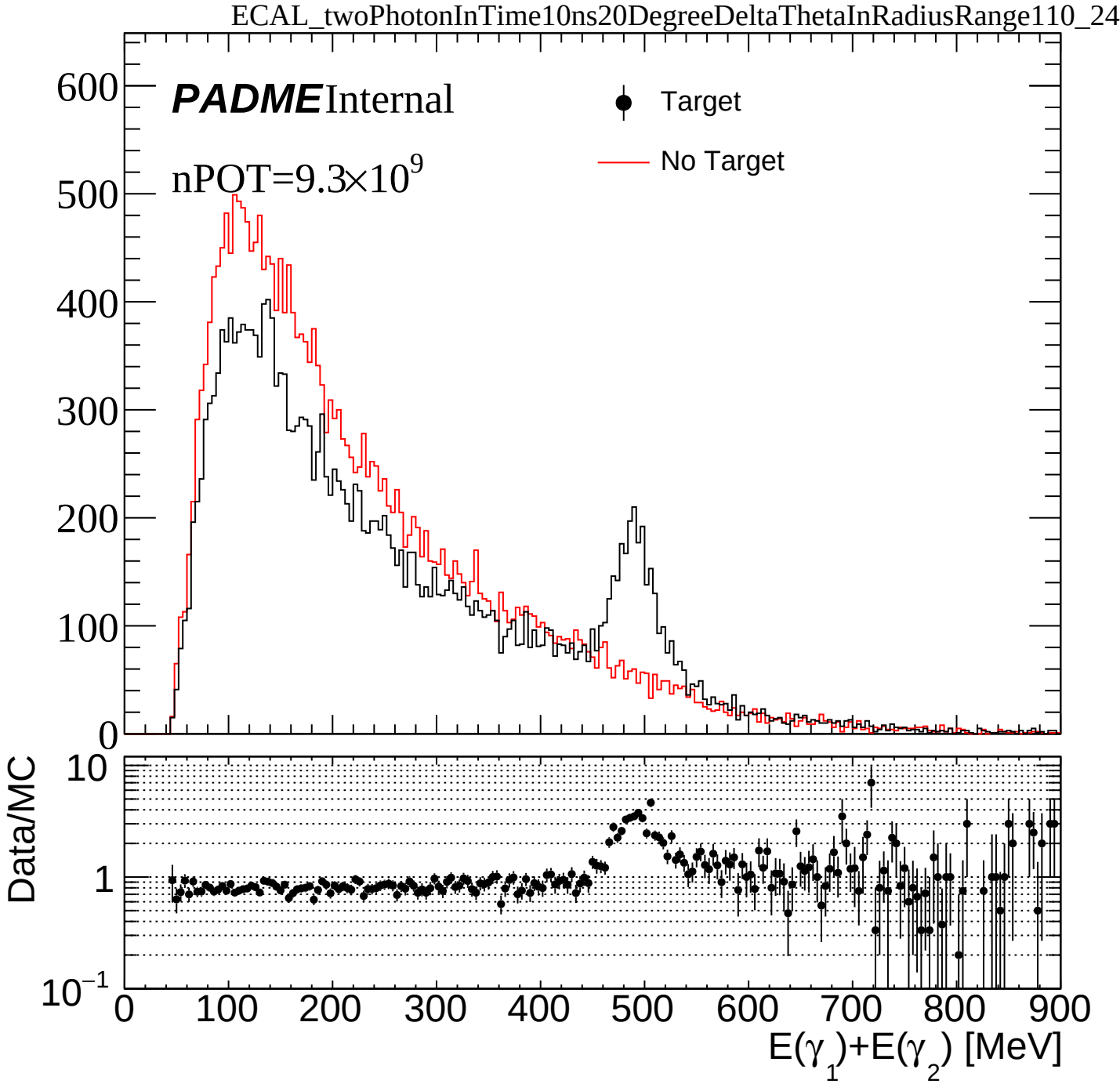

N entries 315
UnderPeak 314
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
900

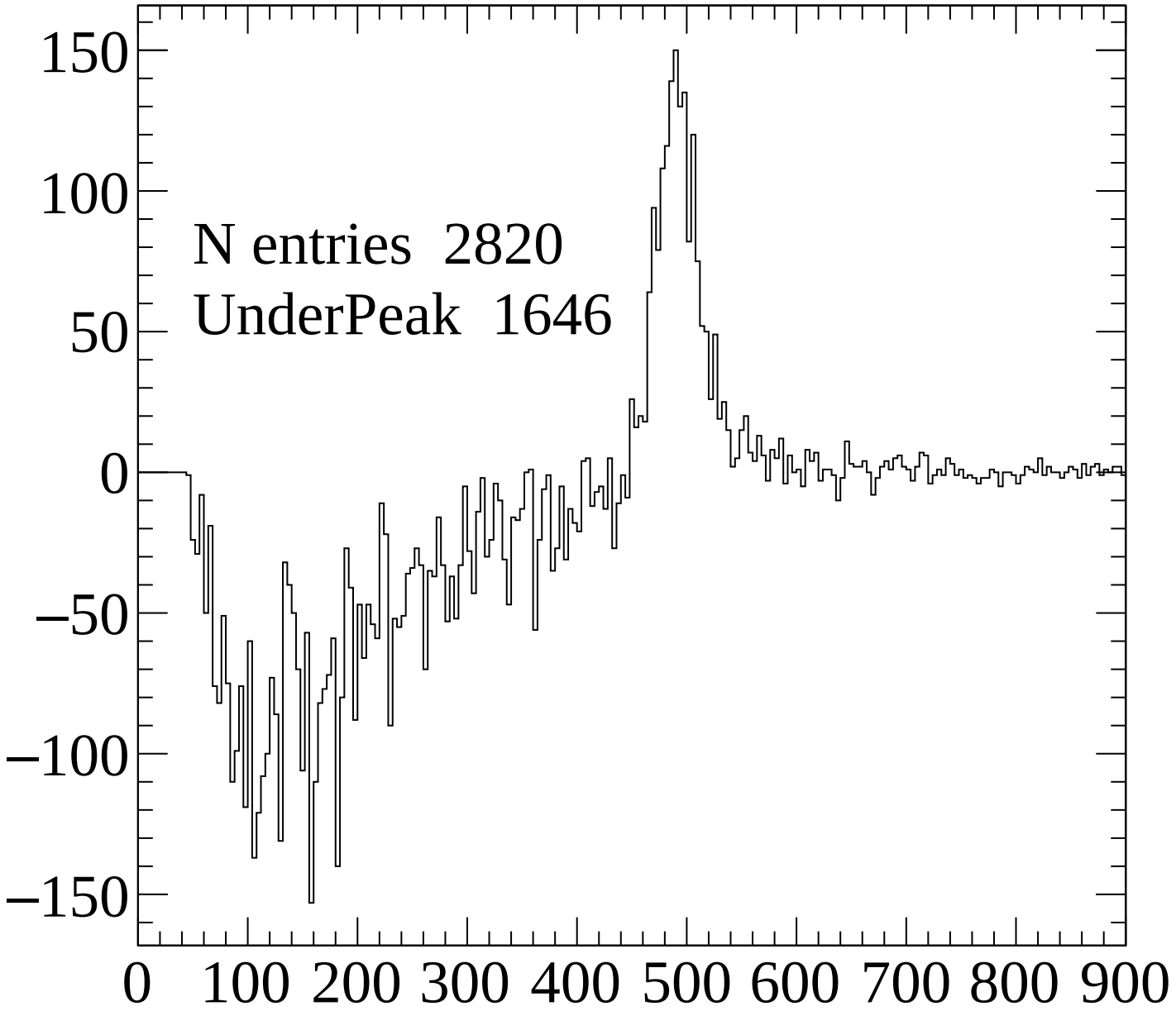

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
700
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

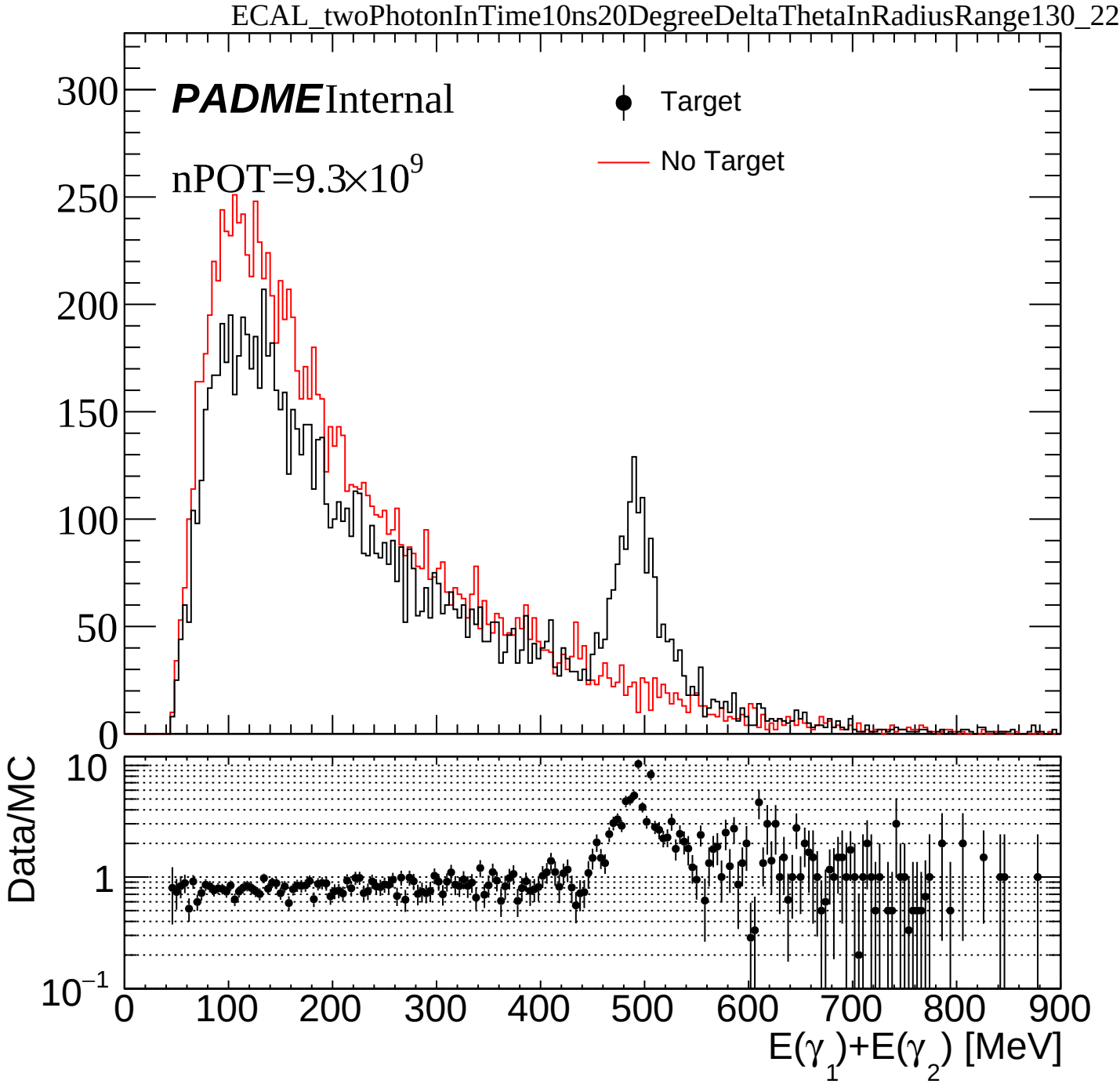

N entries 3415
UnderPeak 1921
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

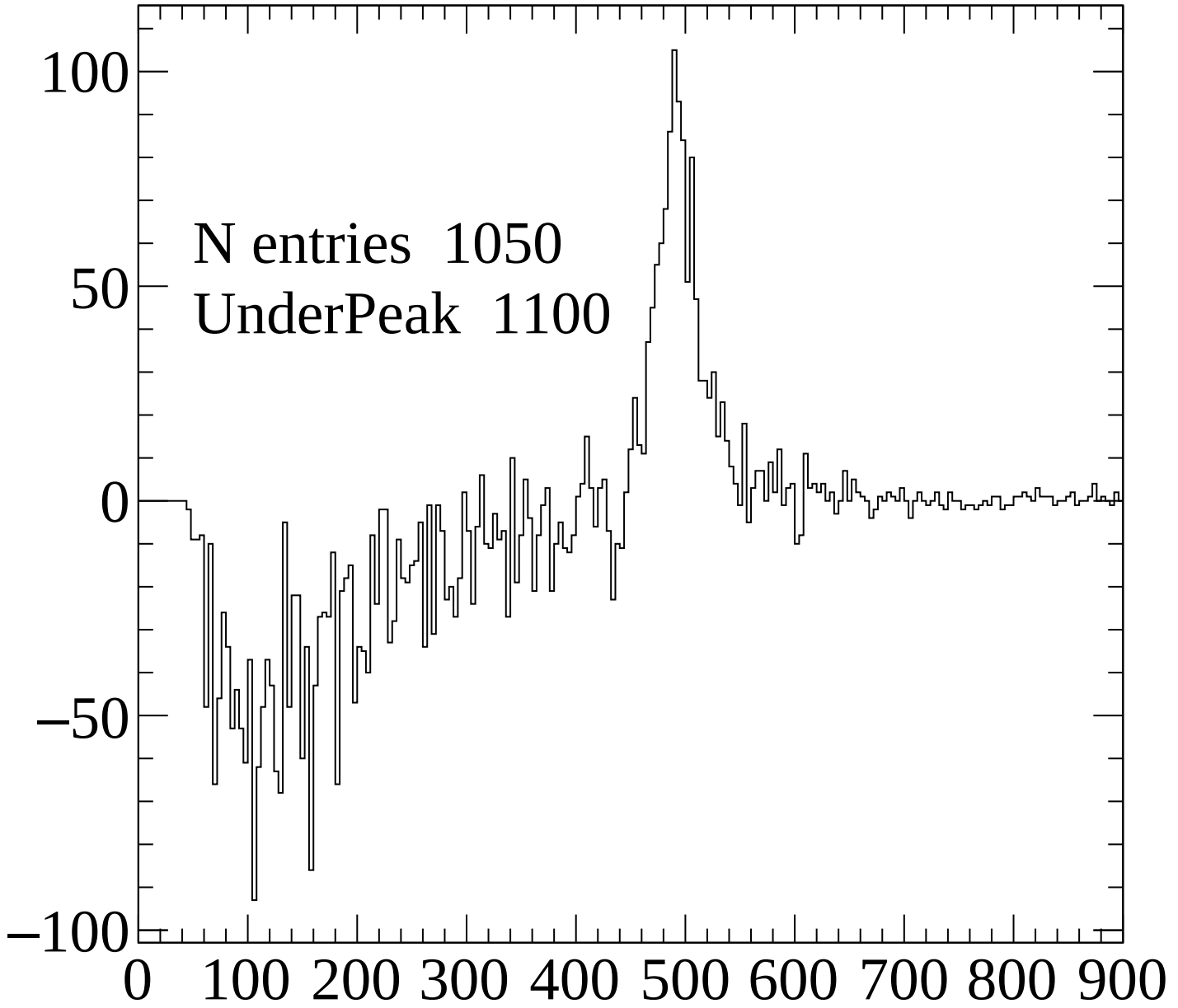

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_260
PADME Internal
nPOT=9.3×10^9
Target
No Target
700
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

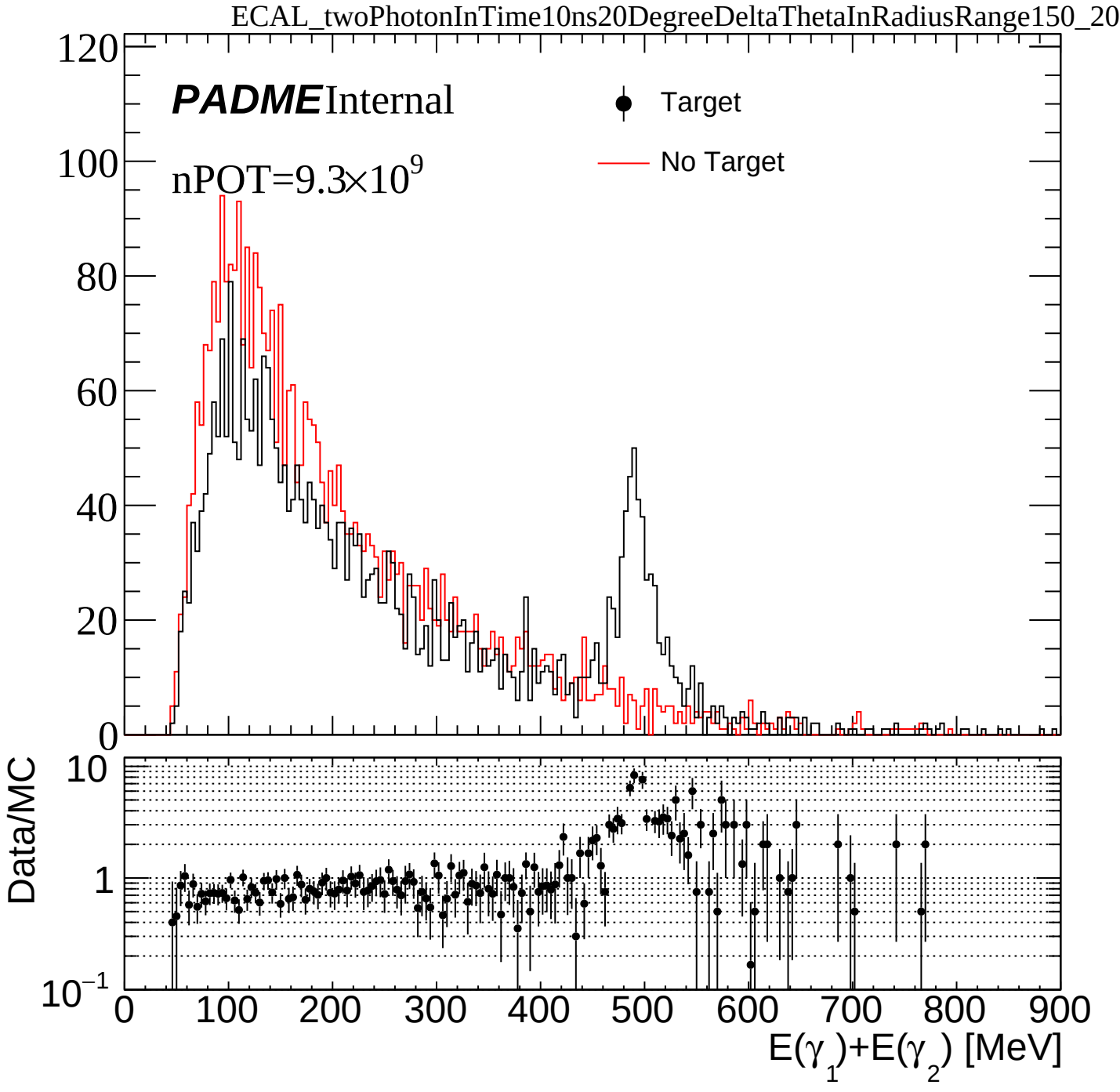

N entries 3415
UnderPeak 1921
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

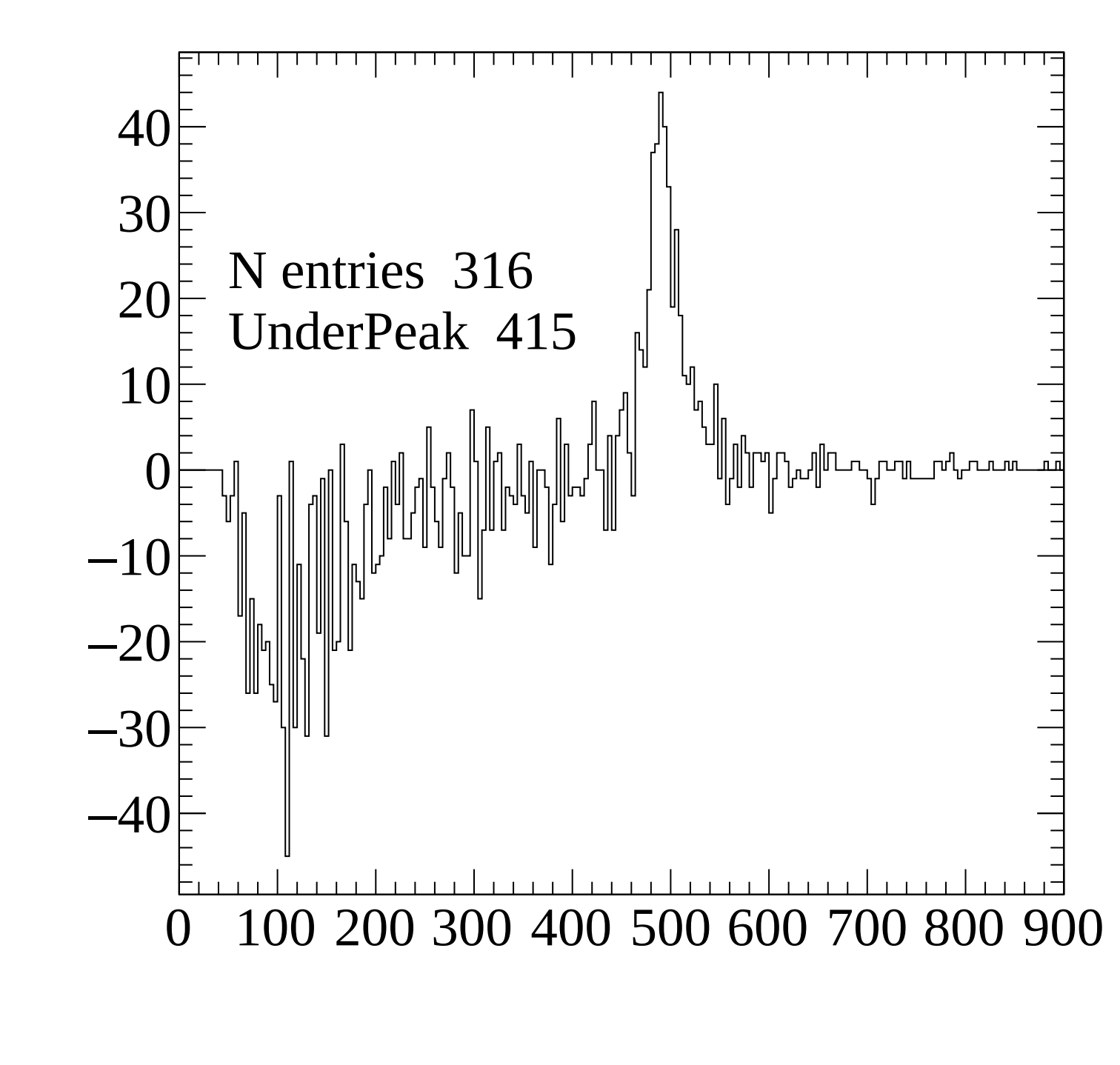

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_24
PADME Internal
nPOT=9.3×10^9
Target
No Target
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

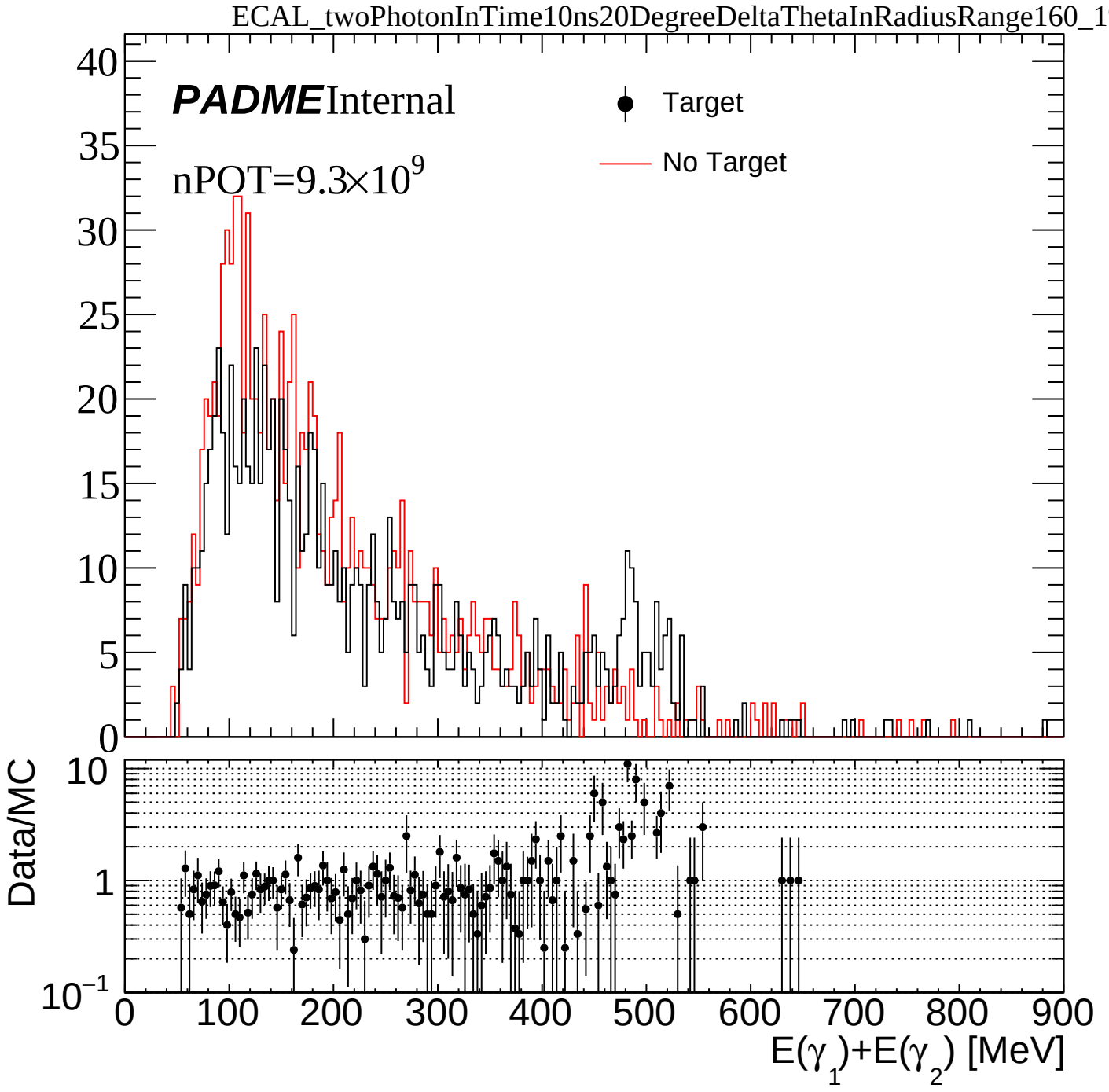

N entries 2820
UnderPeak 1646
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

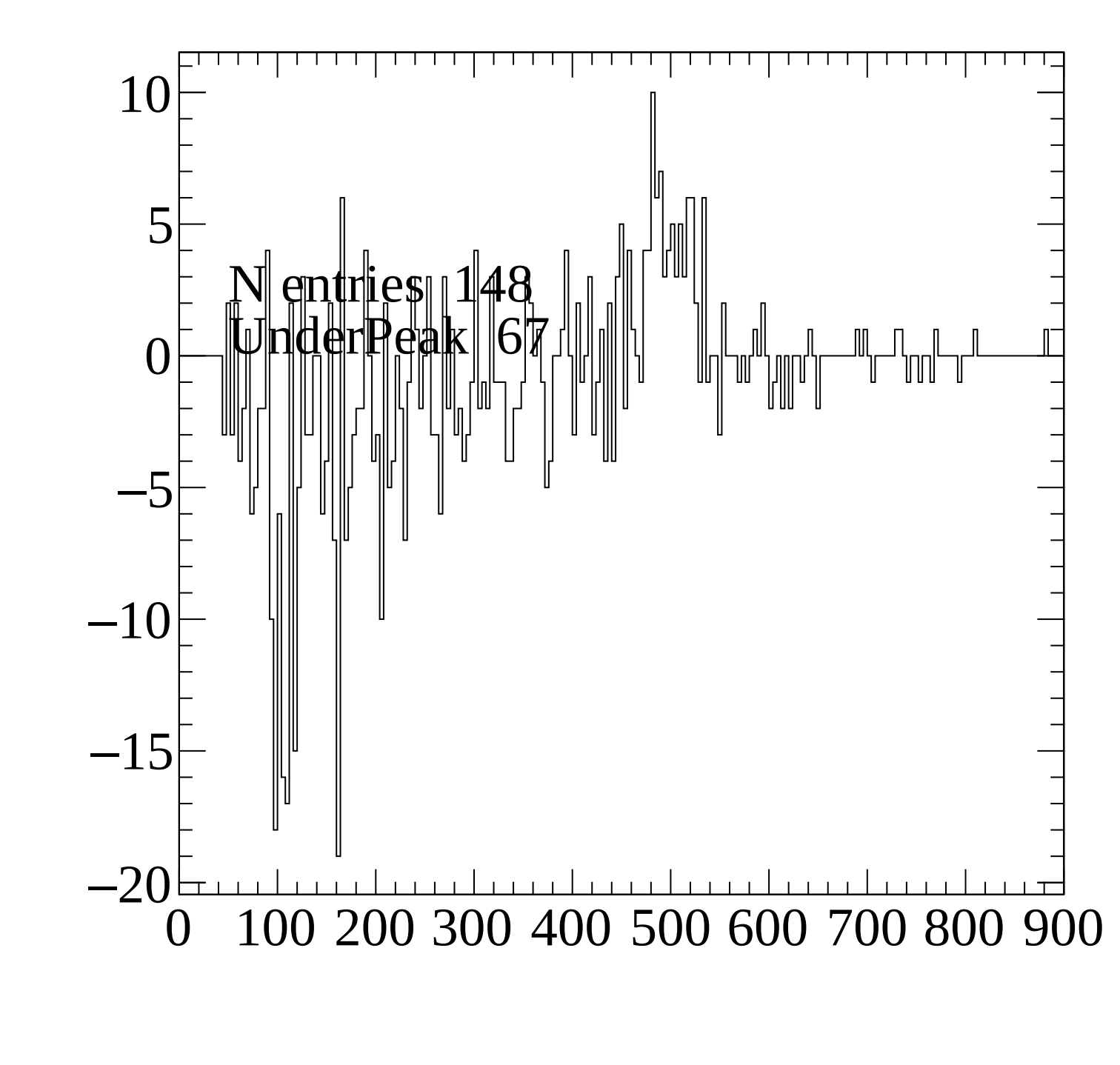

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange130_22
PADME Internal
nPOT=9.3×10^9
Target
No Target
300
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

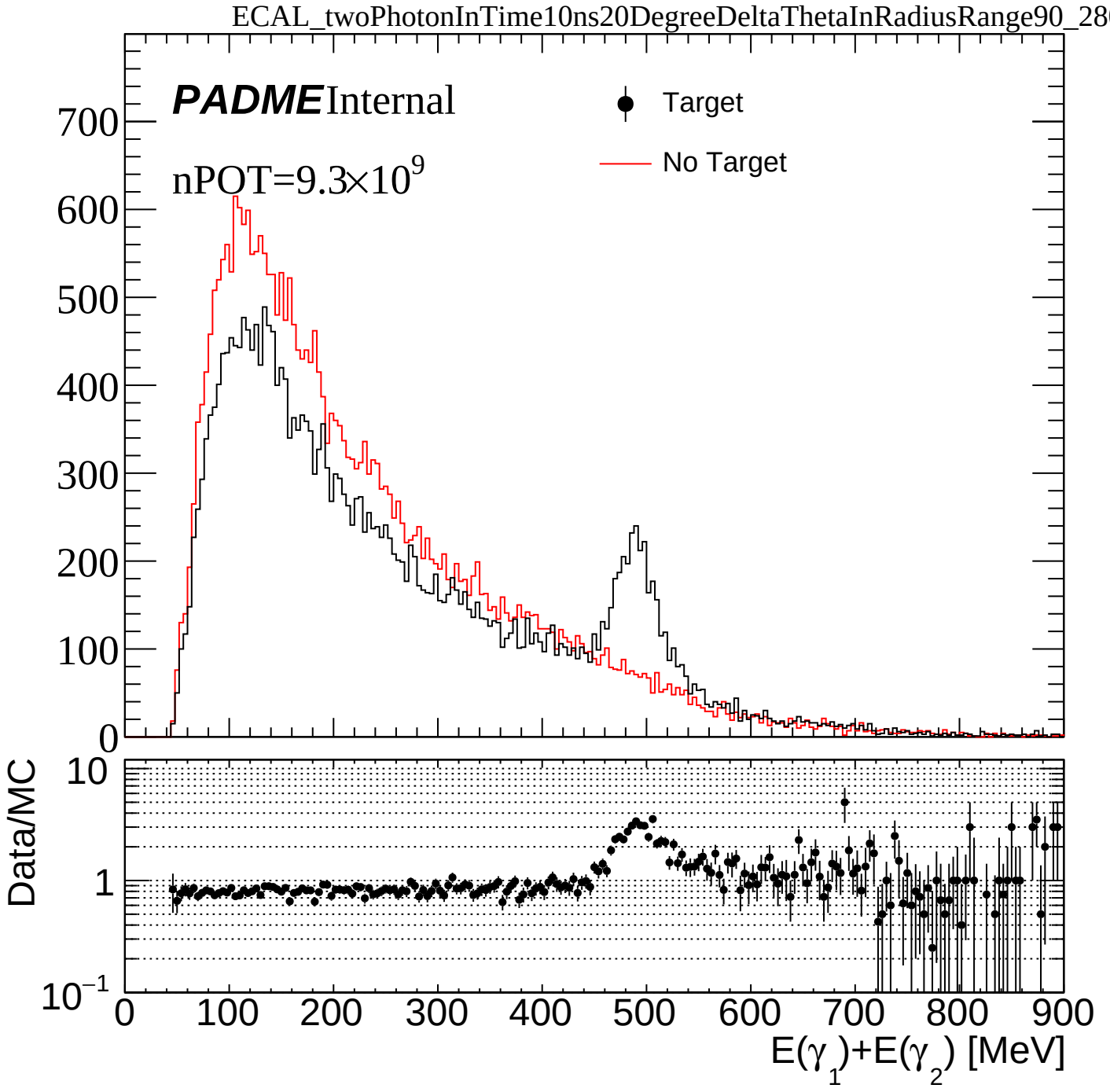

N entries 1050
UnderPeak 1100
100
50
0
−50
−100
0
100
200
300
400
500
600
700
800
900

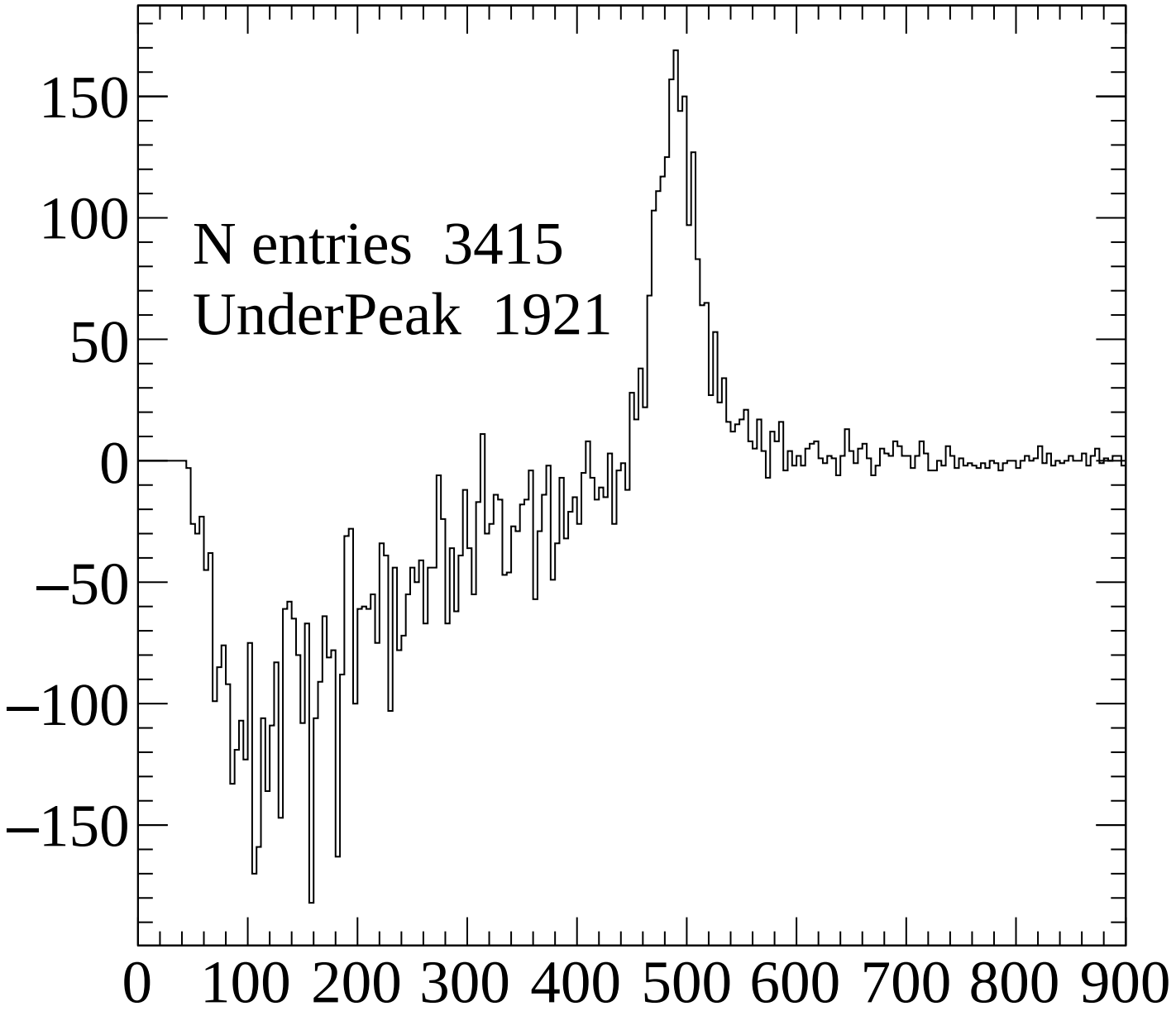

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_20
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

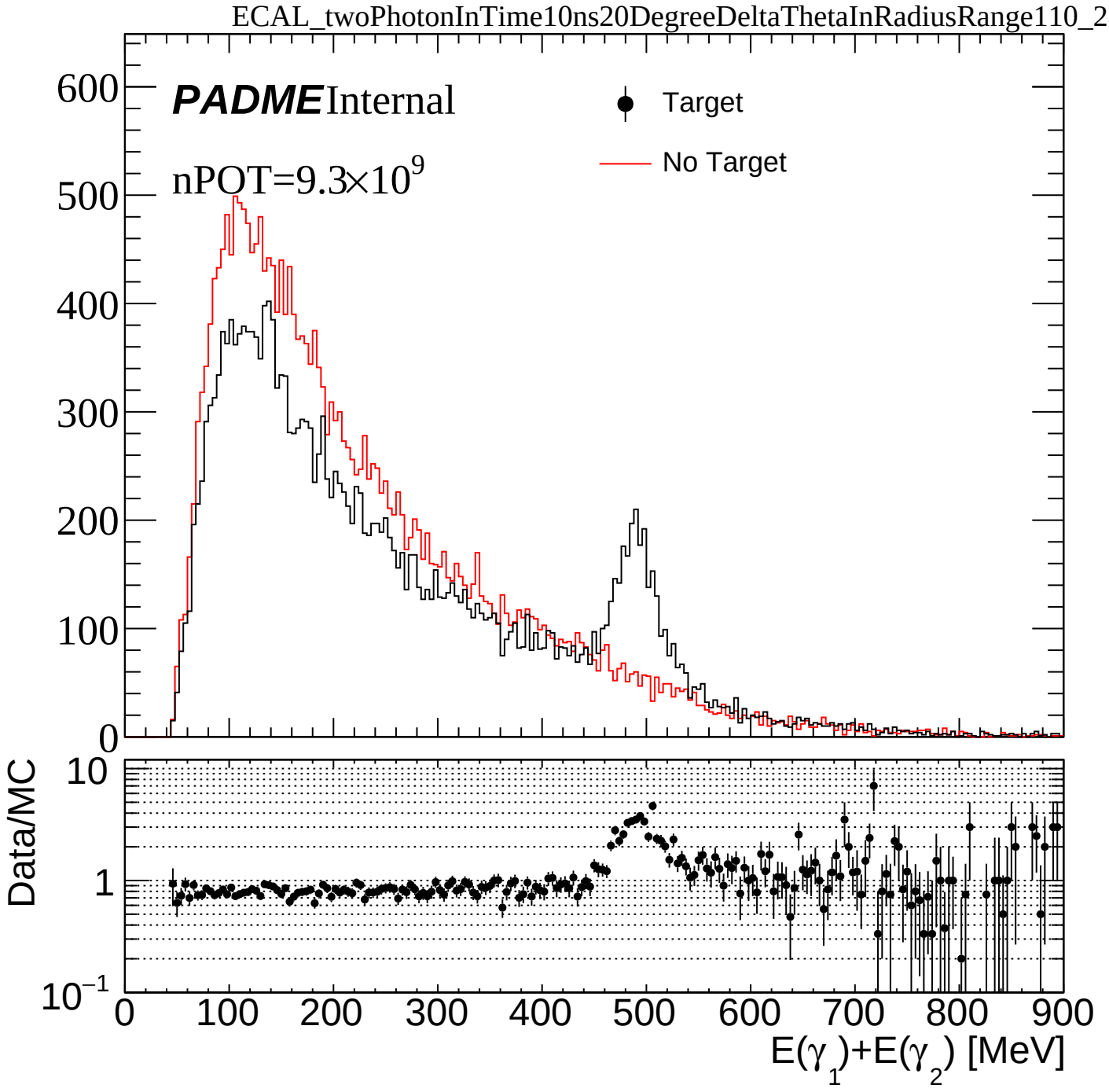

N entries 316
UnderPeak 415
40
30
20
10
0
−10
−20
−30
−40
0
100
200
300
400
500
600
700
800
900

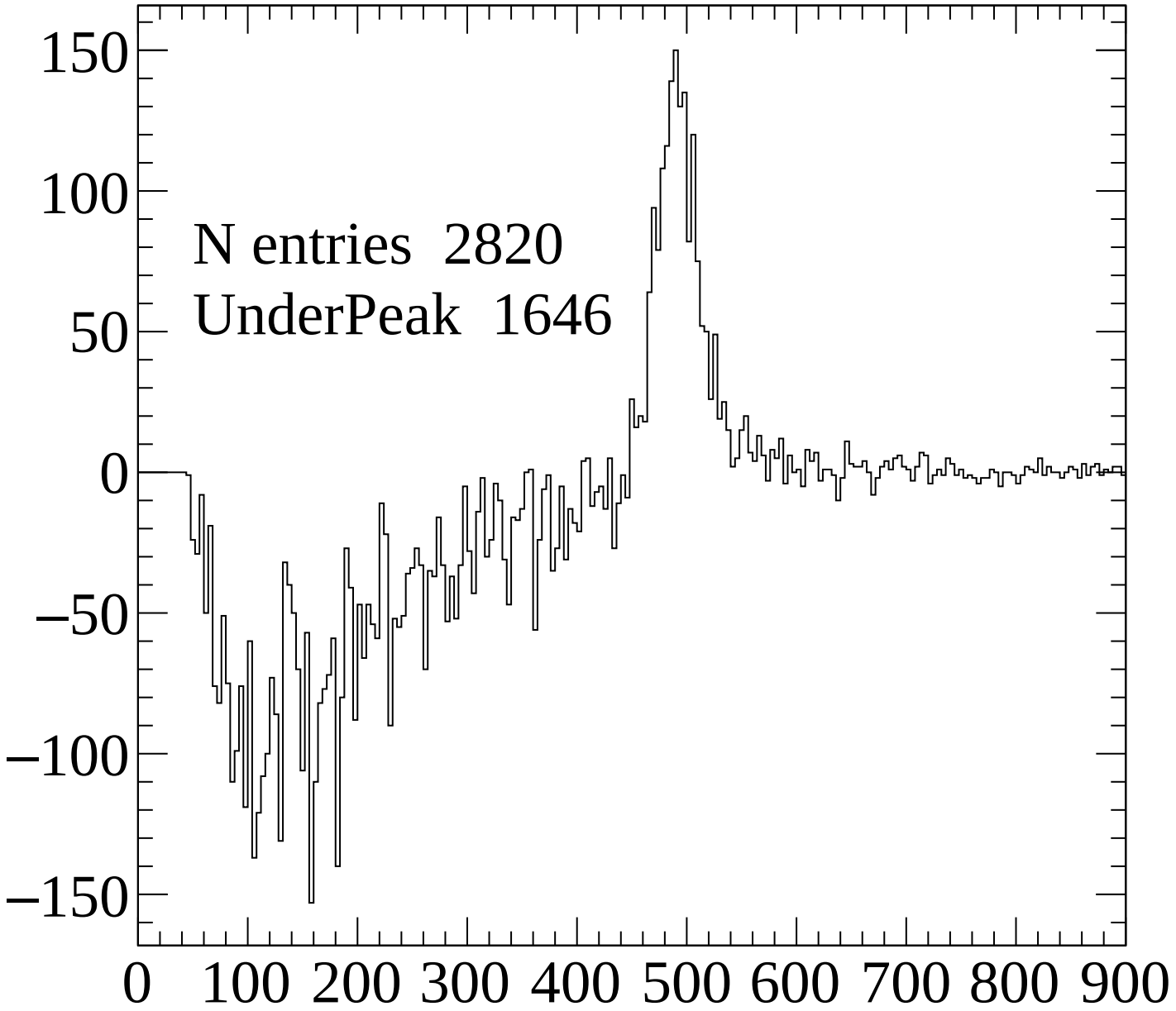

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_19
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

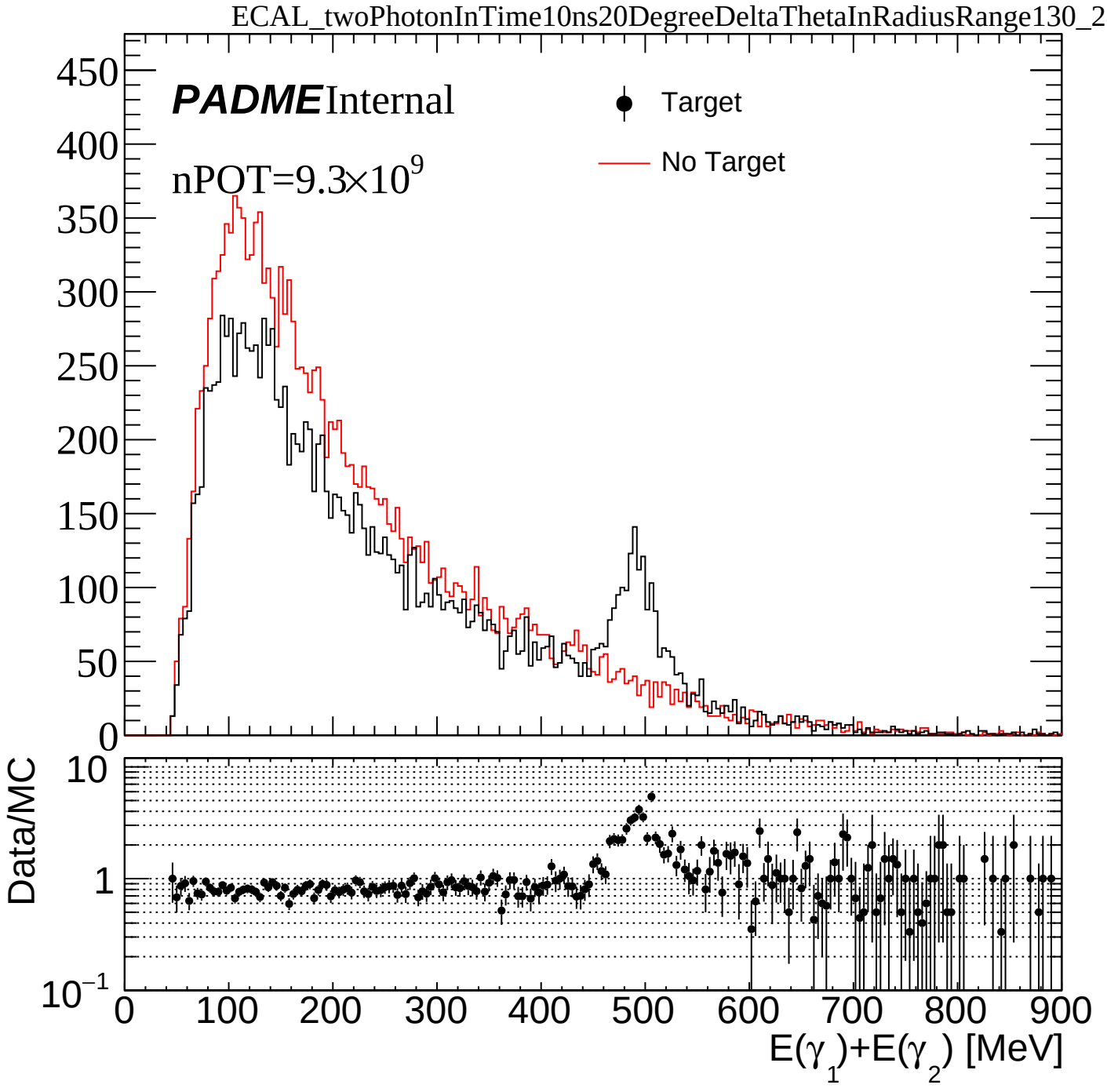

N entries 148
UnderPeak 67
10
5
0
−5
−10
−15
−20
0
100
200
300
400
500
600
700
800
900

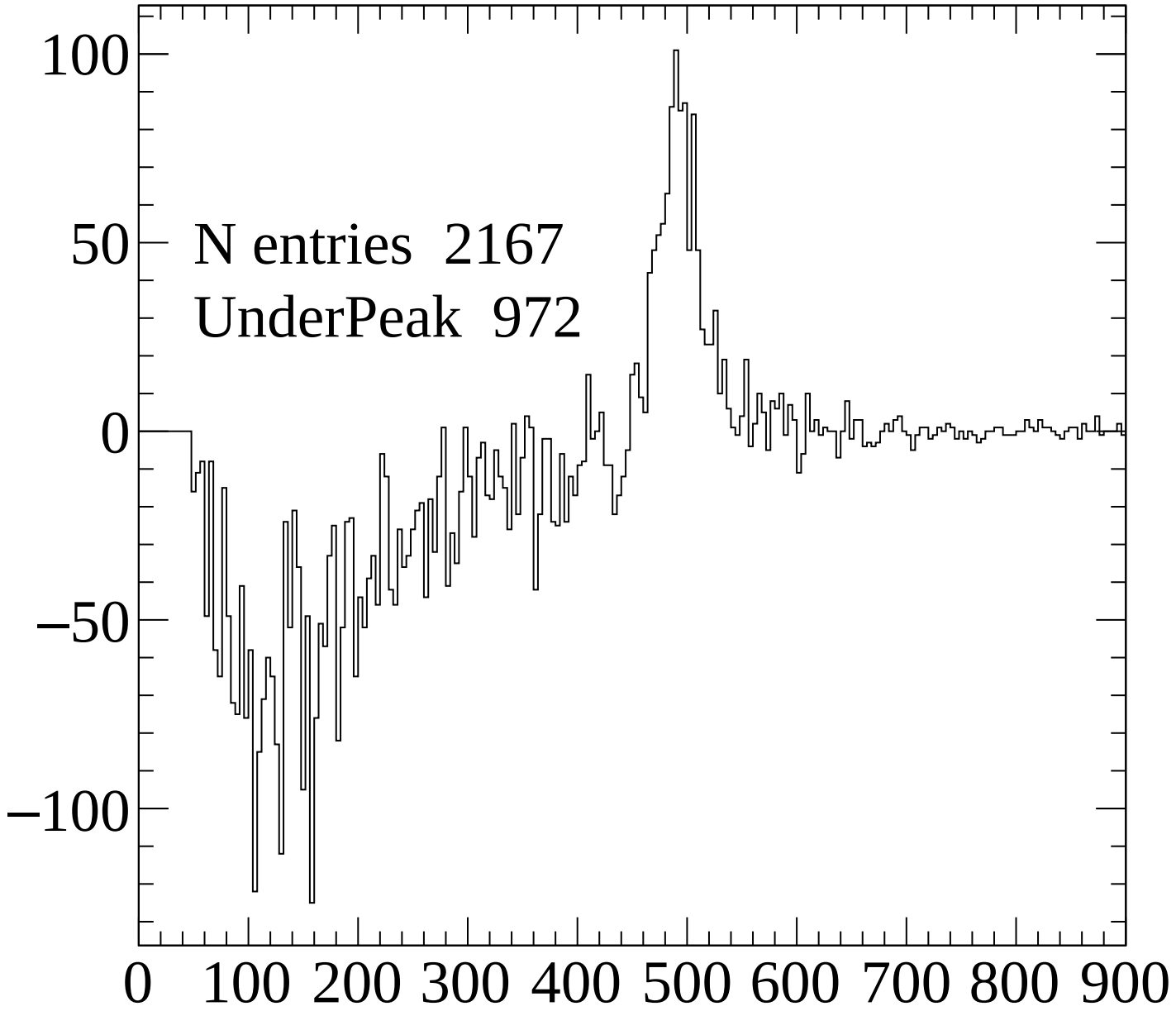

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
700
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

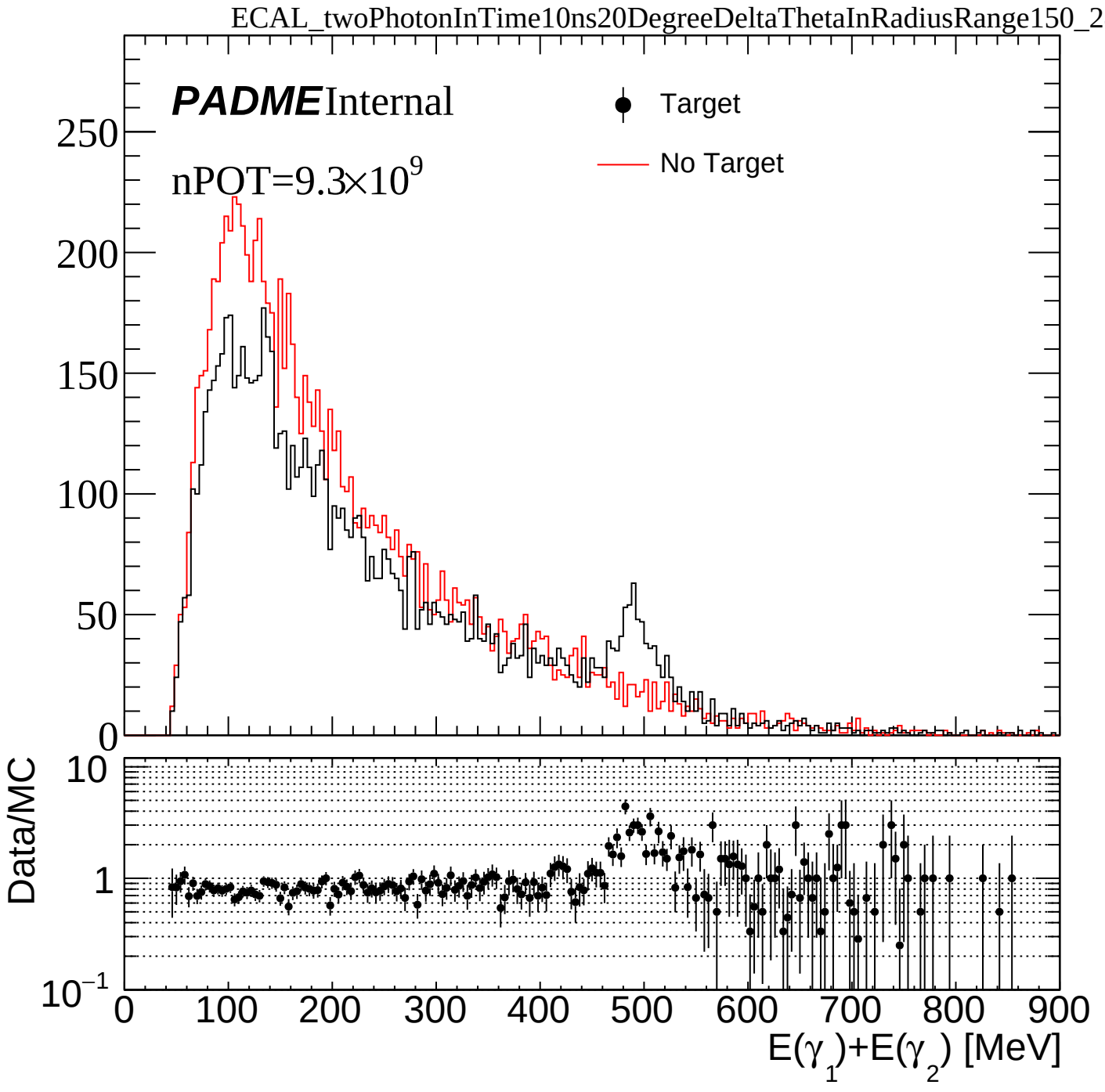

N entries 3415
UnderPeak 1921
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

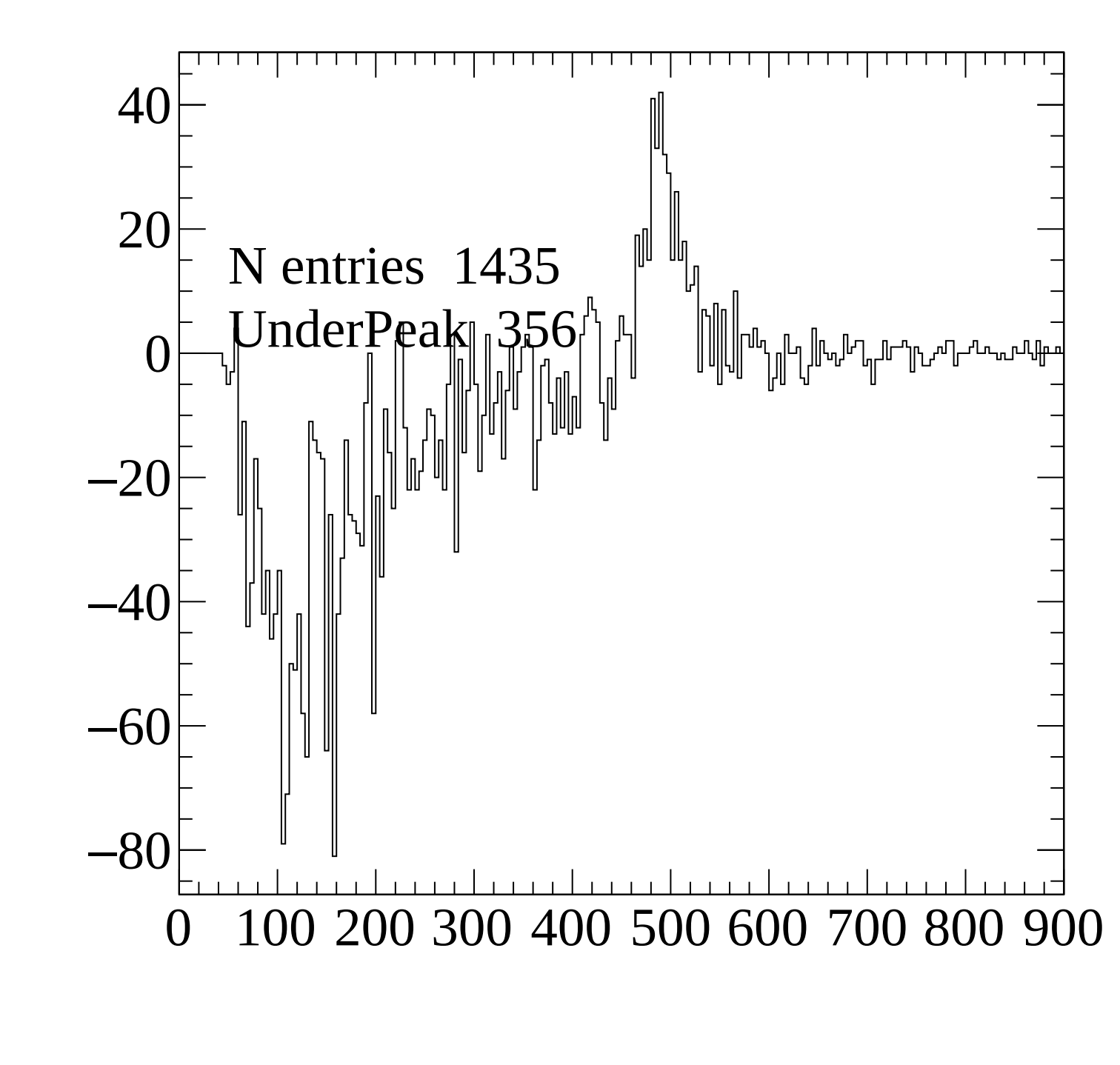

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
600
500
400
300
200
100
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

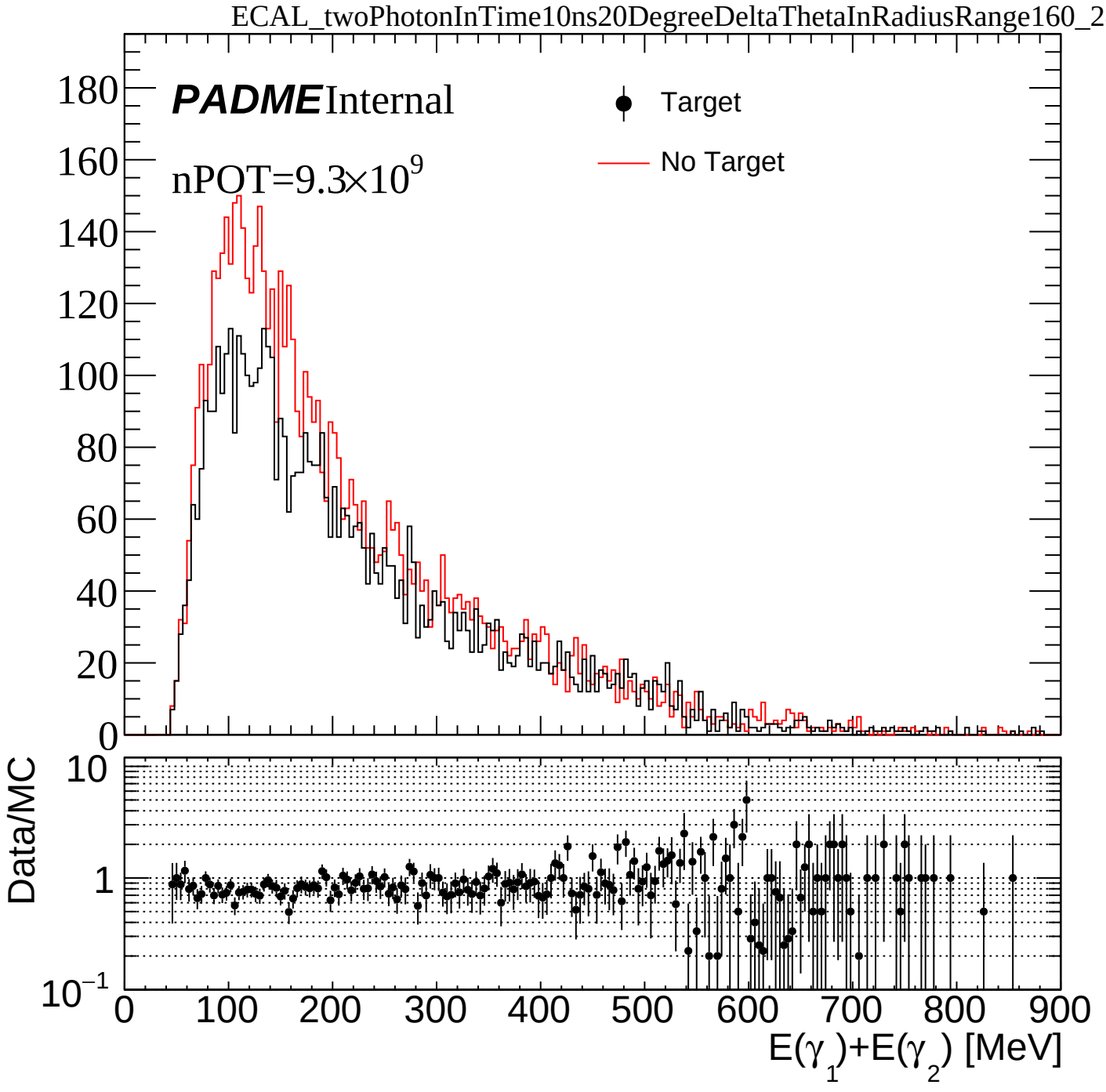

N entries 2820
UnderPeak 1646
150
100
50
0
−50
−100
−150
0
100
200
300
400
500
600
700
800
900

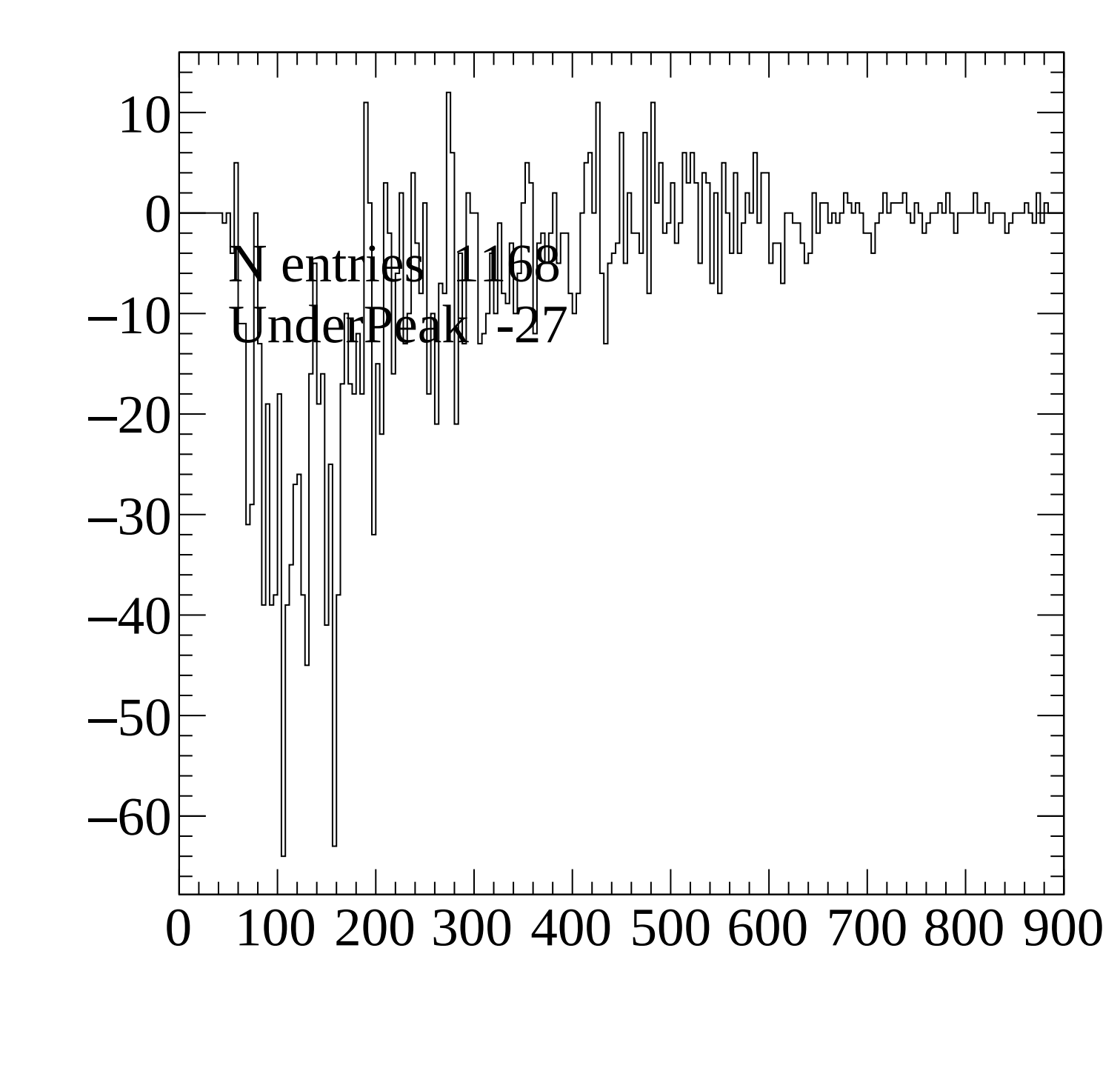

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange130_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
450
400
350
300
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

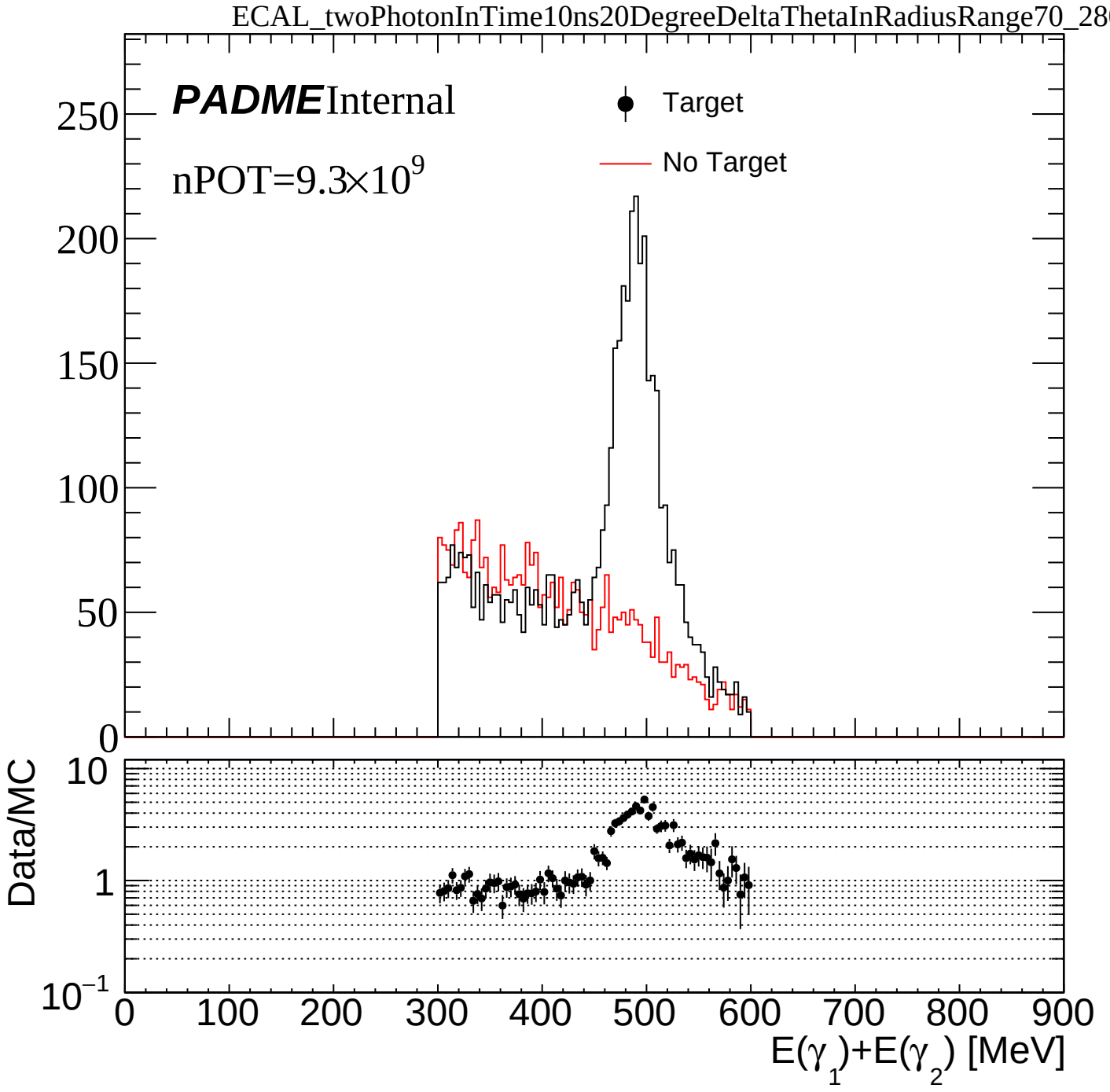

N entries 2167
UnderPeak 972
100
50
0
−50
−100
0
100
200
300
400
500
600
700
800
900

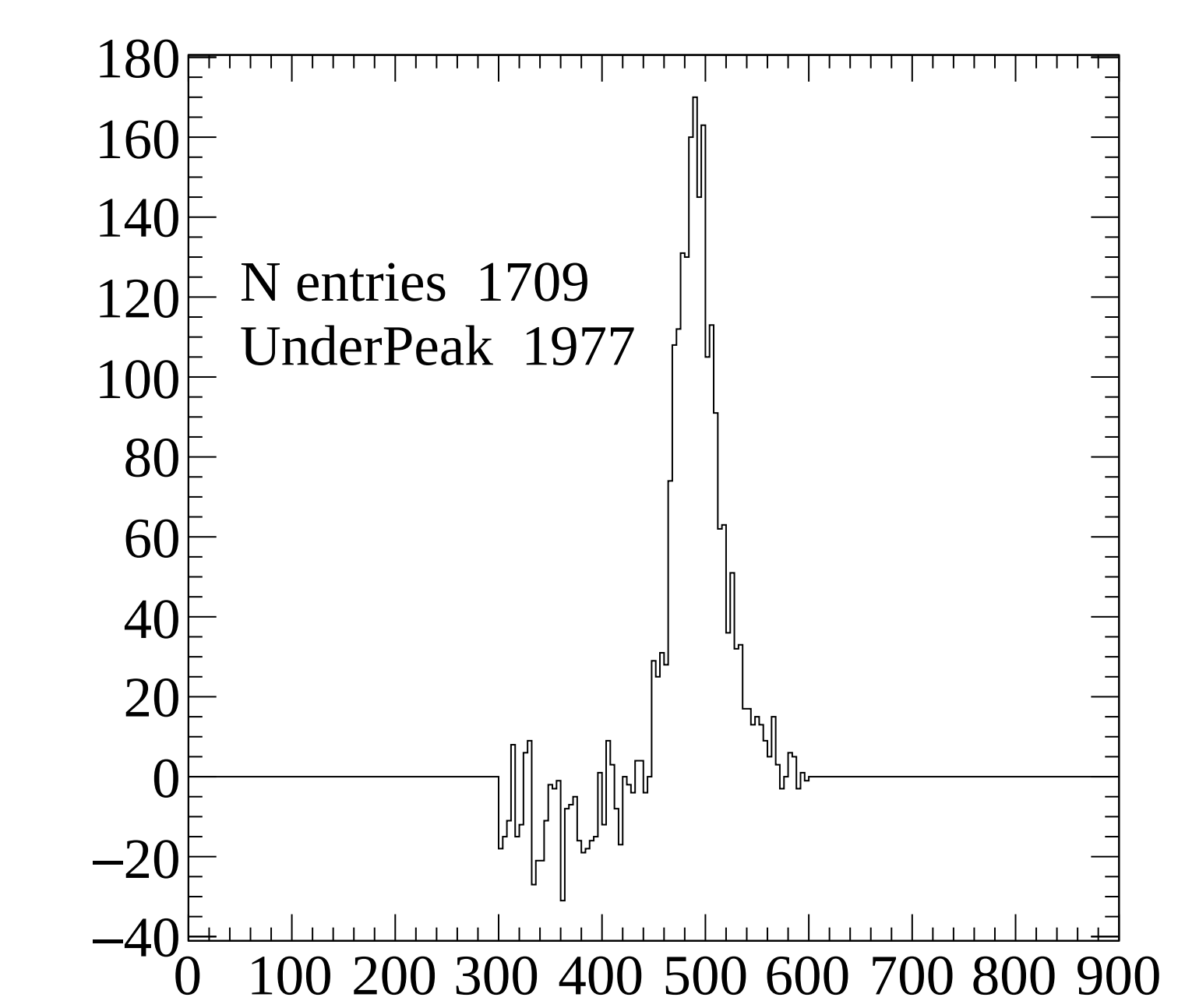

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

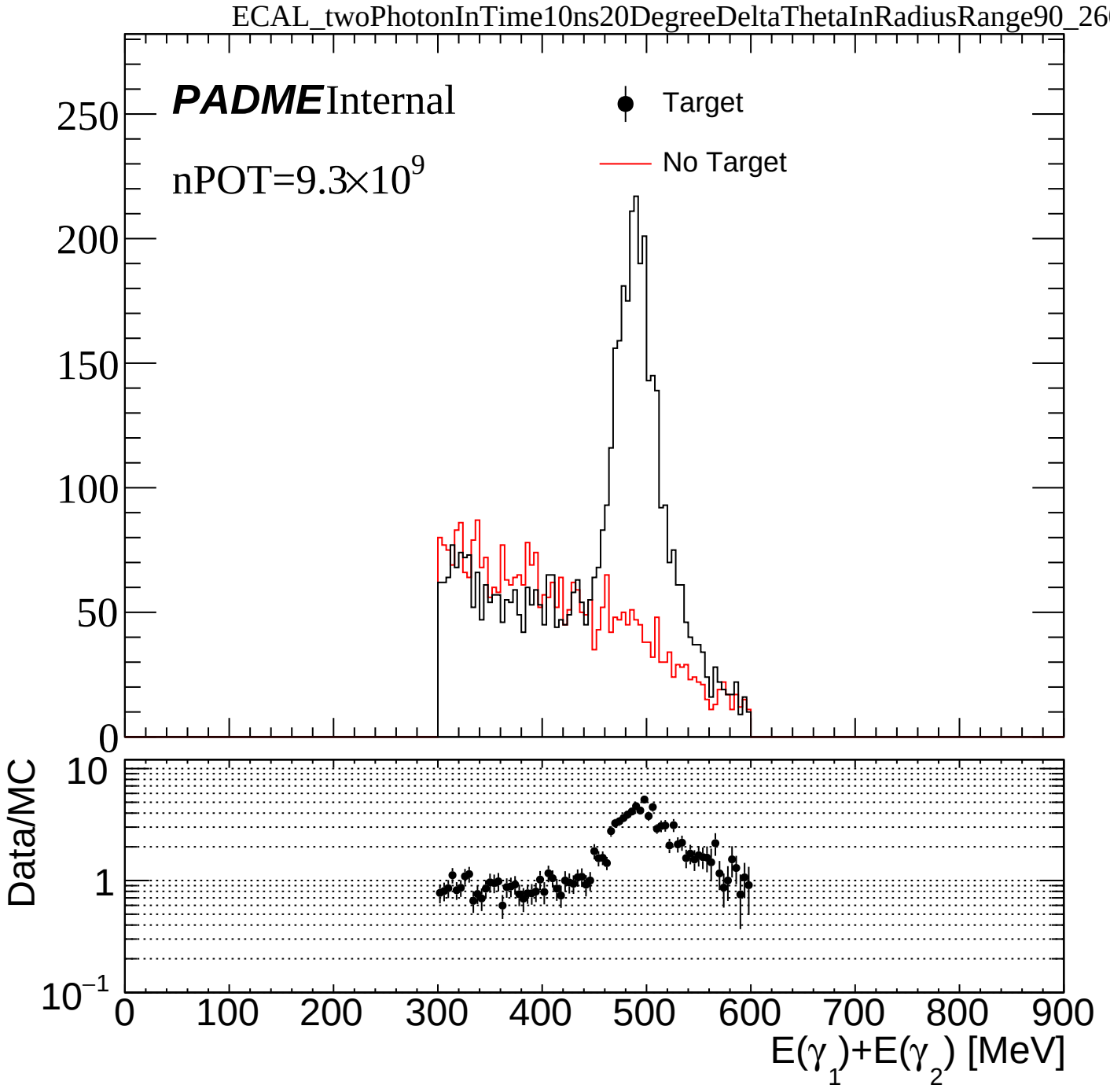

N entries 1435
UnderPeak 356
40
20
0
−20
−40
−60
−80
0
100
200
300
400
500
600
700
800
900

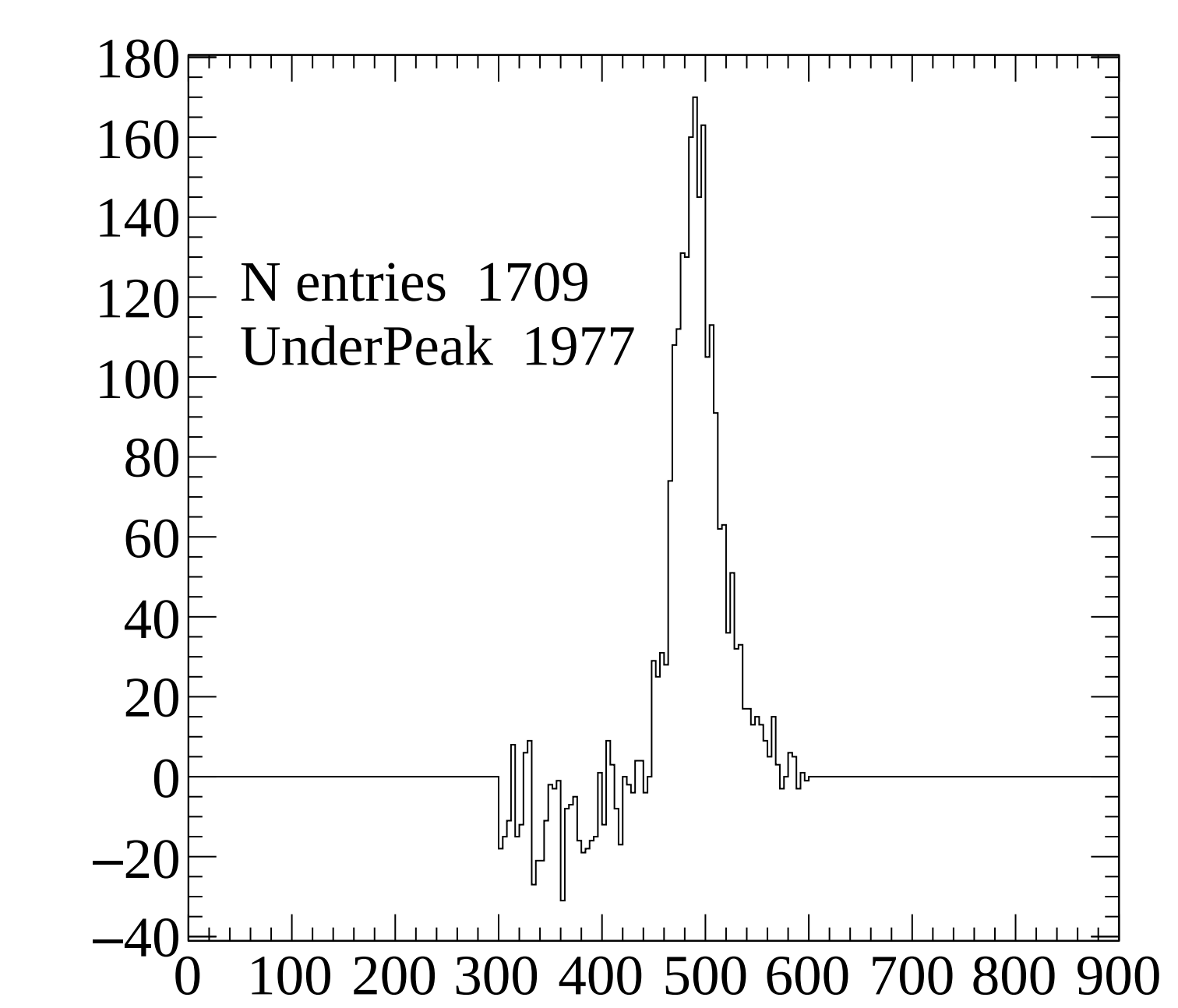

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

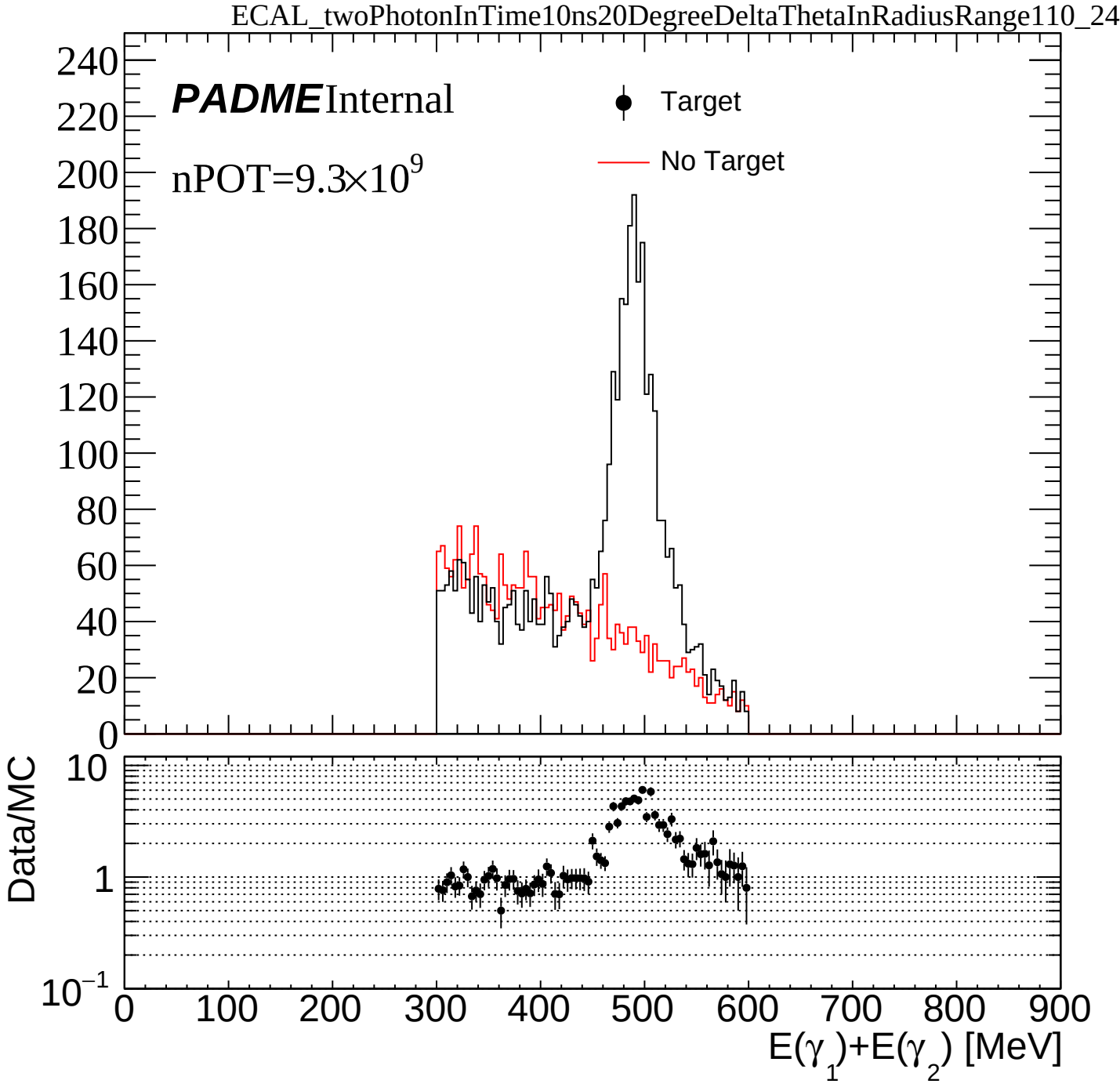

N entries 1168
UnderPeak -27
10
0
−10
−20
−30
−40
−50
−60
0
100
200
300
400
500
600
700
800
900

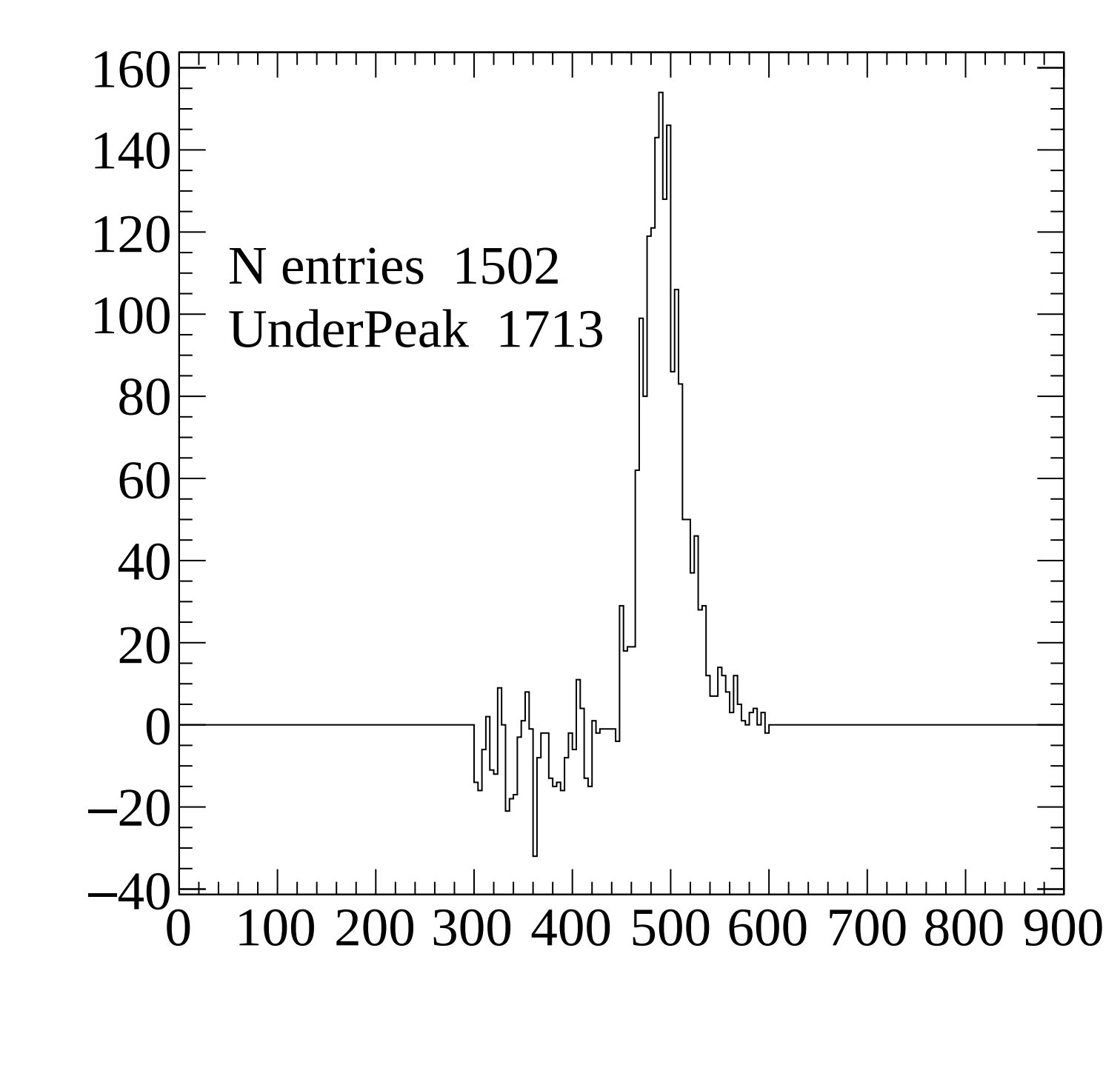

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ_1)+E(γ_2) [MeV]

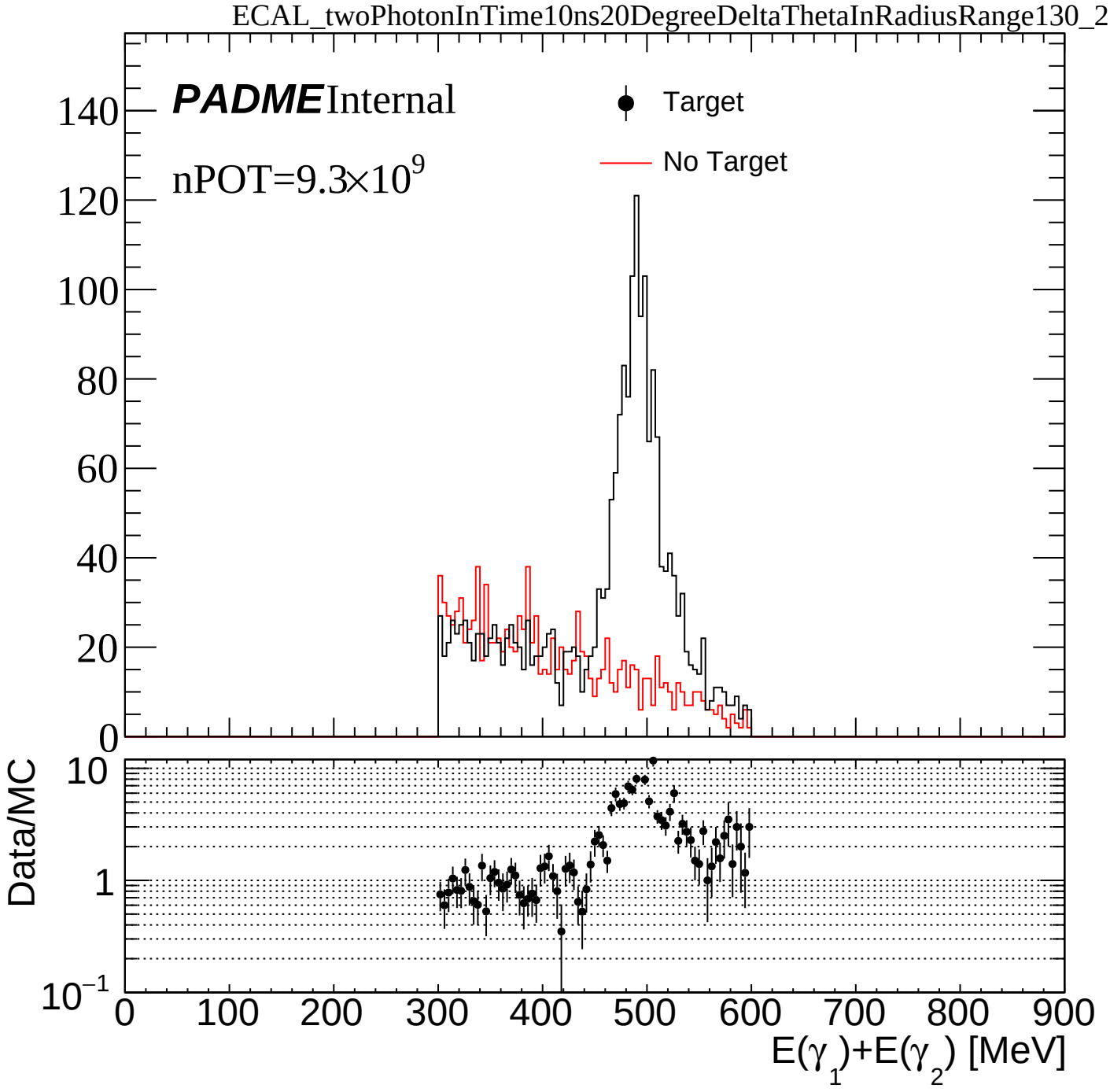

N entries 1709
UnderPeak 1977
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

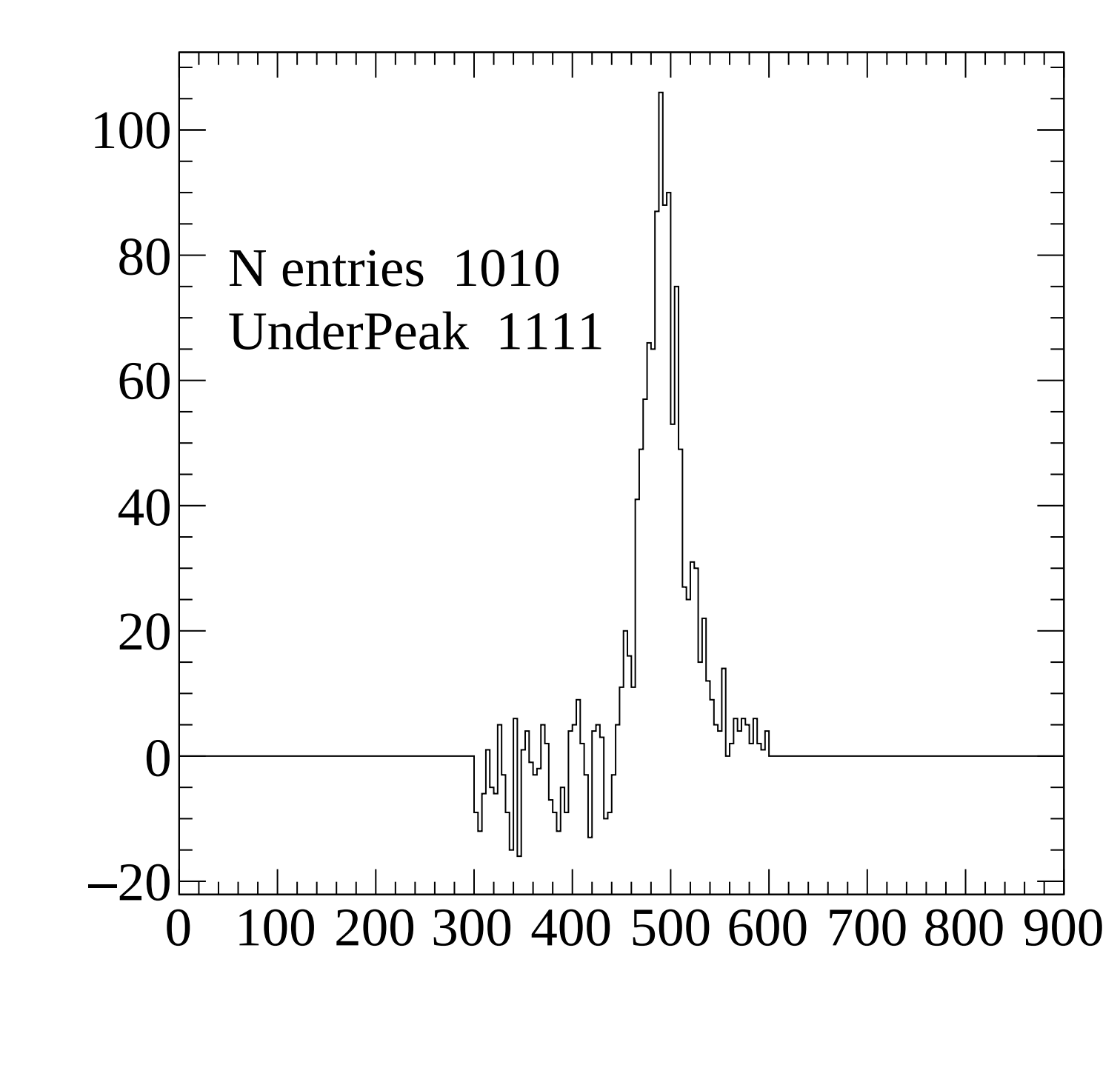

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_260
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

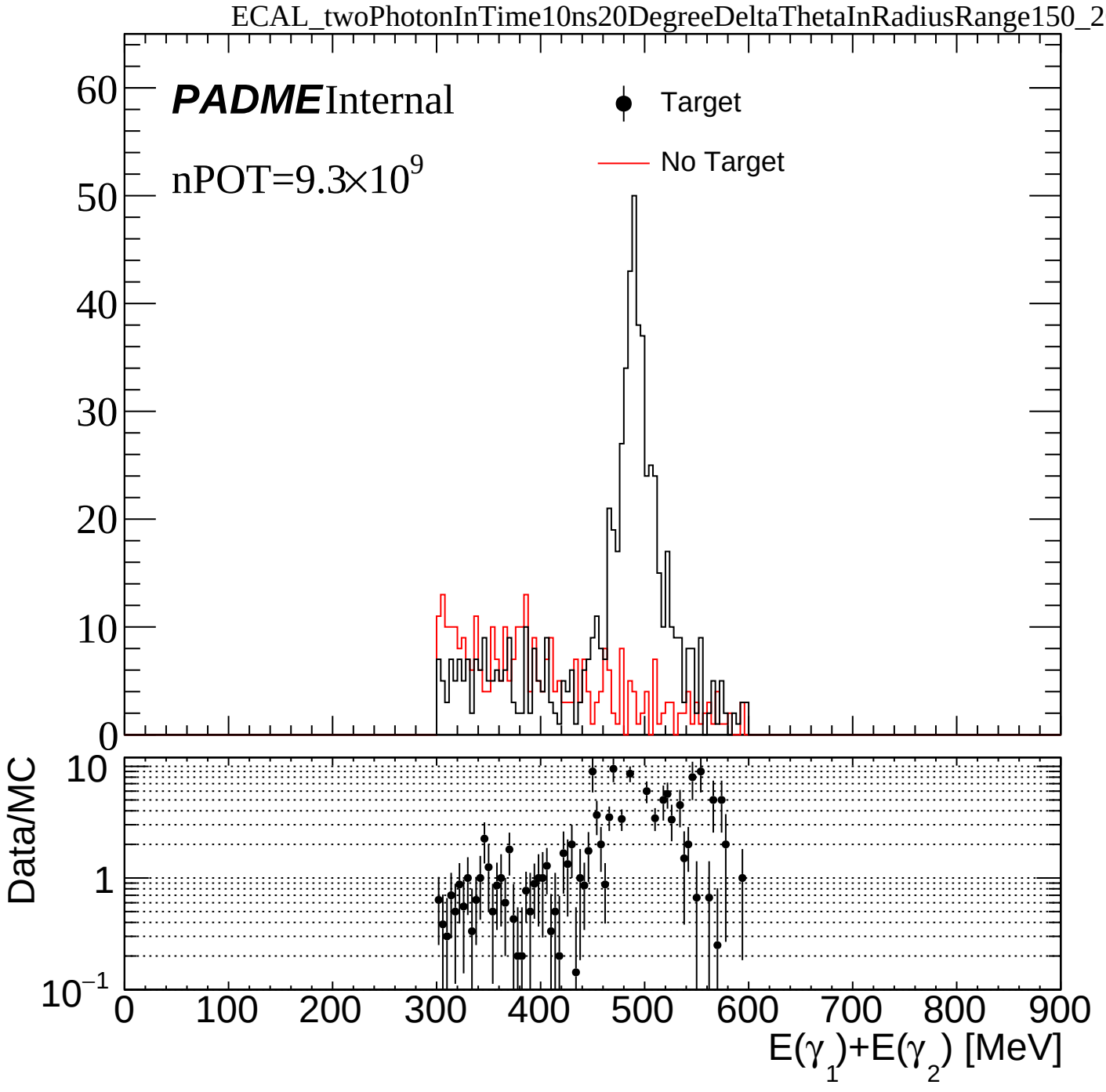

N entries 1709
UnderPeak 1977
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

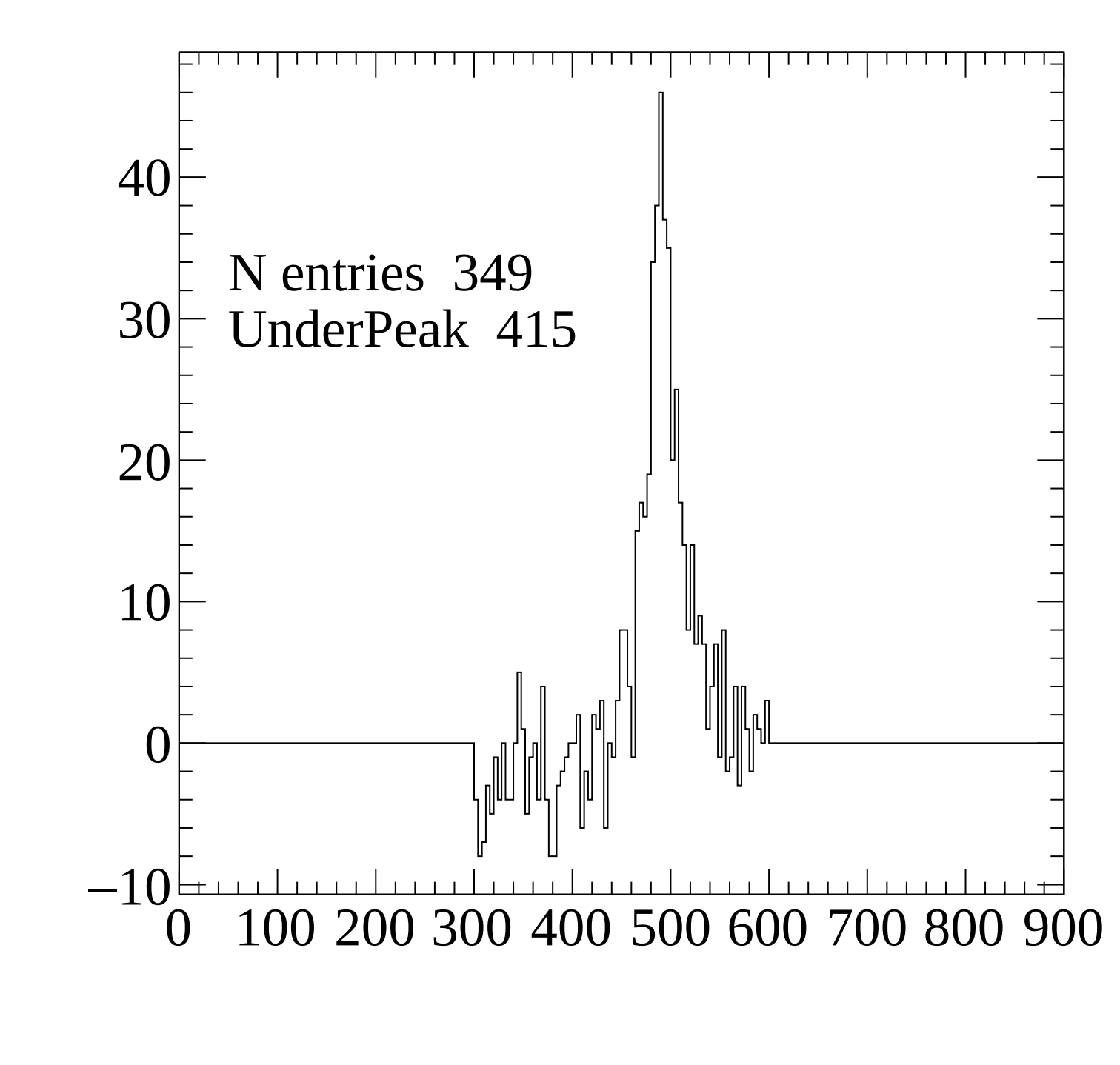

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_24
PADME Internal
nPOT=9.3×10^9
Target
No Target
240
220
200
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

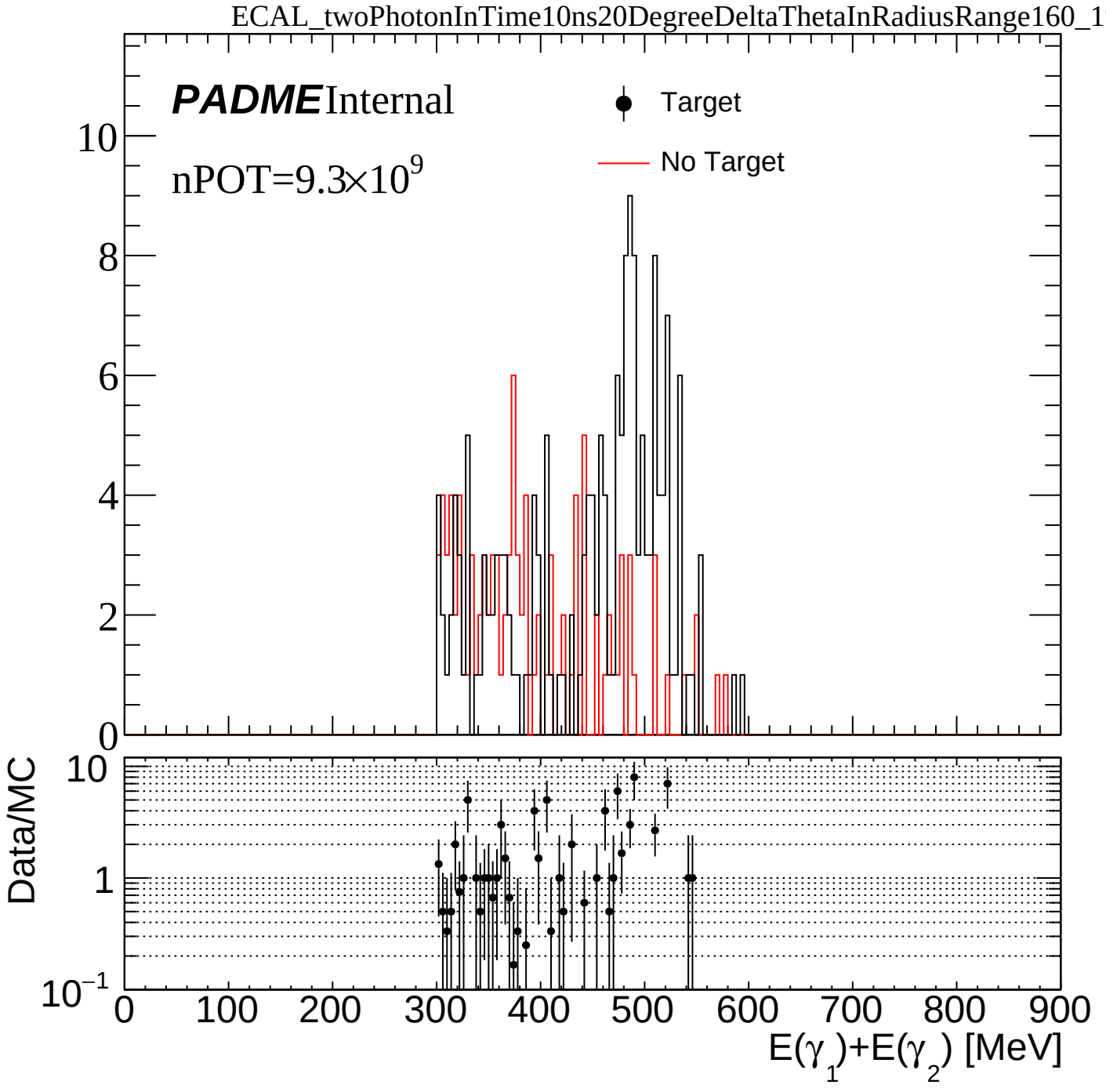

N entries 1502
UnderPeak 1713
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

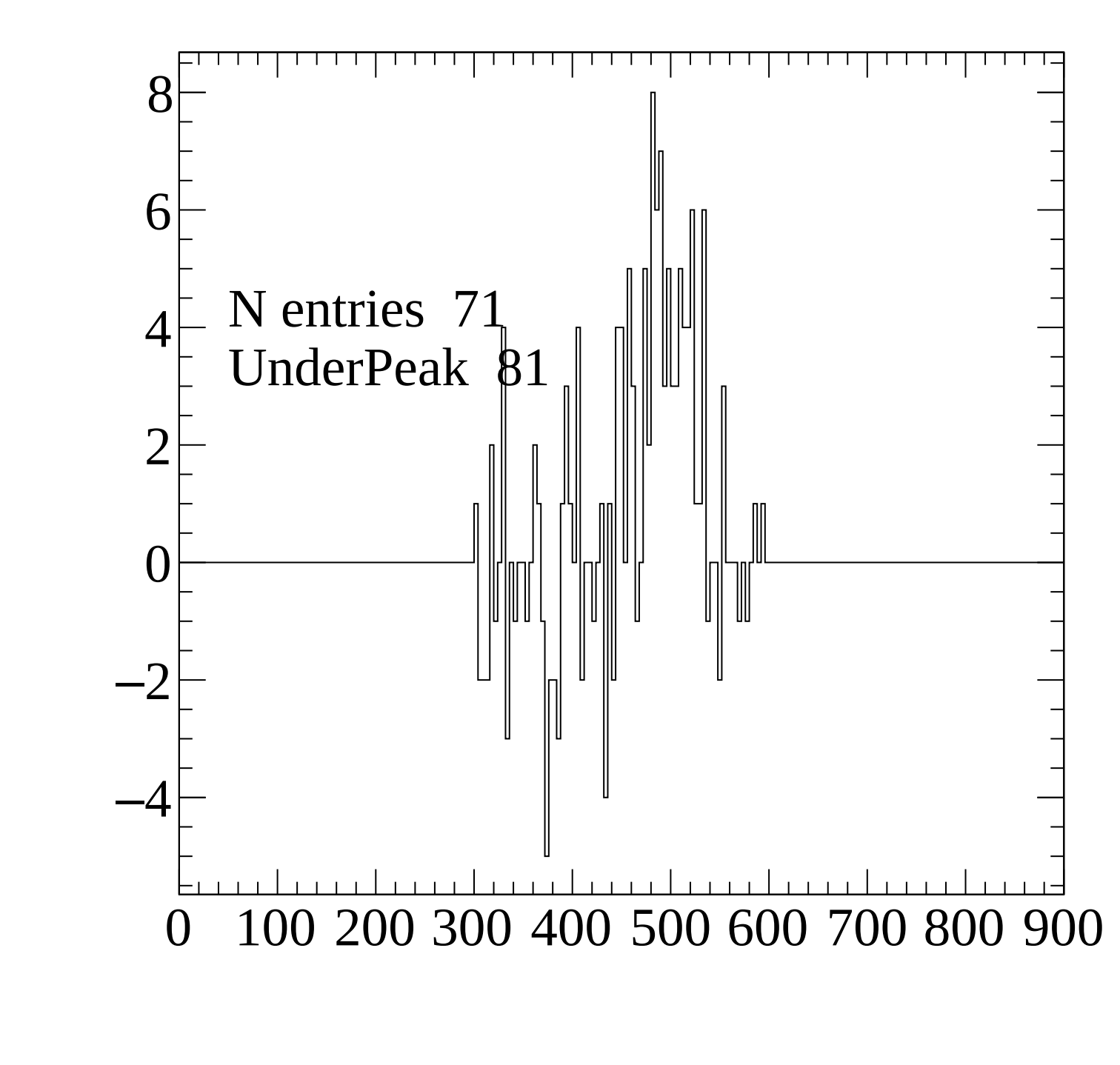

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange130_22
PADME Internal
nPOT=9.3×10^9
Target
No Target
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

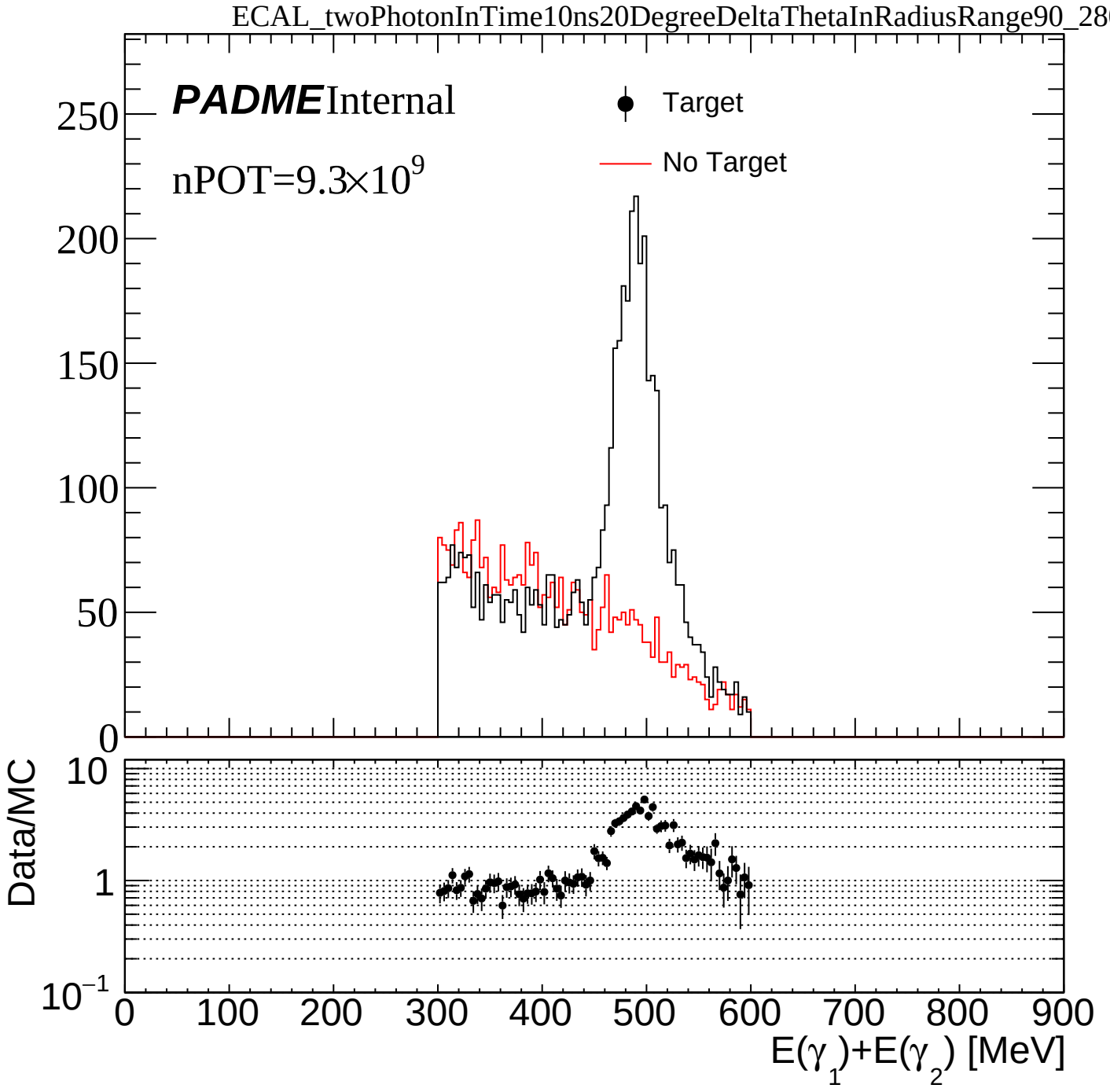

N entries 1010
UnderPeak 1111
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

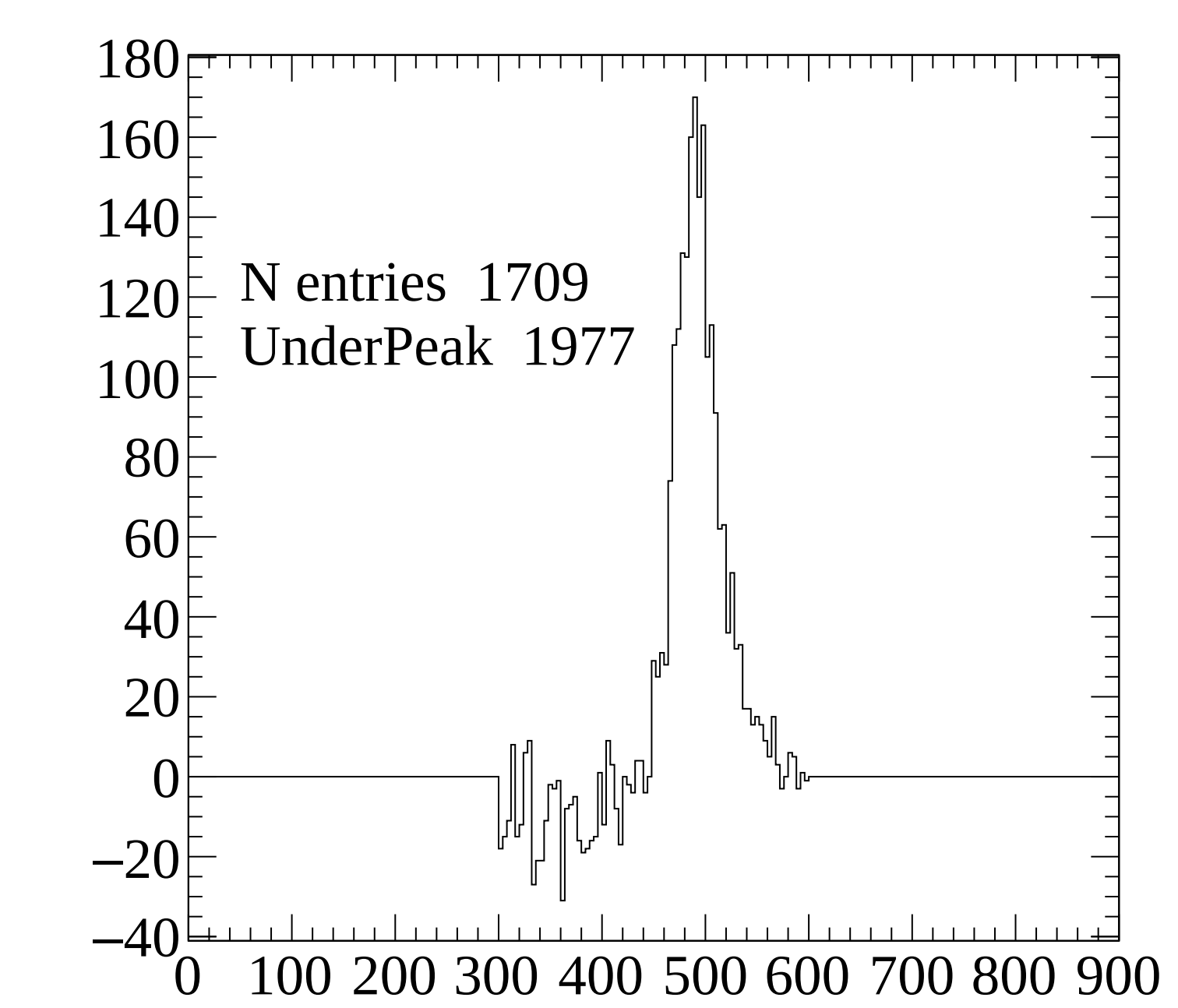

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_20
PADME Internal
nPOT=9.3×10^9
Target
No Target
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

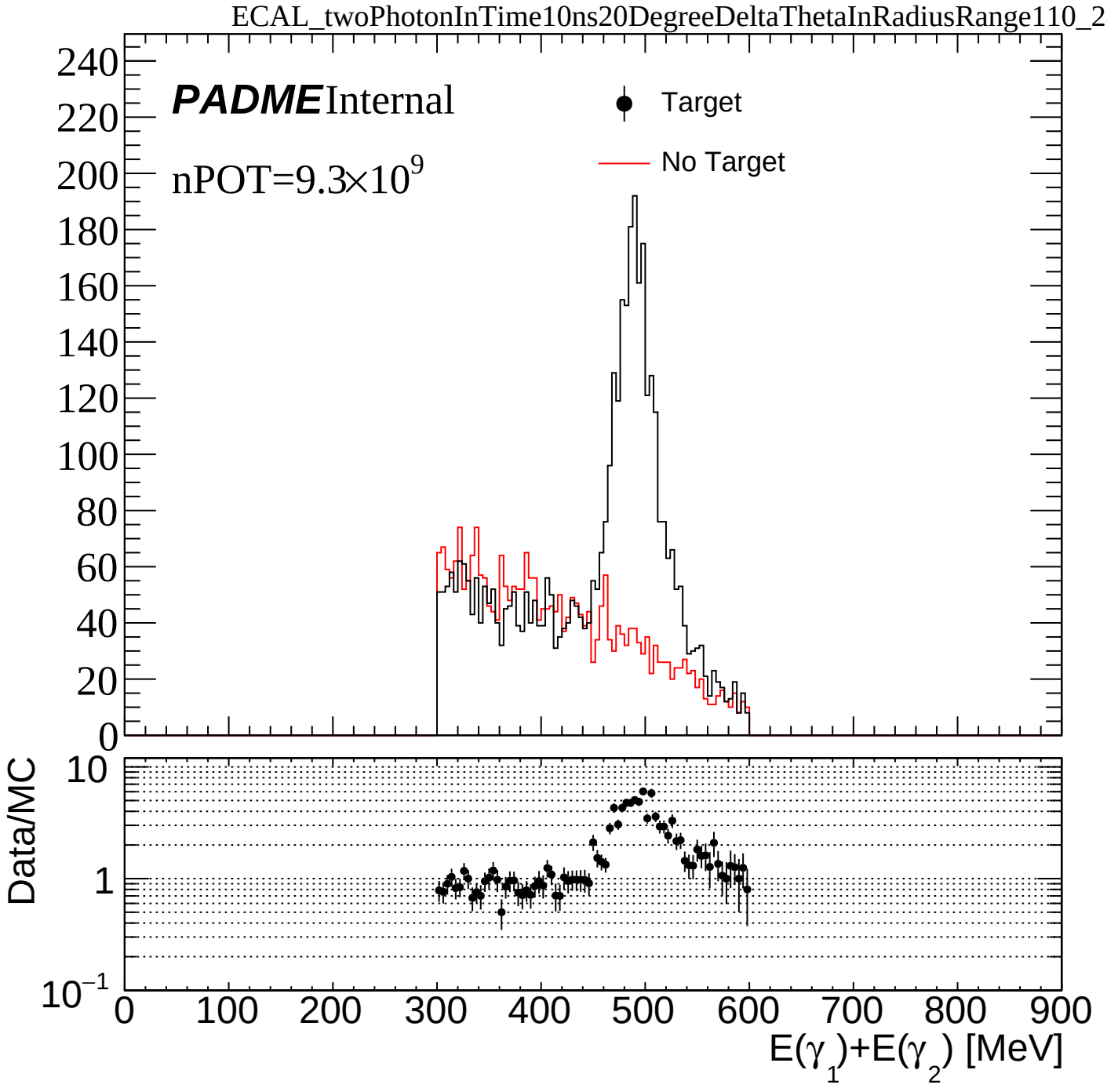

N entries 349
UnderPeak 415
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

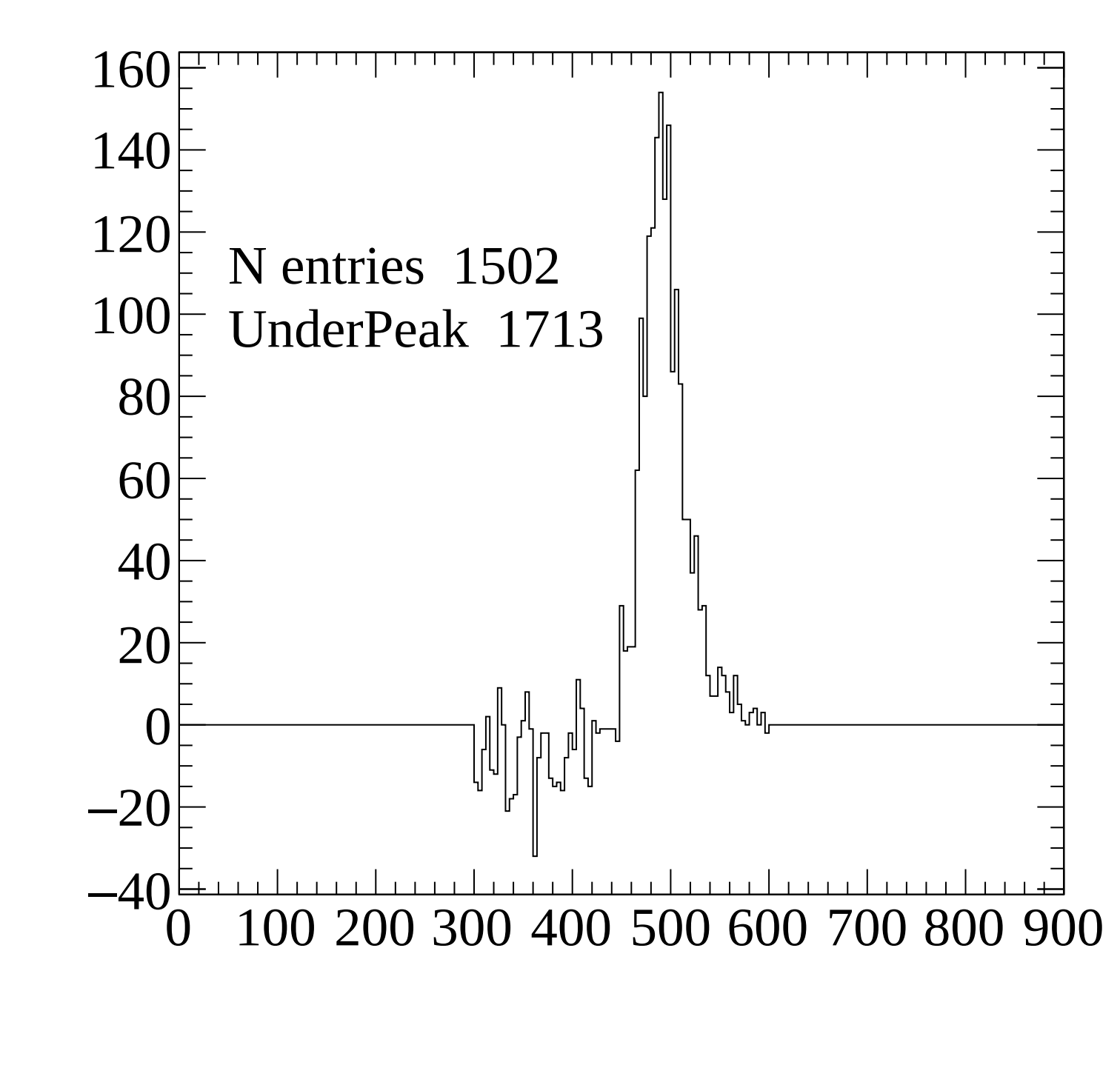

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_19
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

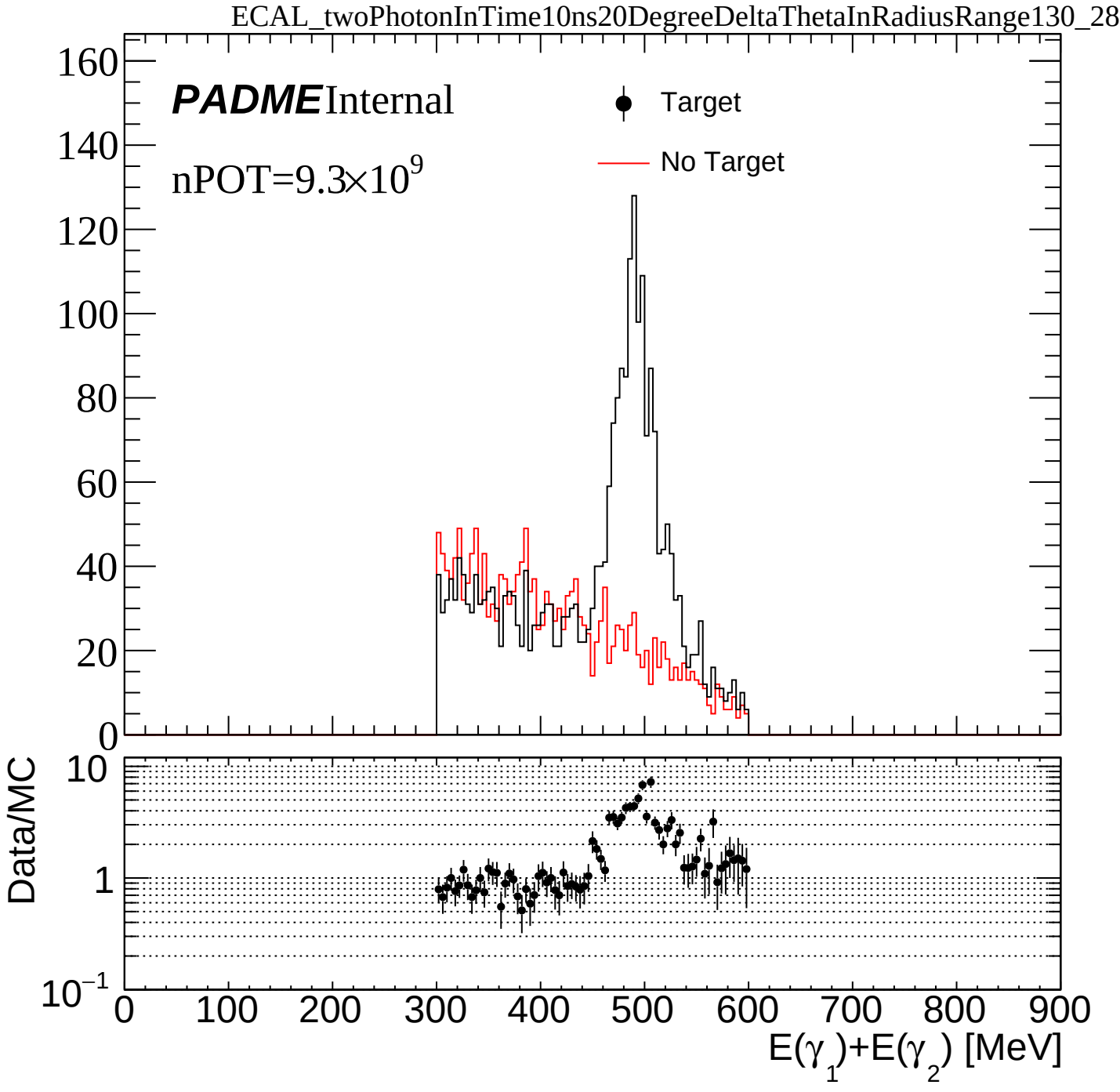

N entries 71
UnderPeak 81
8
6
4
2
0
−2
−4
0
100
200
300
400
500
600
700
800
900

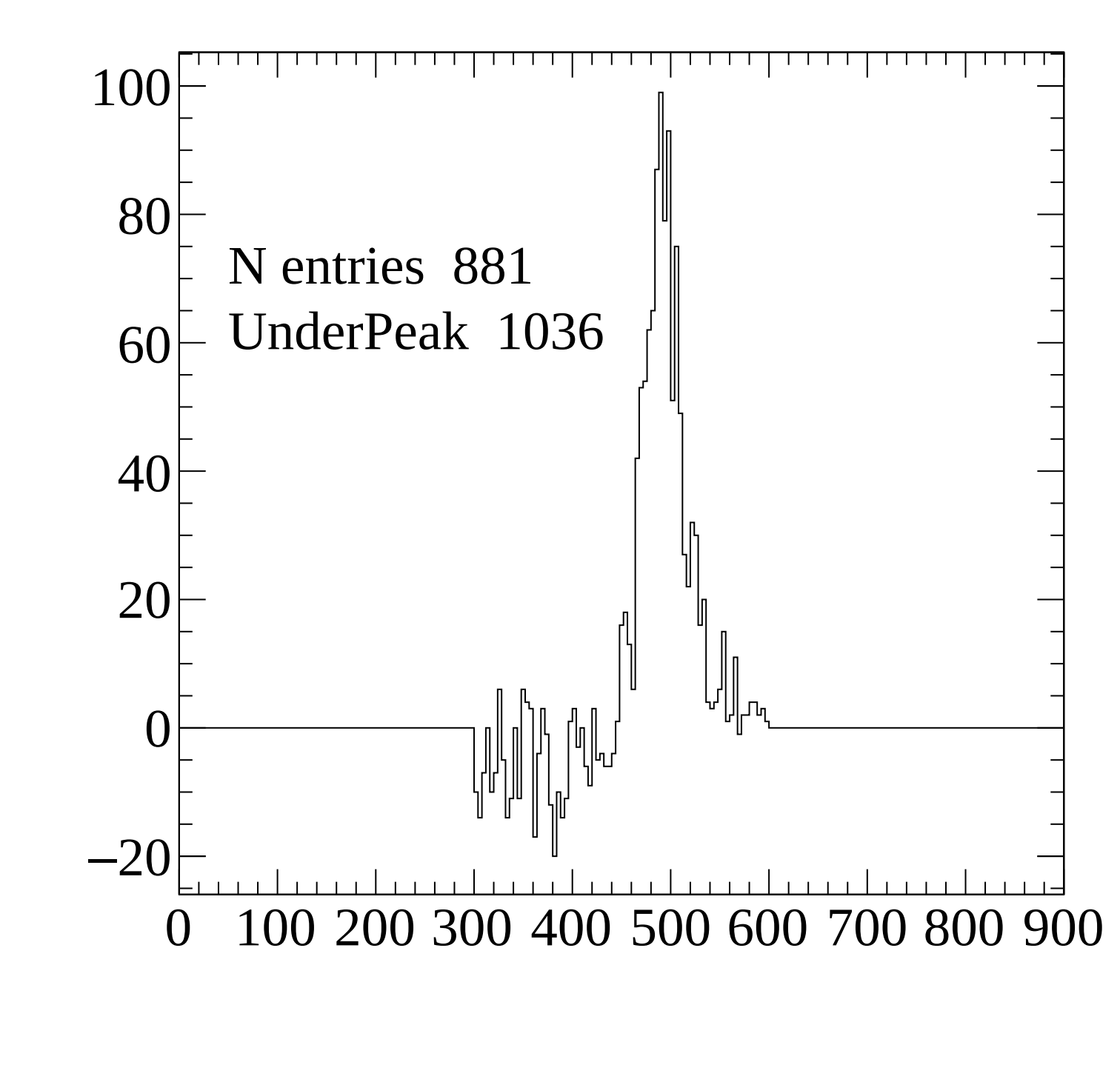

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
250
200
150
100
50
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

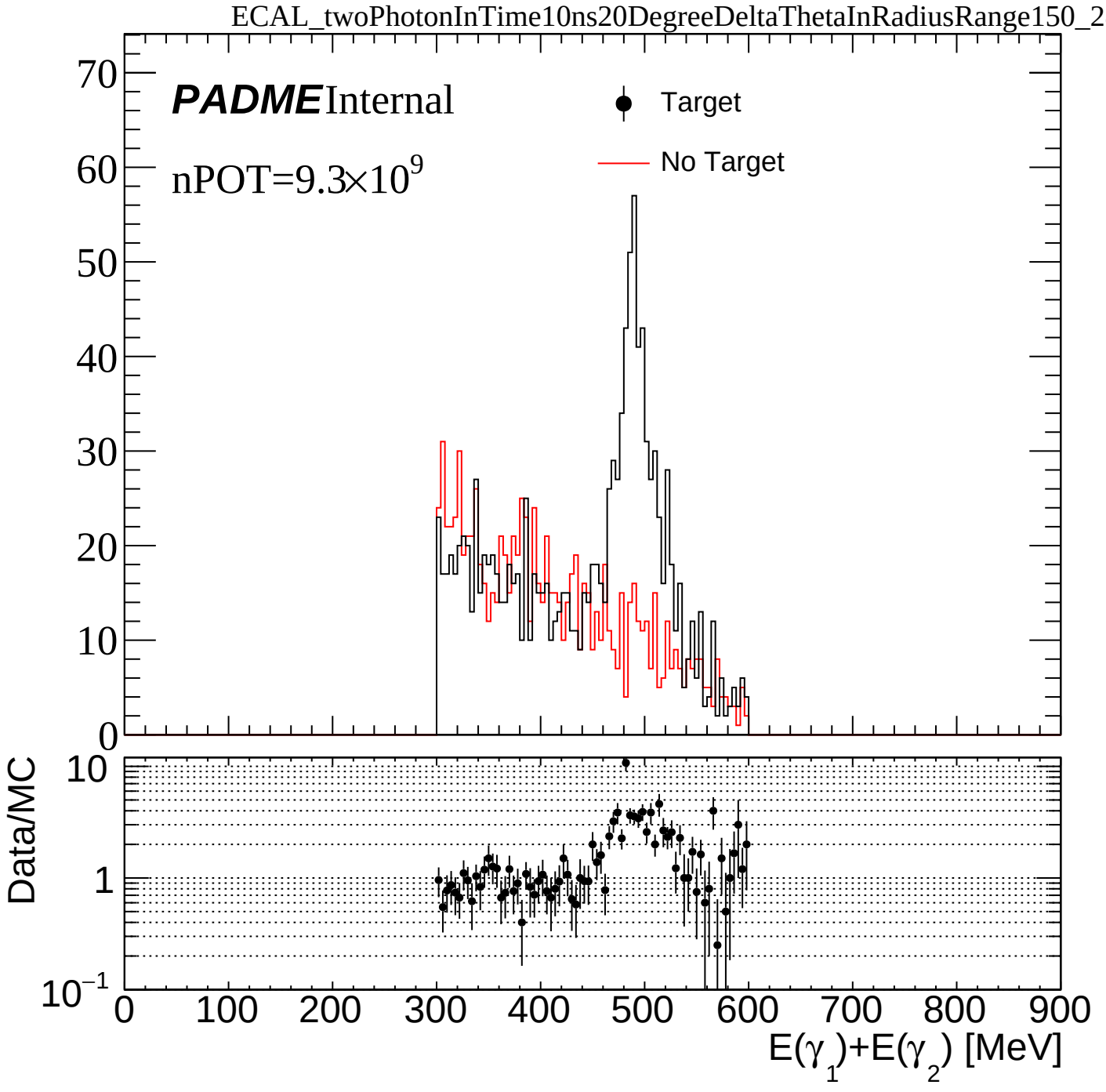

N entries 1709
UnderPeak 1977
180
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

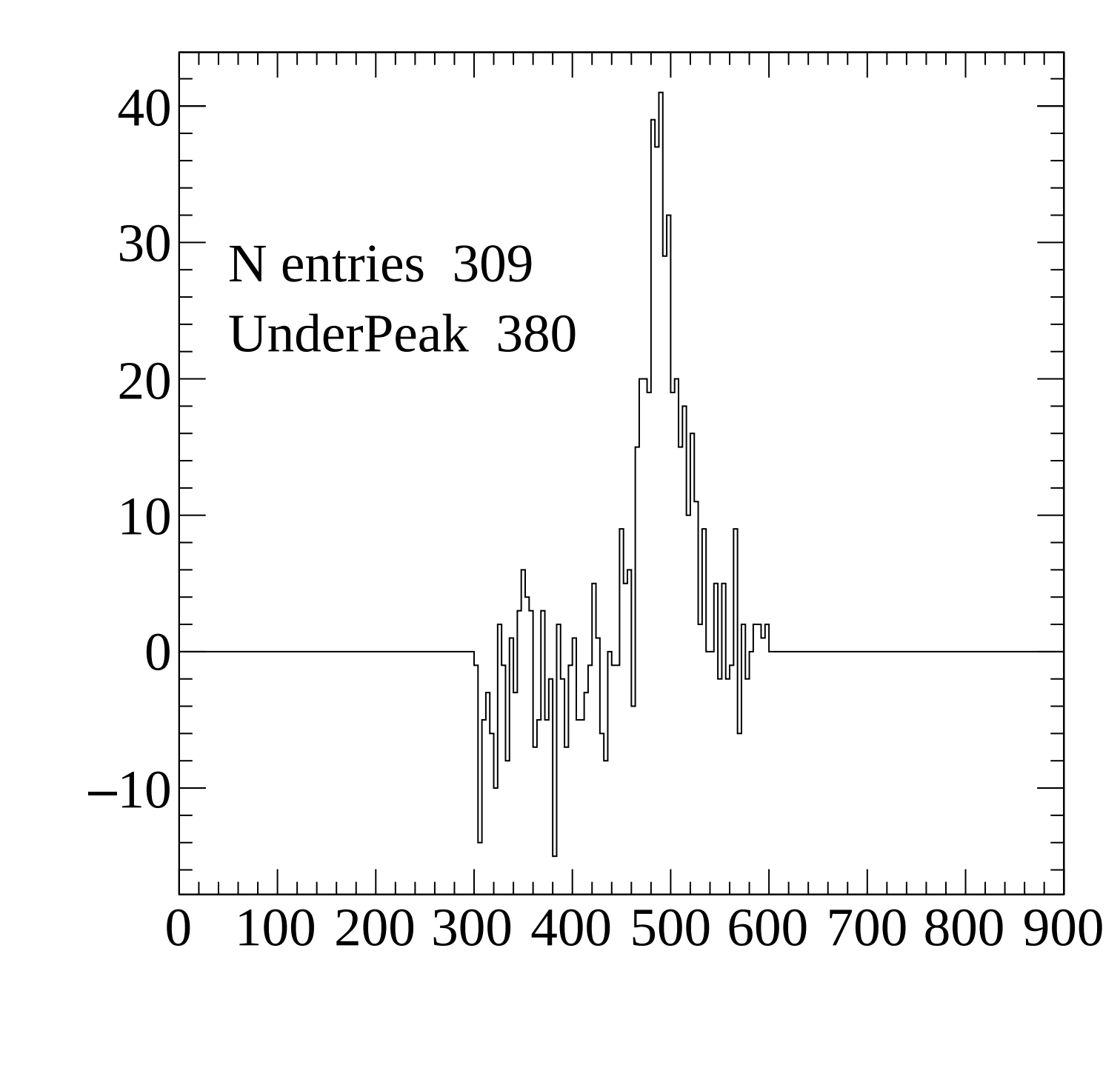

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
240
220
200
180
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

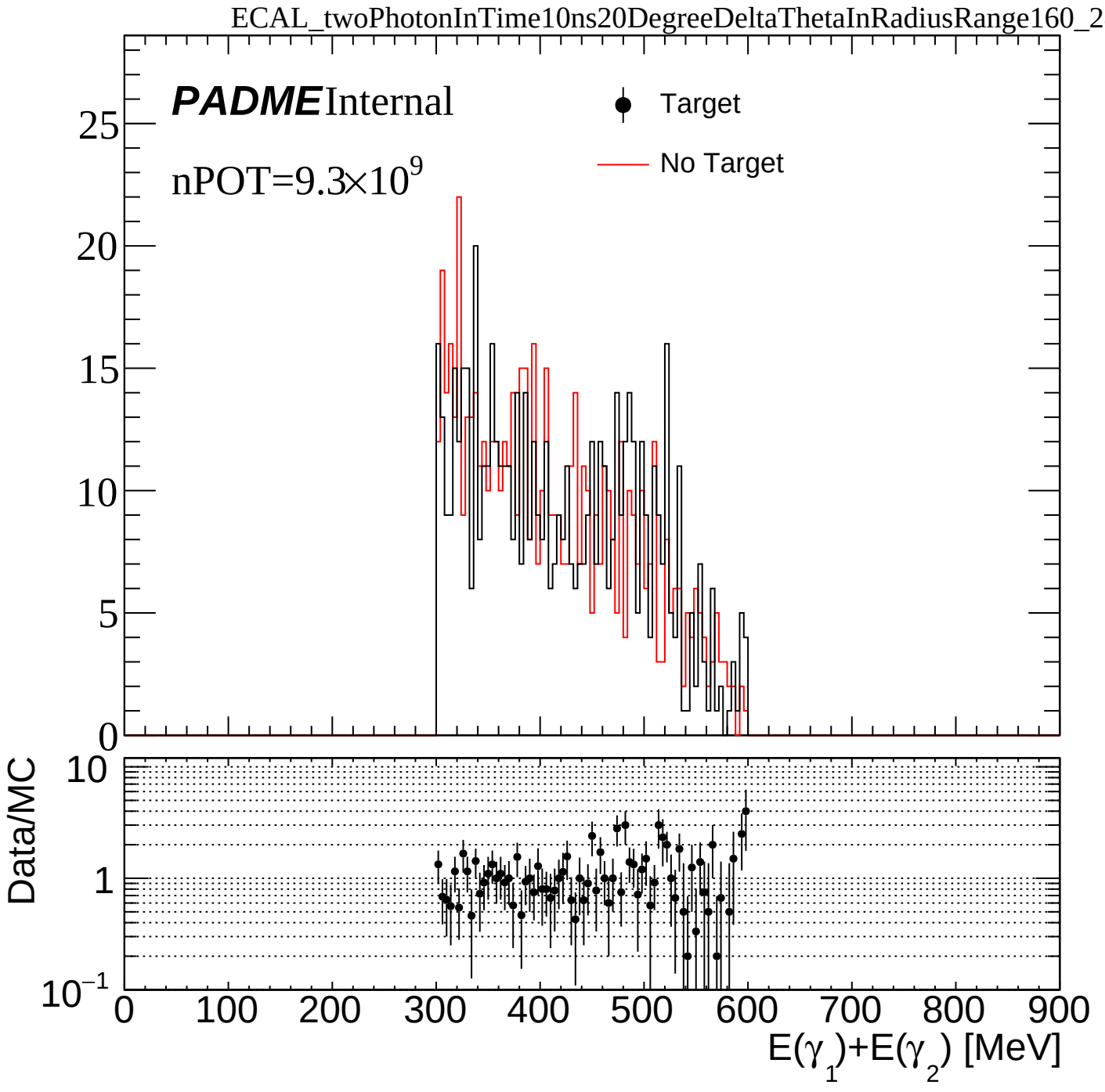

N entries 1502
UnderPeak 1713
160
140
120
100
80
60
40
20
0
−20
−40
0
100
200
300
400
500
600
700
800
900

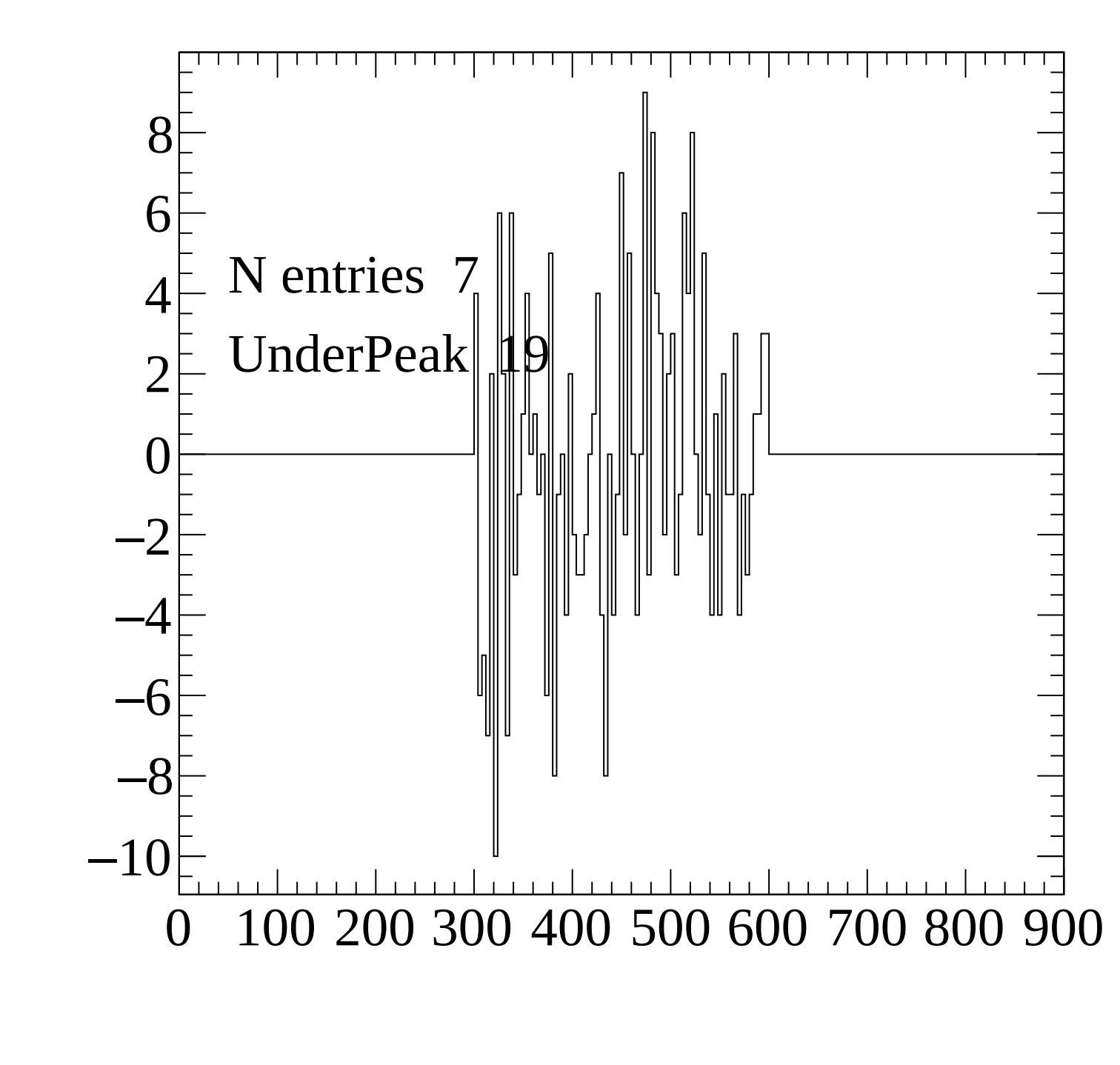

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange130_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

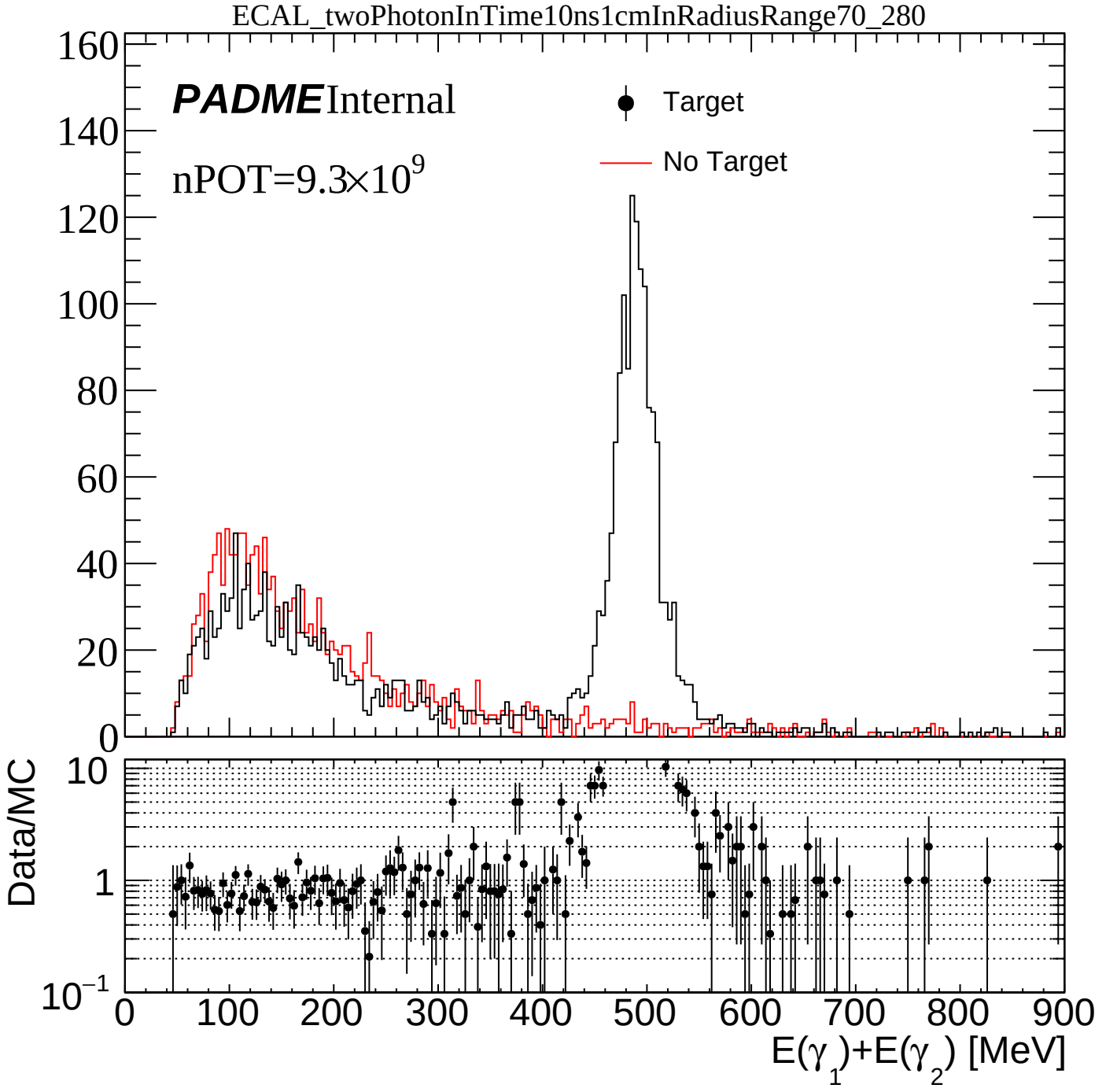

N entries 881
UnderPeak 1036
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

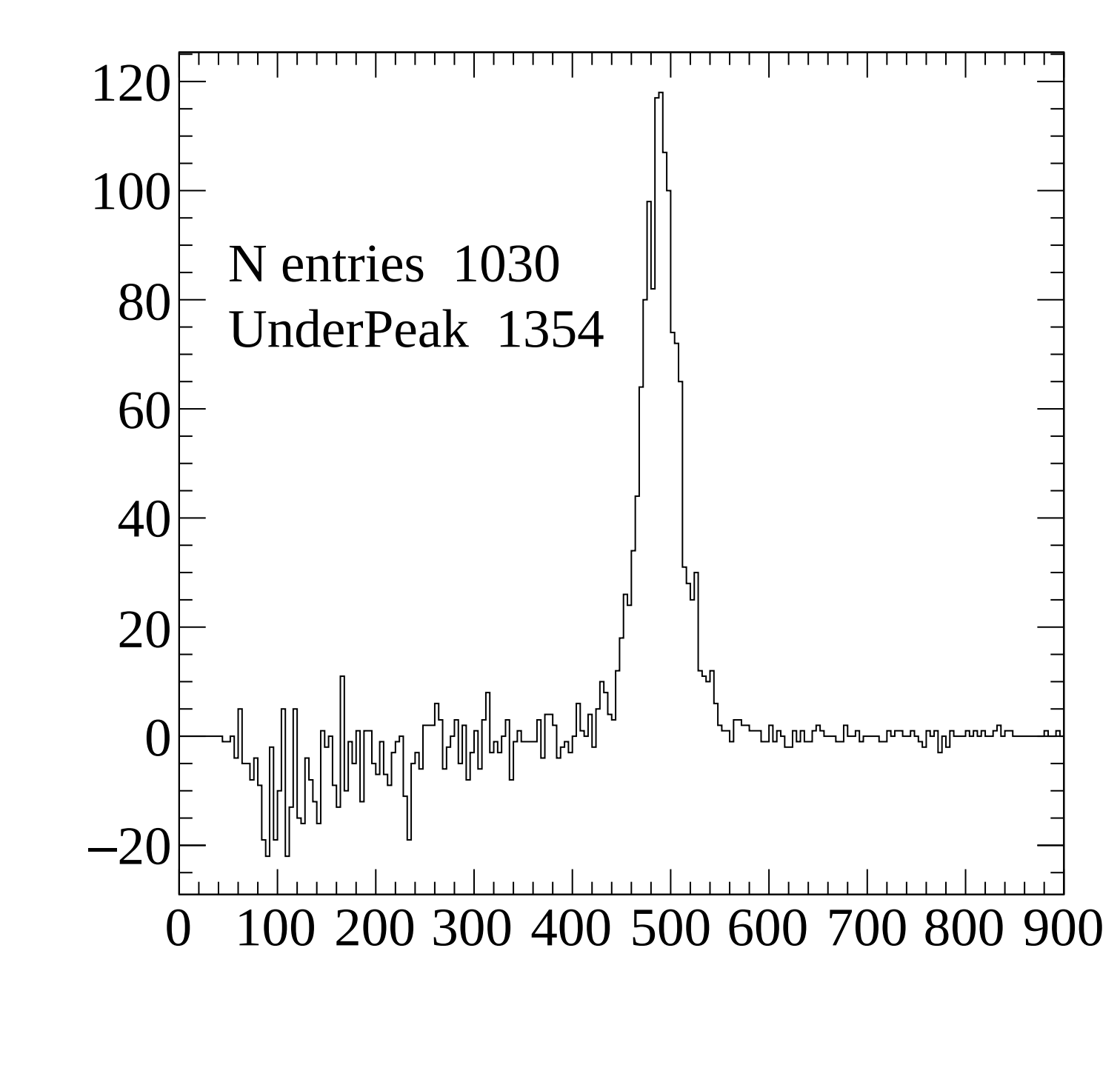

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
70
60
50
40
30
20
10
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

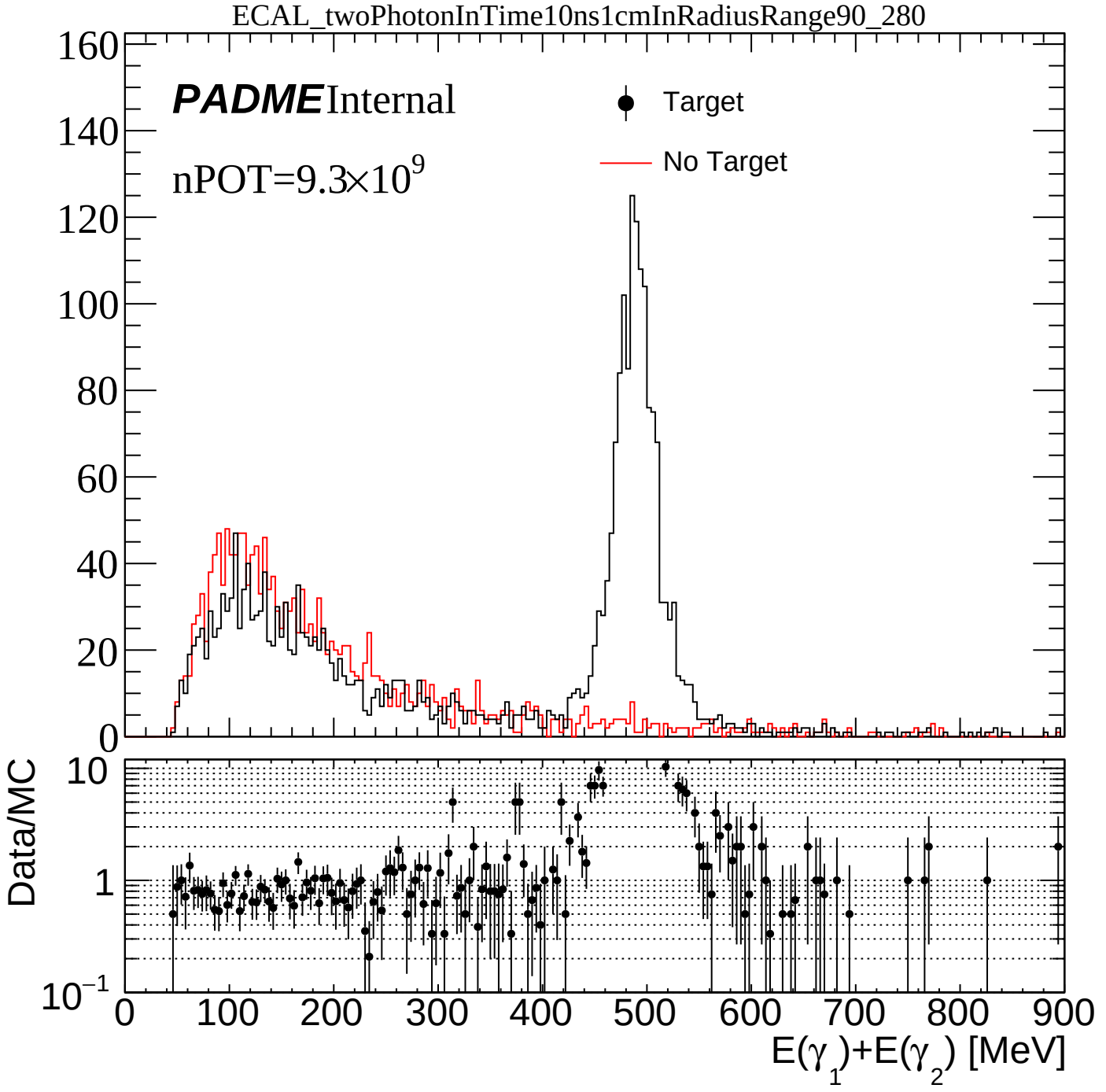

N entries 309
UnderPeak 380
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

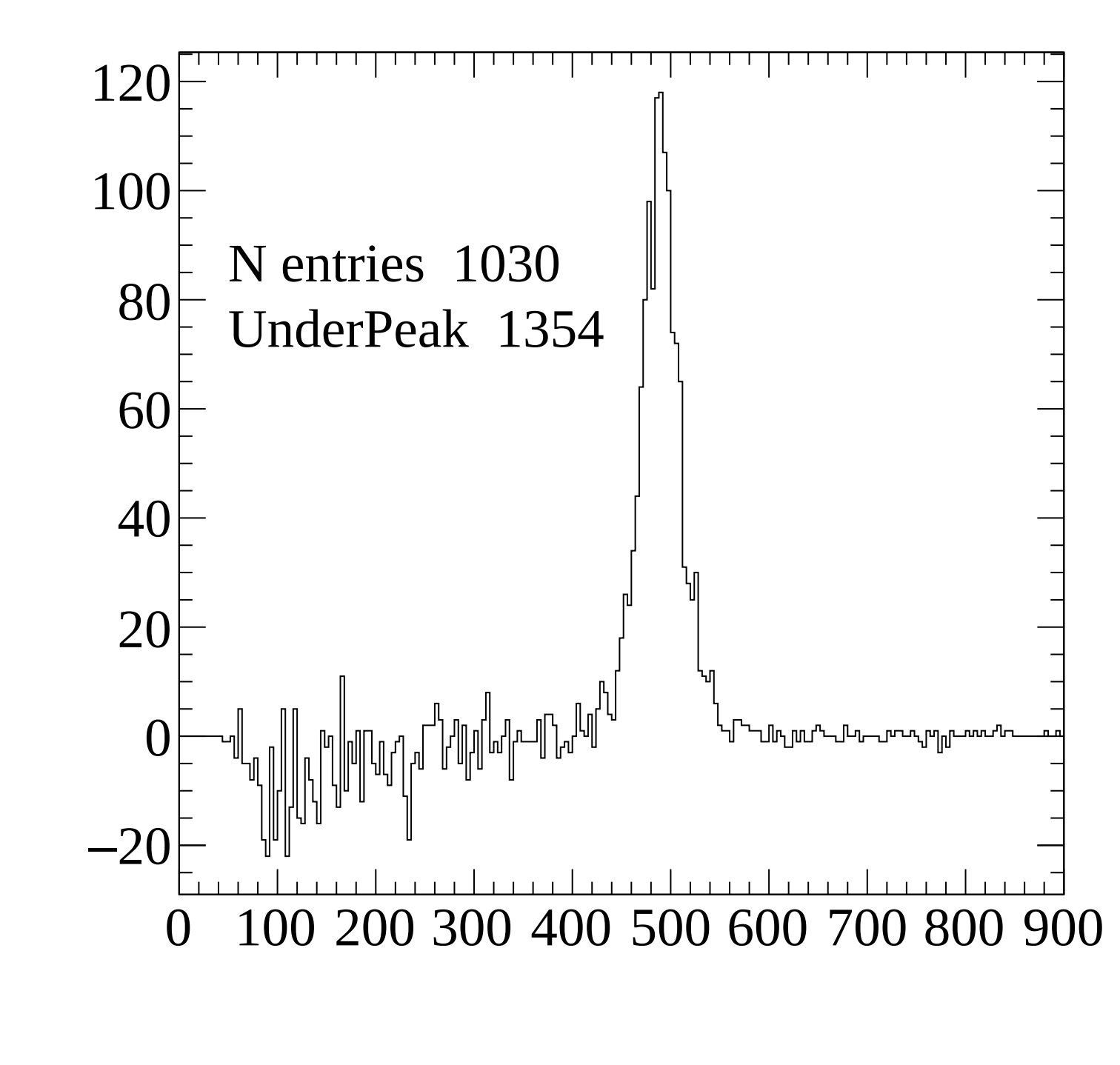

ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_28
PADME Internal
nPOT=9.3×10^9
Target
No Target
25
20
15
10
5
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

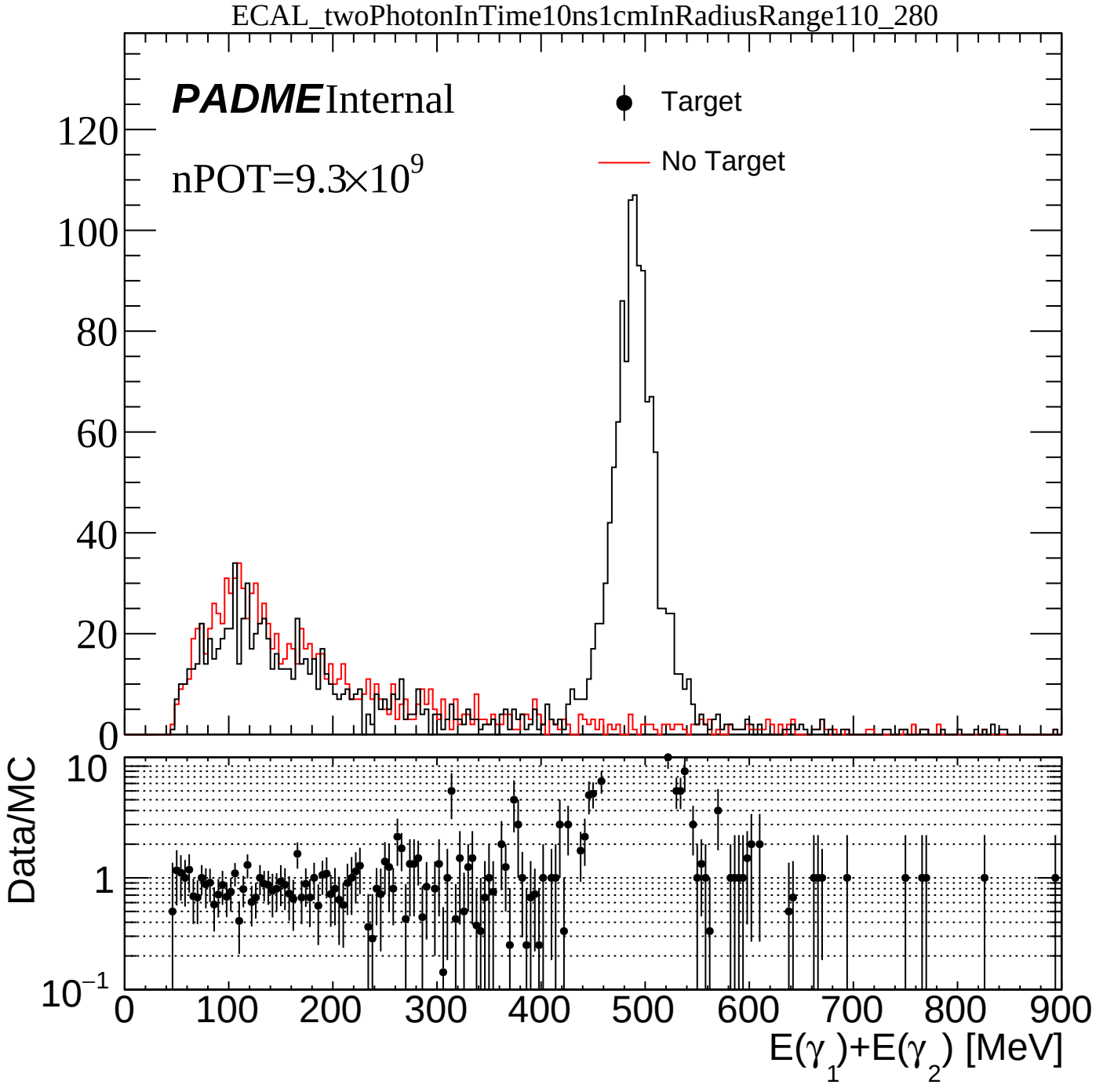

N entries 7
UnderPeak 19
8
6
4
2
0
−2
−4
−6
−8
−10
0
100
200
300
400
500
600
700
800
900

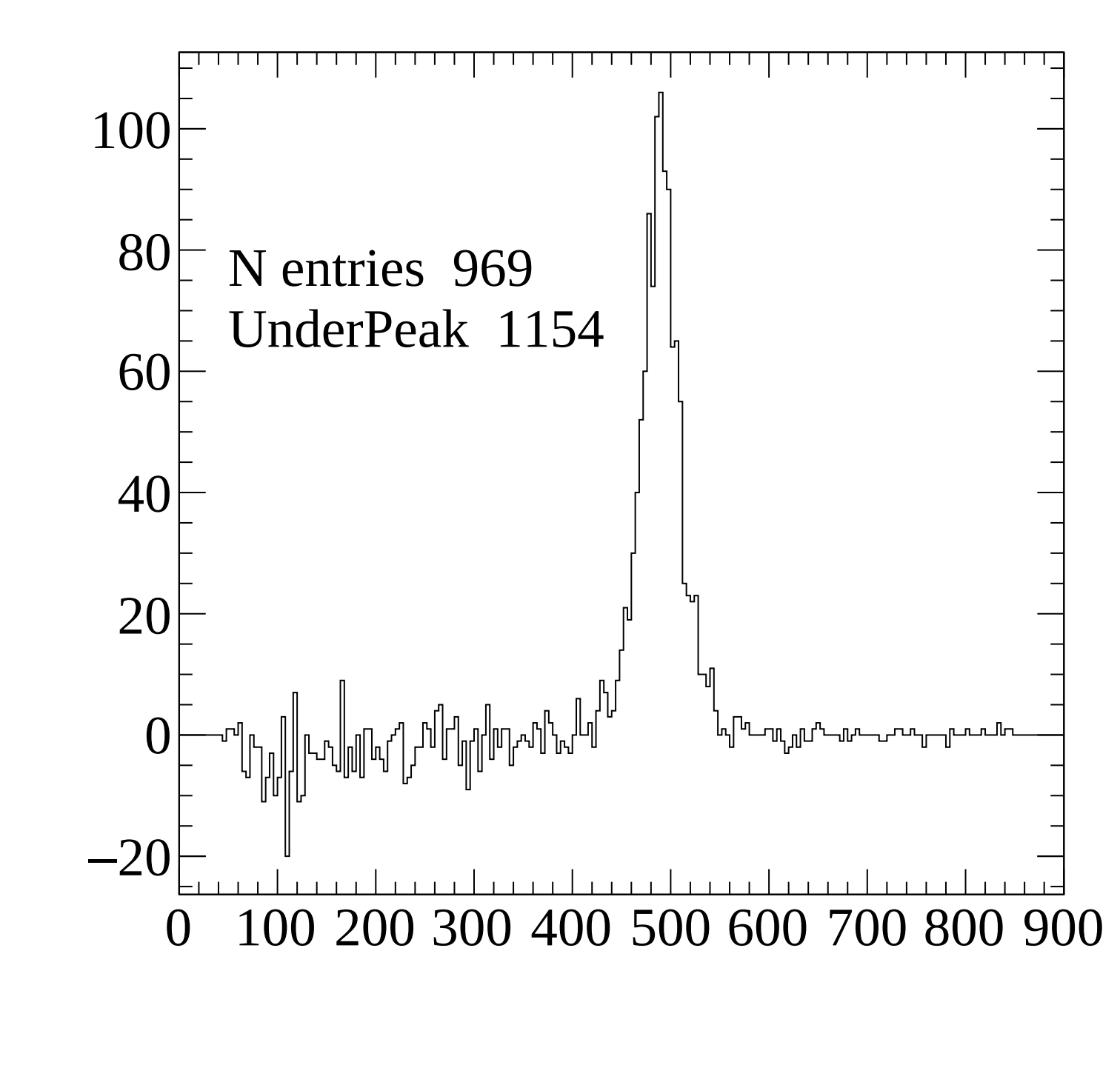

ECAL_twoPhotonInTime10ns1cmInRadiusRange70_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

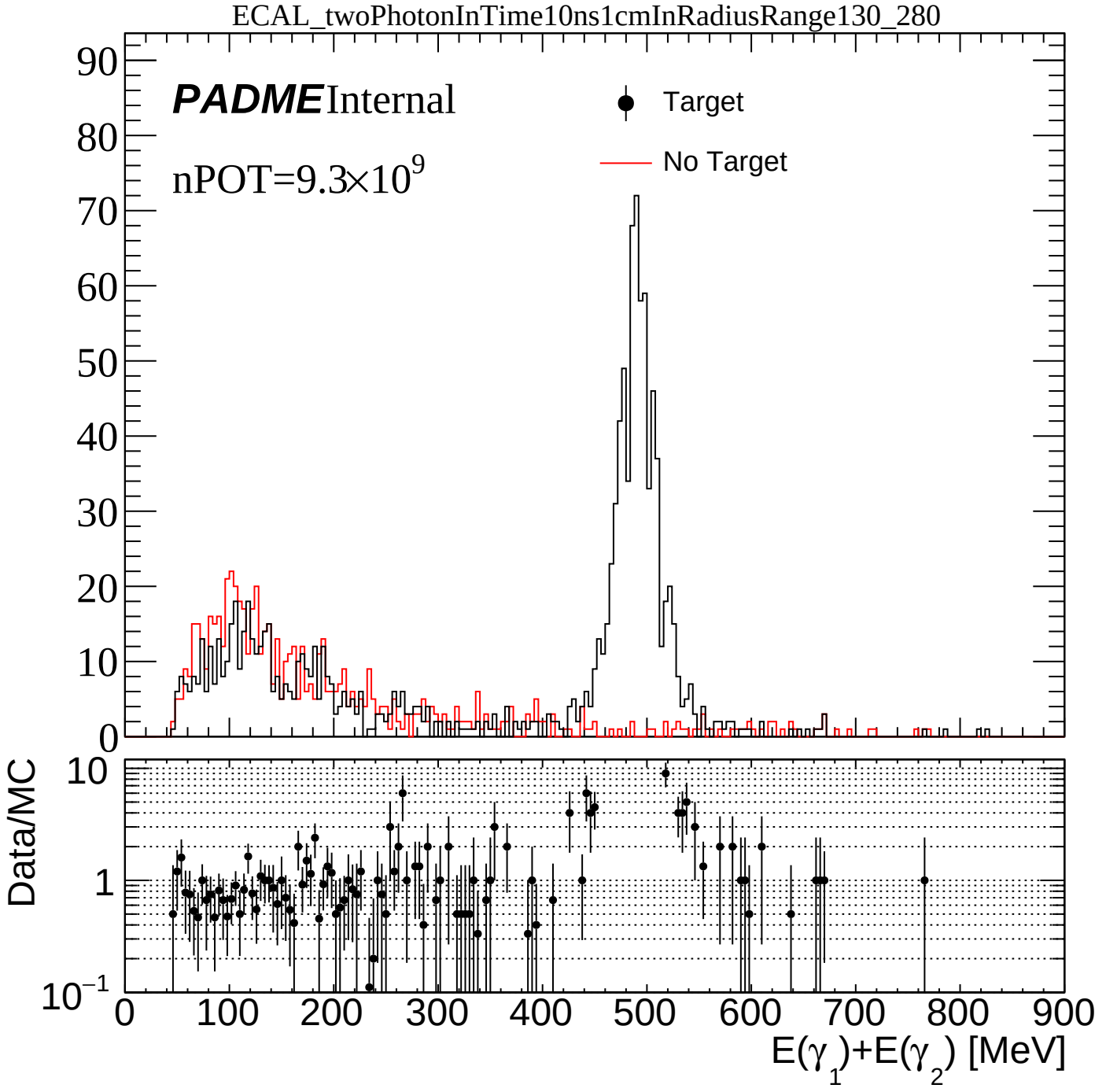

N entries 1030
UnderPeak 1354
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

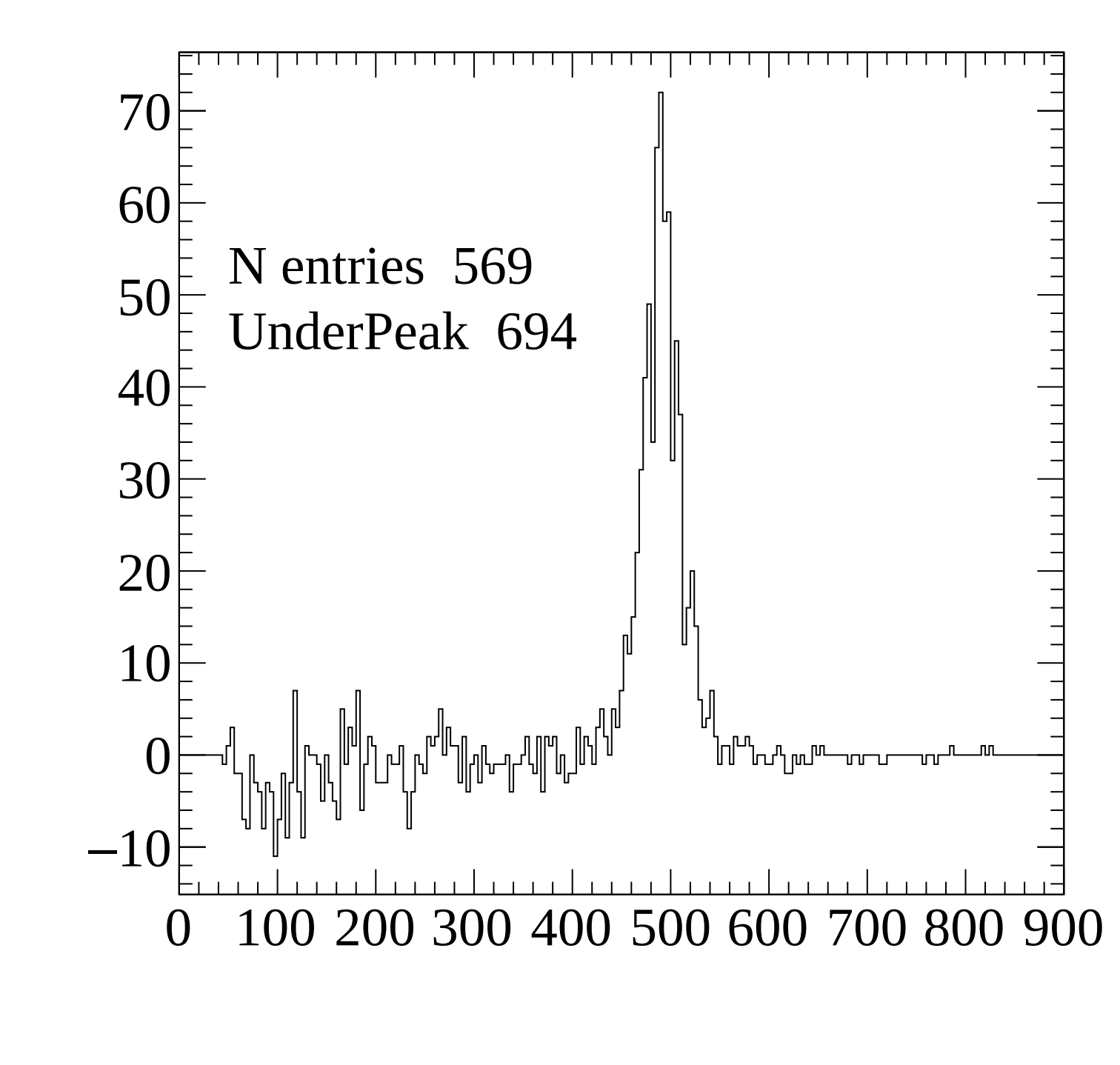

ECAL_twoPhotonInTime10ns1cmInRadiusRange90_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

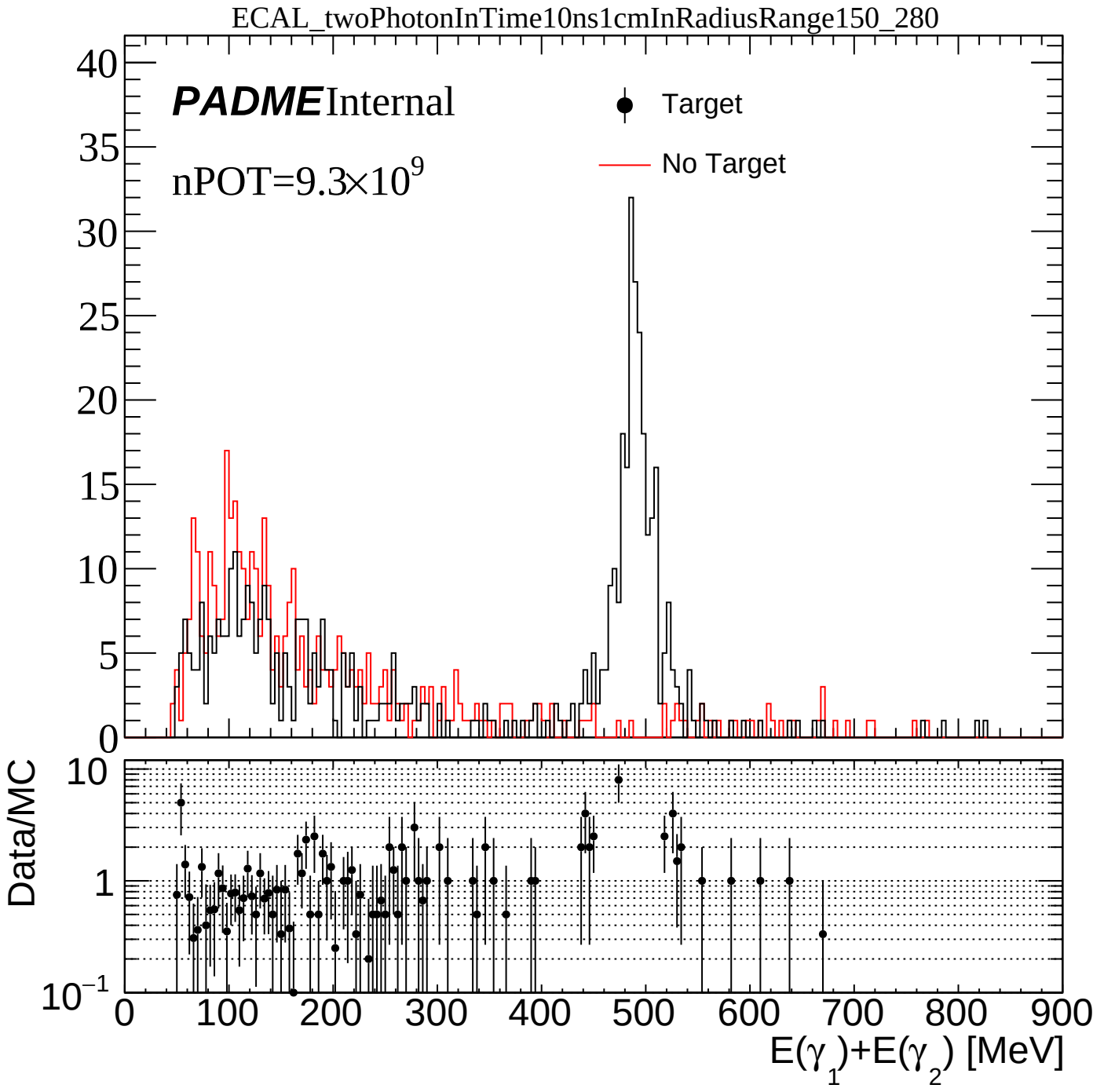

N entries 1030
UnderPeak 1354
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

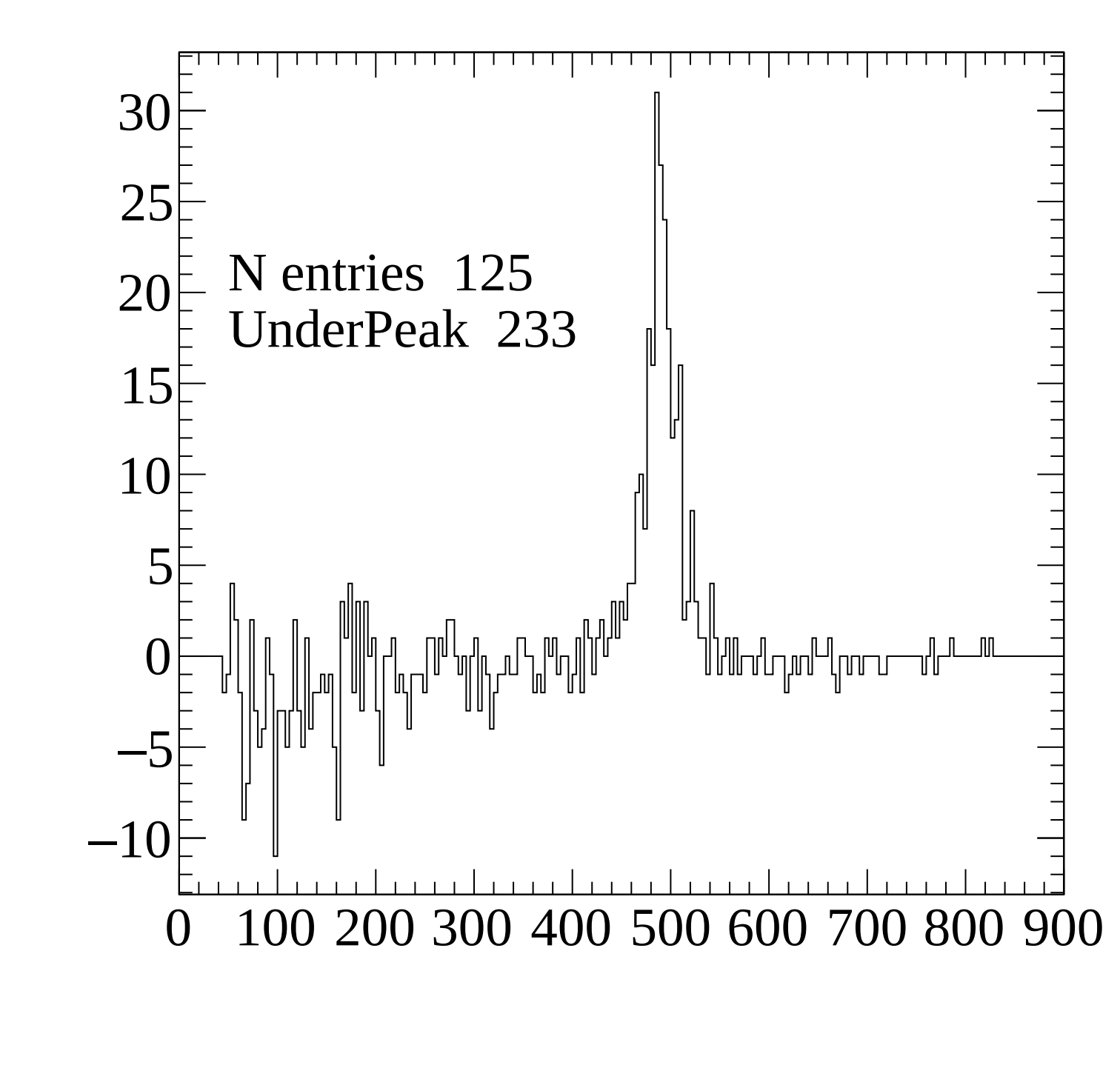

ECAL_twoPhotonInTime10ns1cmInRadiusRange110_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

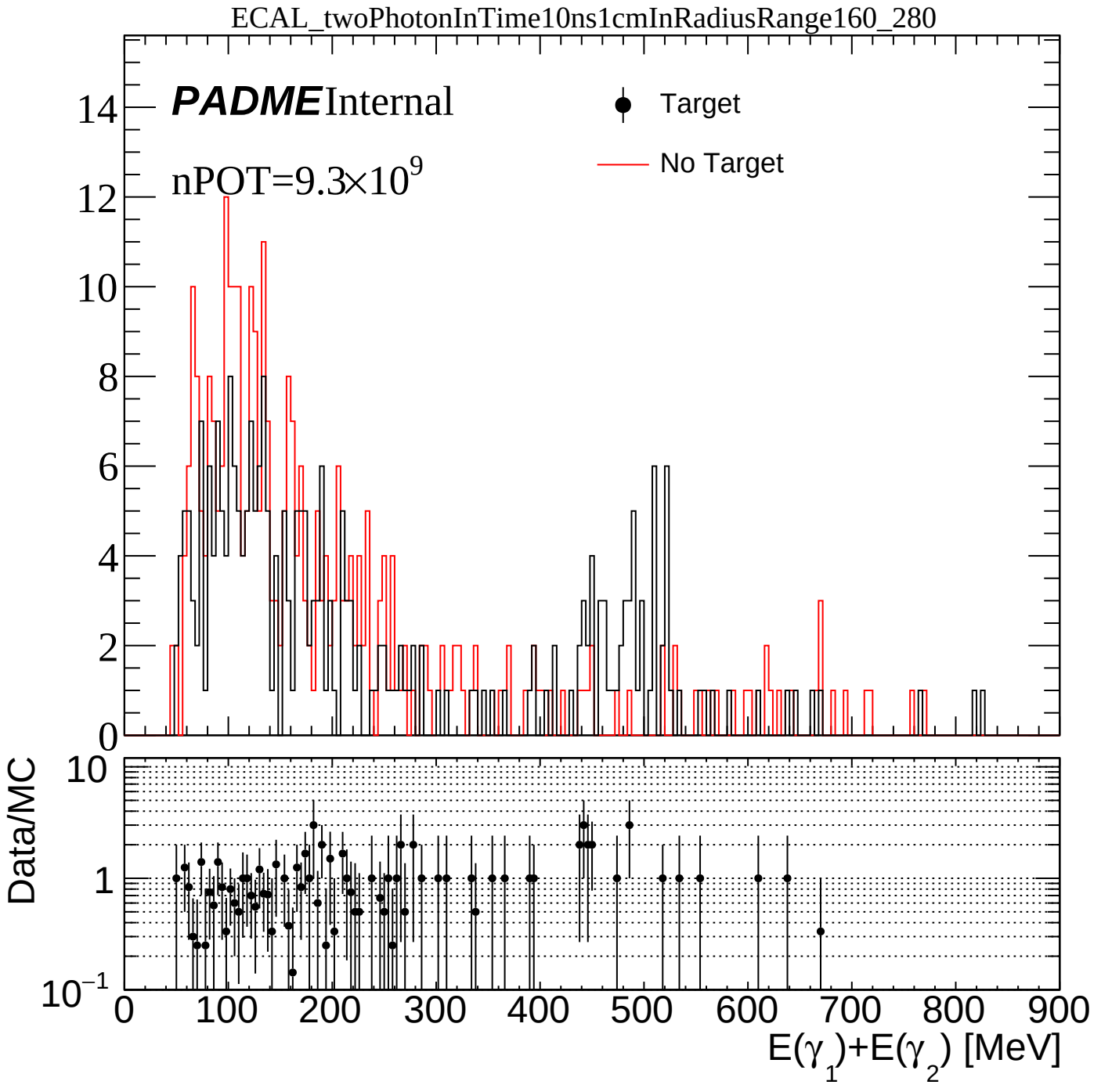

N entries 969
UnderPeak 1154
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

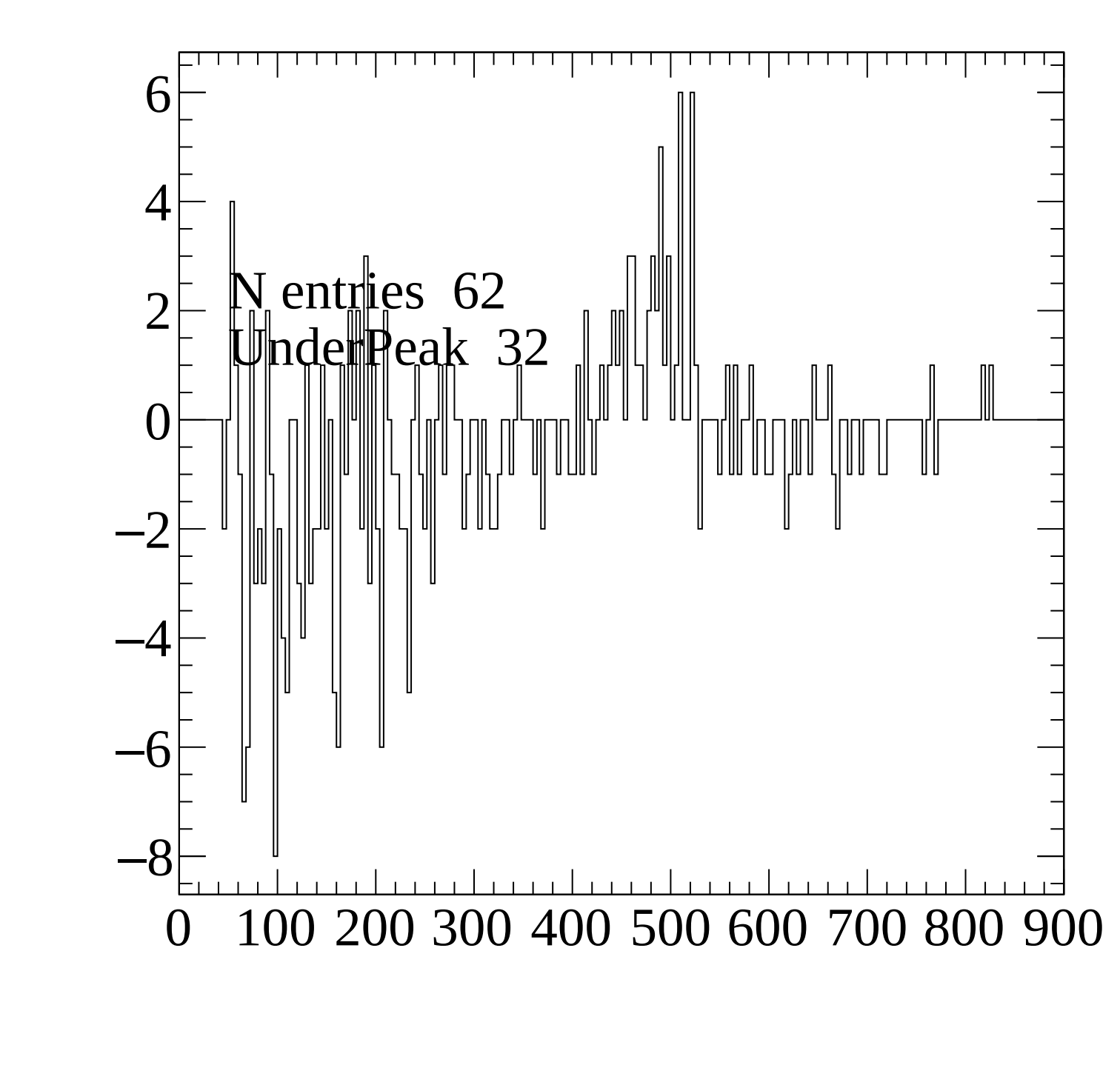

ECAL_twoPhotonInTime10ns1cmInRadiusRange130_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

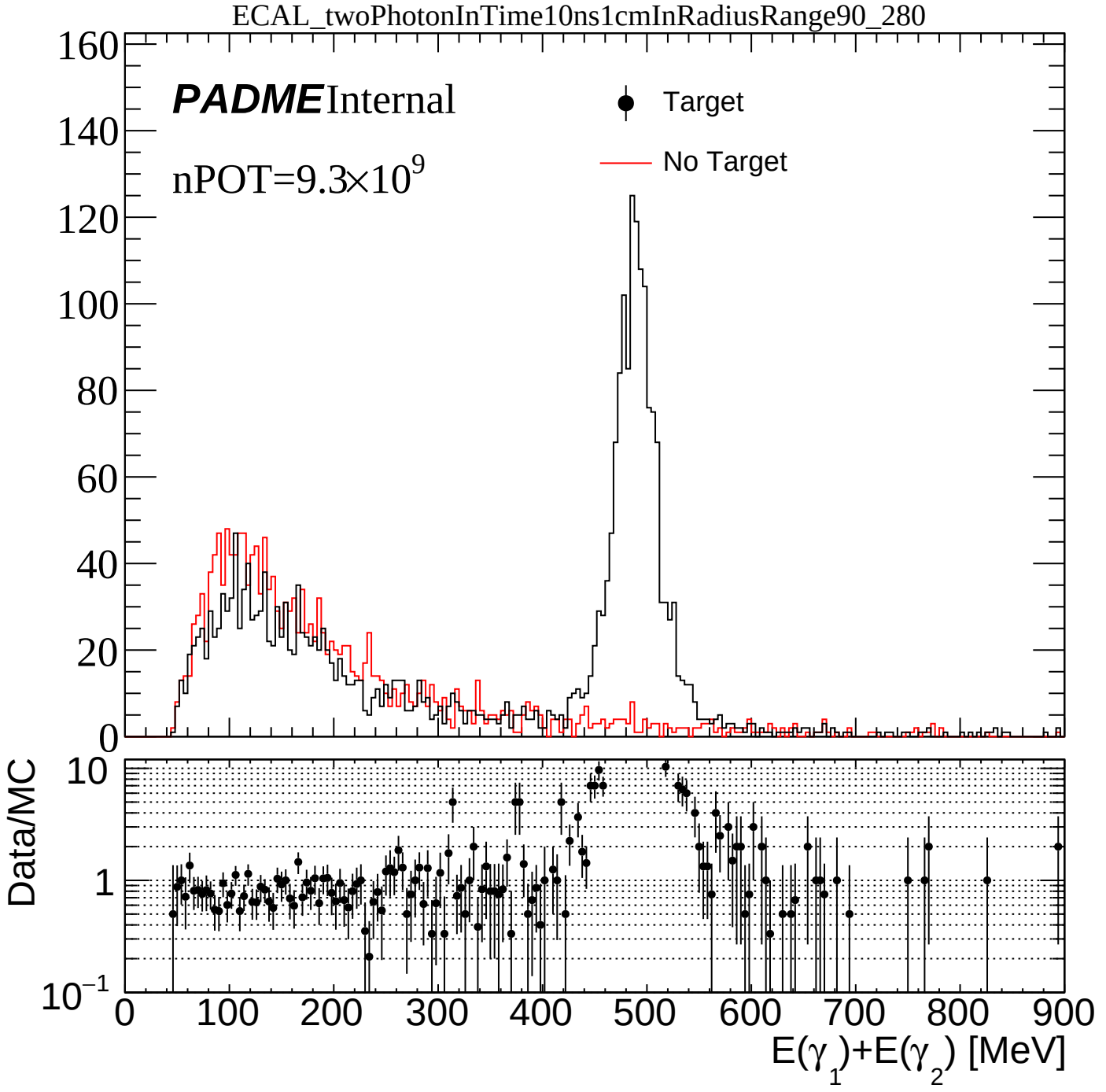

N entries 569
UnderPeak 694
70
60
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900

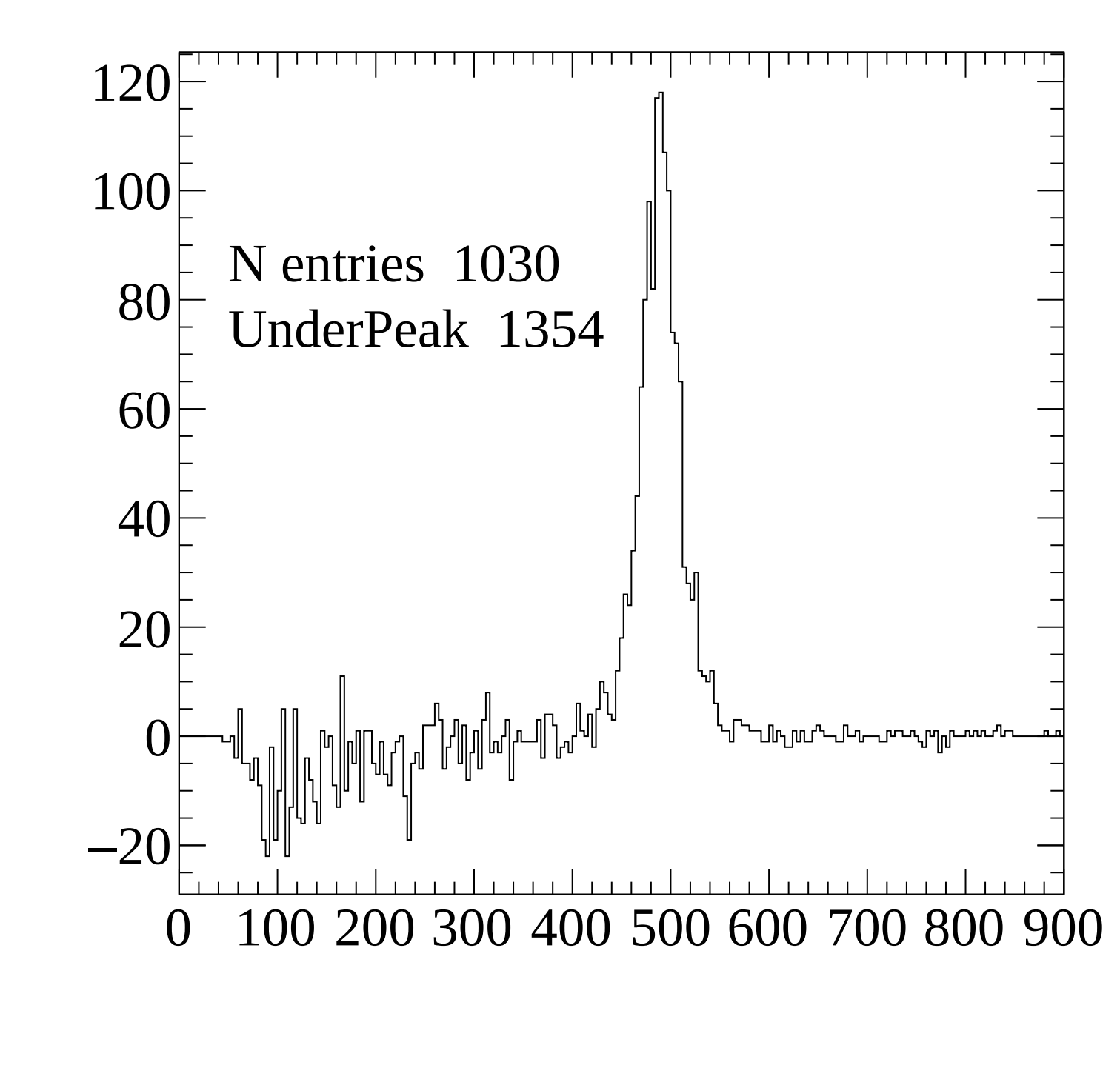

ECAL_twoPhotonInTime10ns1cmInRadiusRange150_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

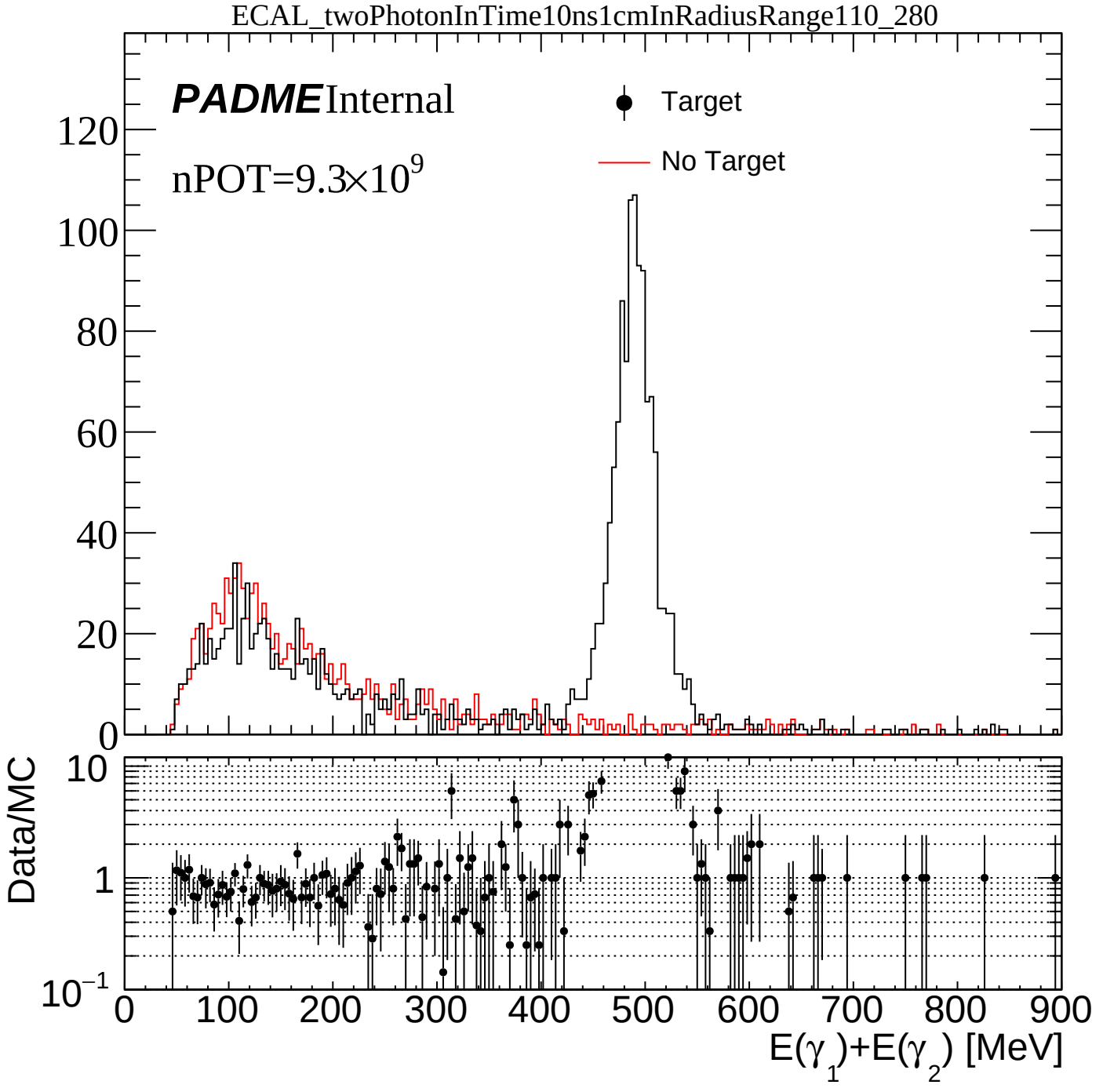

N entries 125
UnderPeak 233
30
25
20
15
10
5
0
−5
−10
0
100
200
300
400
500
600
700
800
900

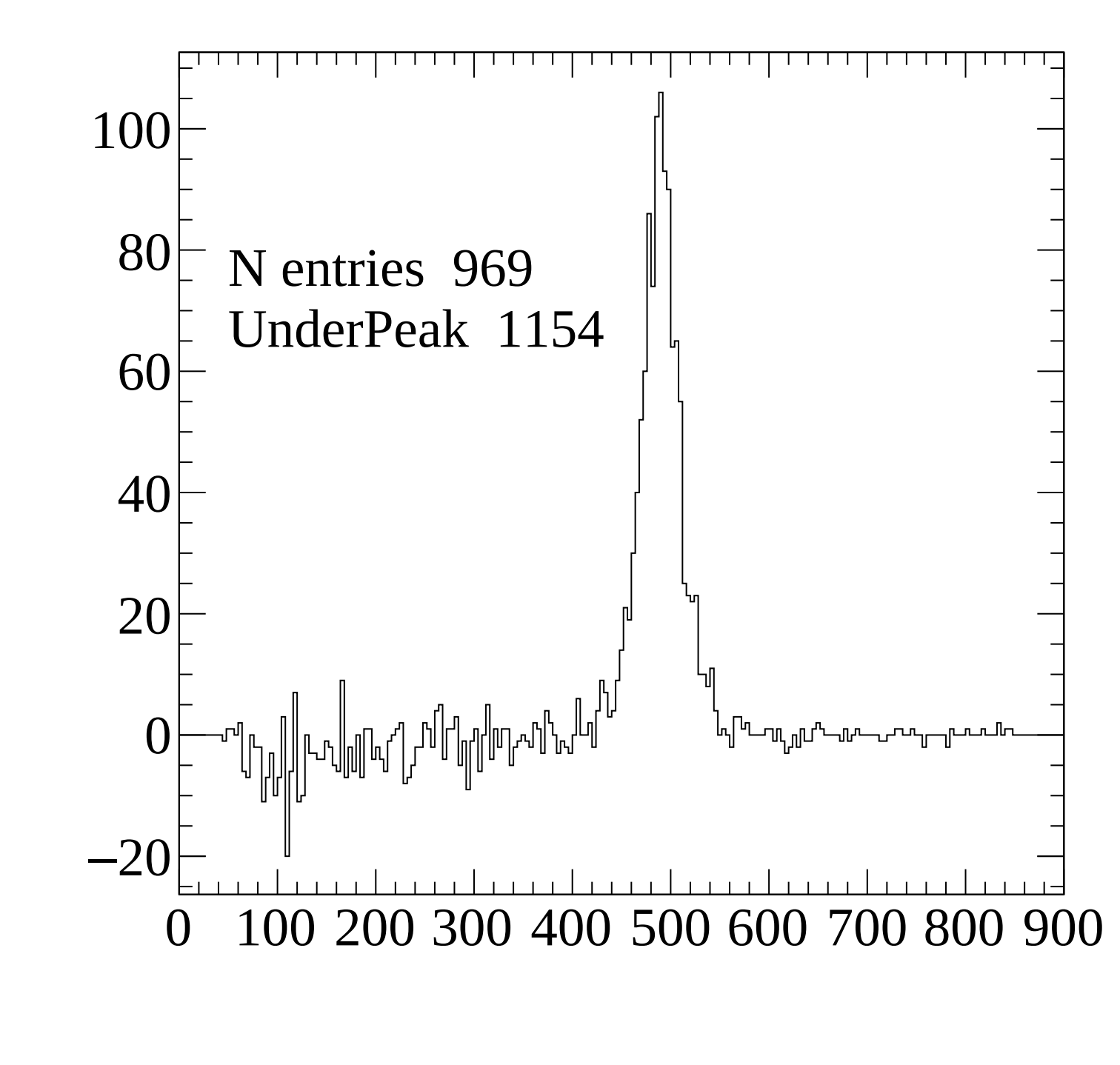

ECAL_twoPhotonInTime10ns1cmInRadiusRange160_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]

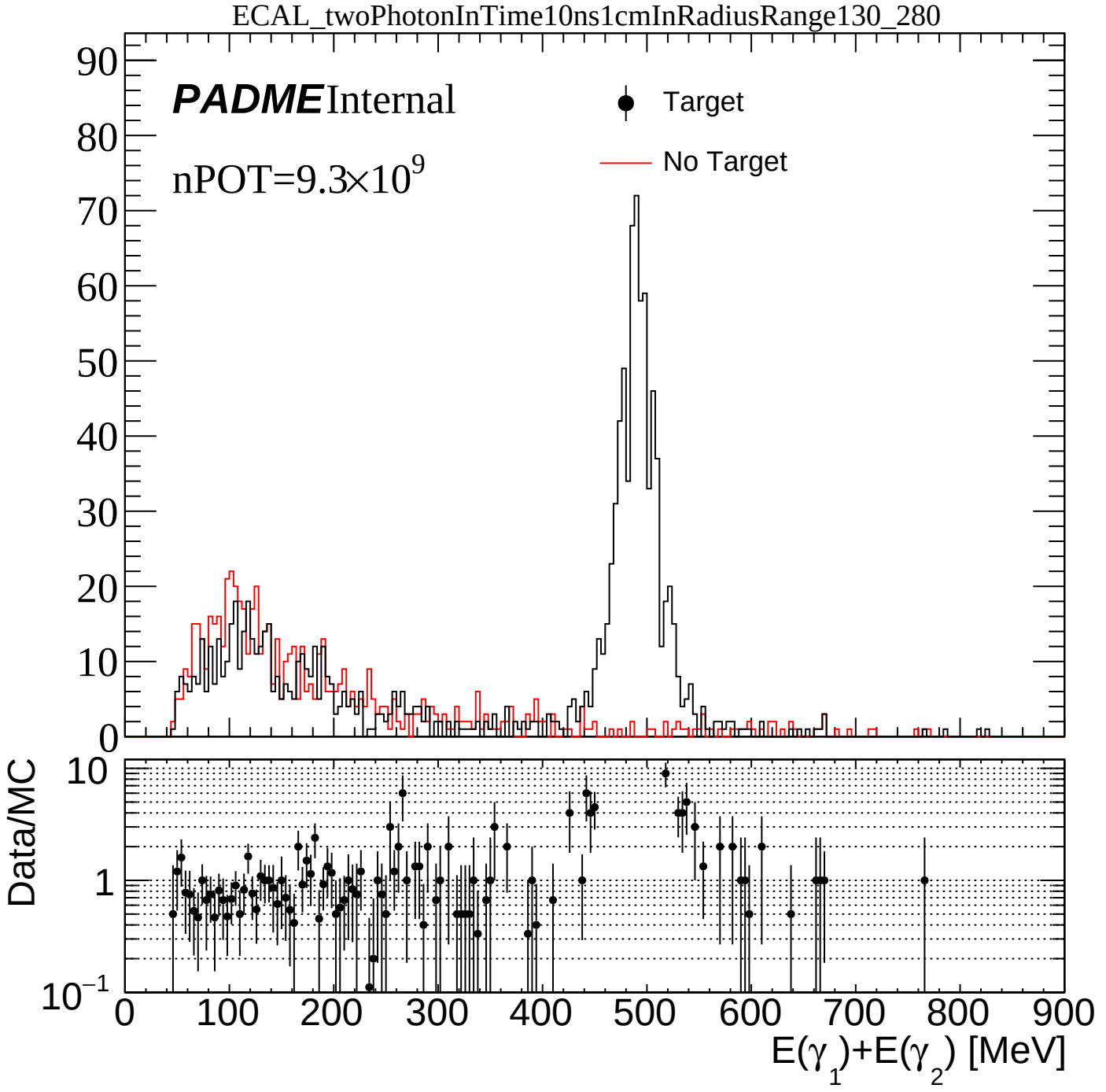

N entries 62
UnderPeak 32
6
4
2
0
−2
−4
−6
−8
0
100
200
300
400
500
600
700
800
900

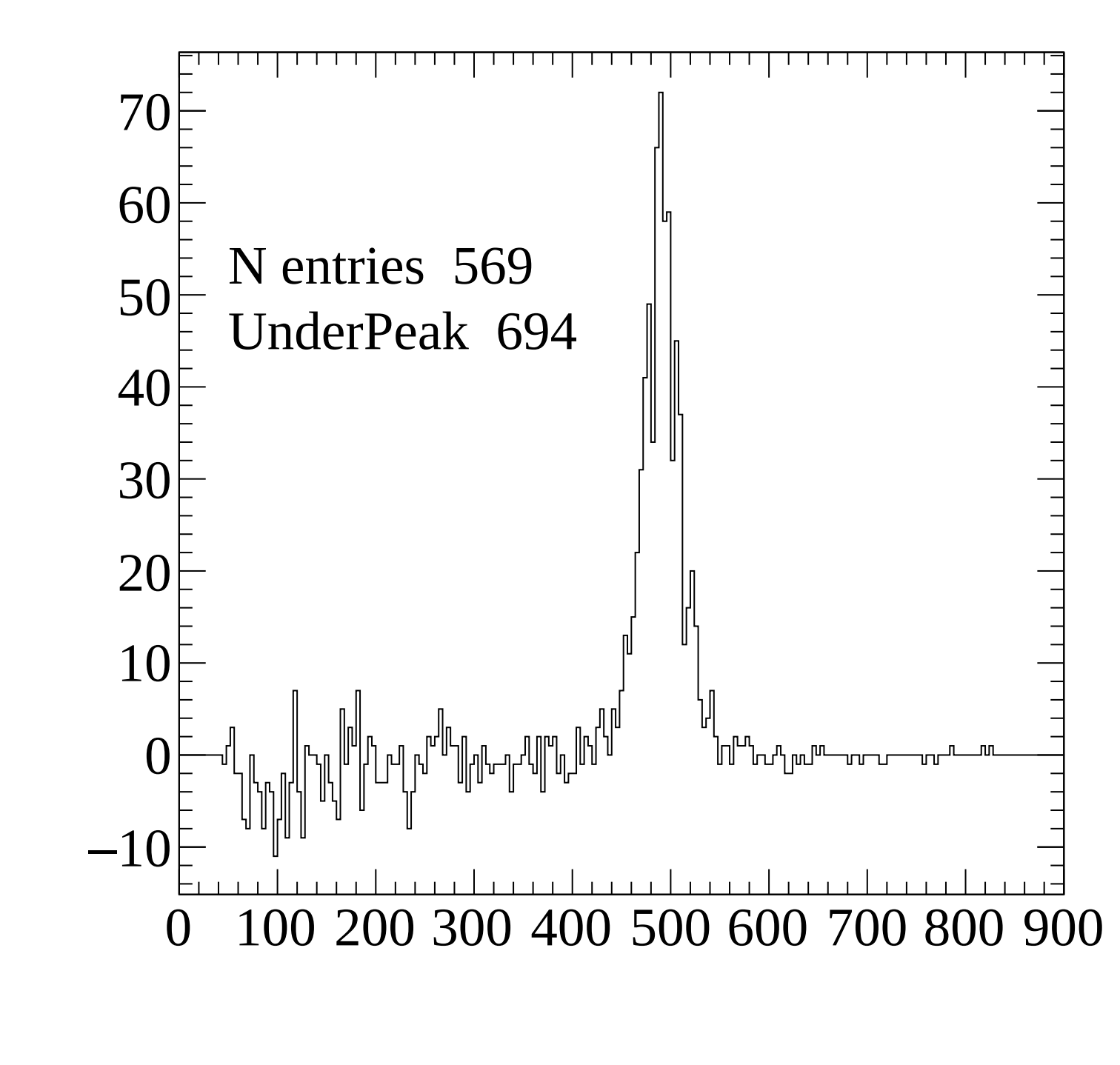

ECAL_twoPhotonInTime10ns1cmInRadiusRange90_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
160
140
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

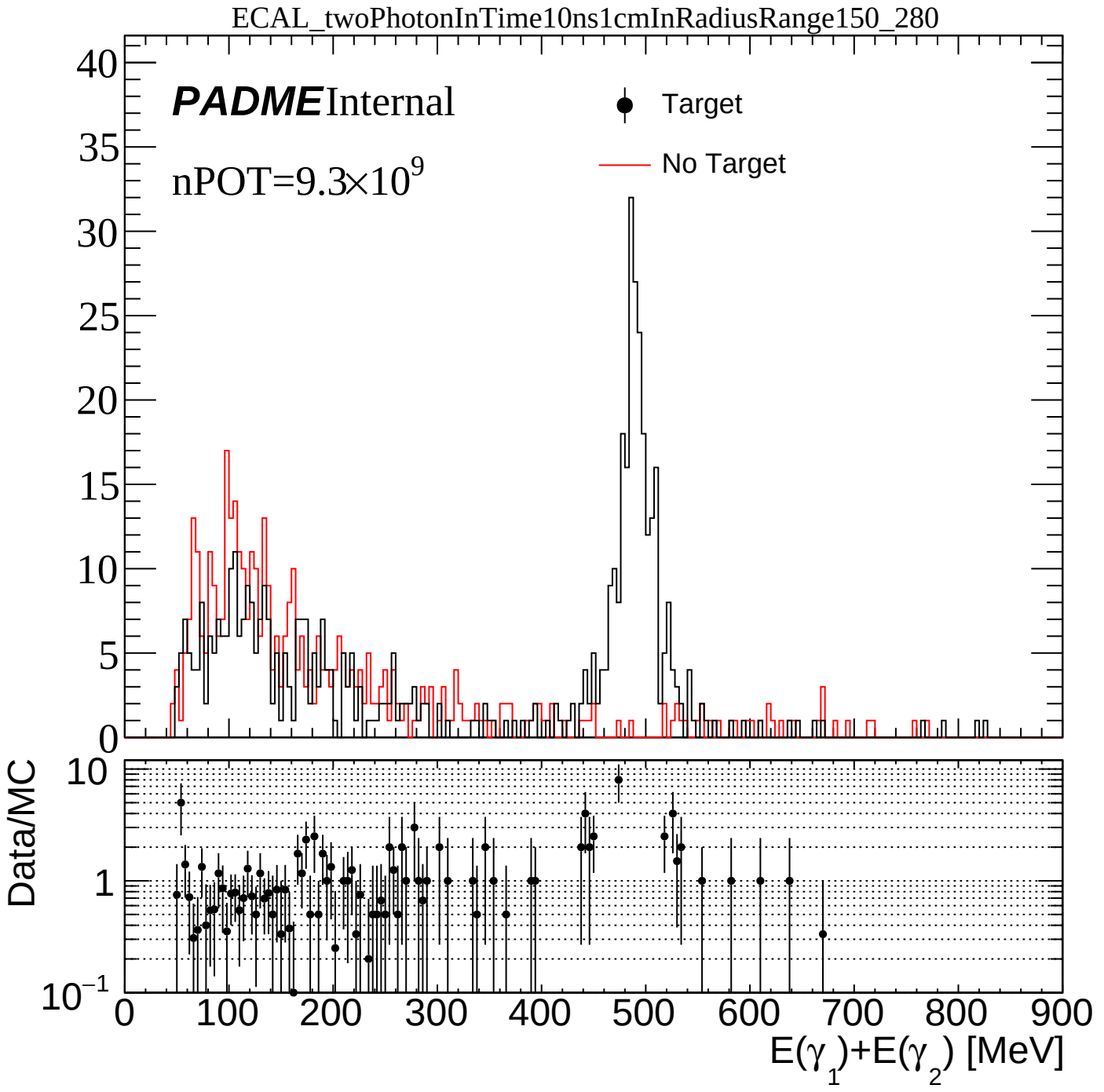

N entries 1030
UnderPeak 1354
120
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

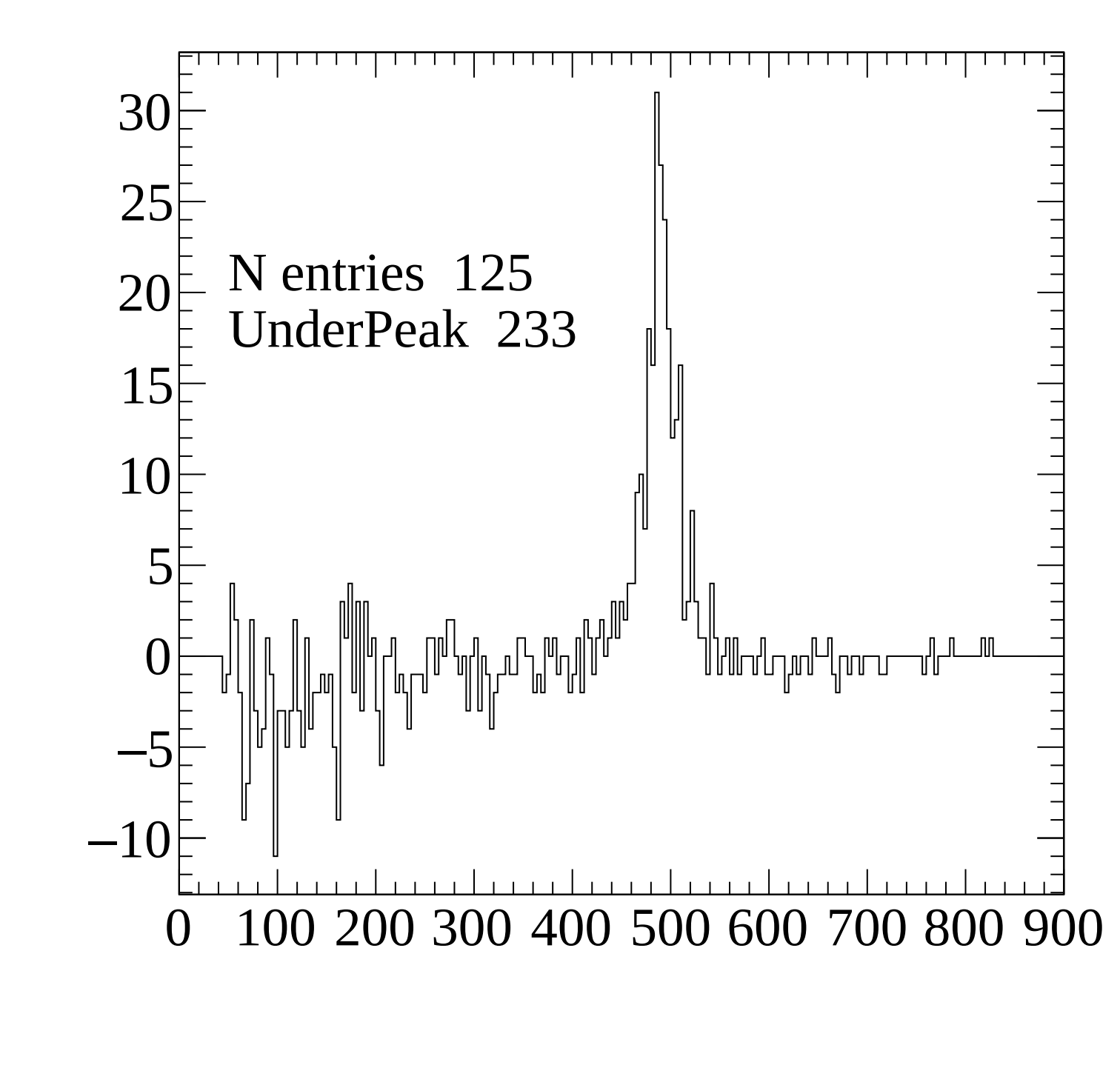

ECAL_twoPhotonInTime10ns1cmInRadiusRange110_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
120
100
80
60
40
20
0
Data/MC
10
1
10^−1
0
100
200
300
400
500
600
700
800
900
E(γ1)+E(γ2) [MeV]

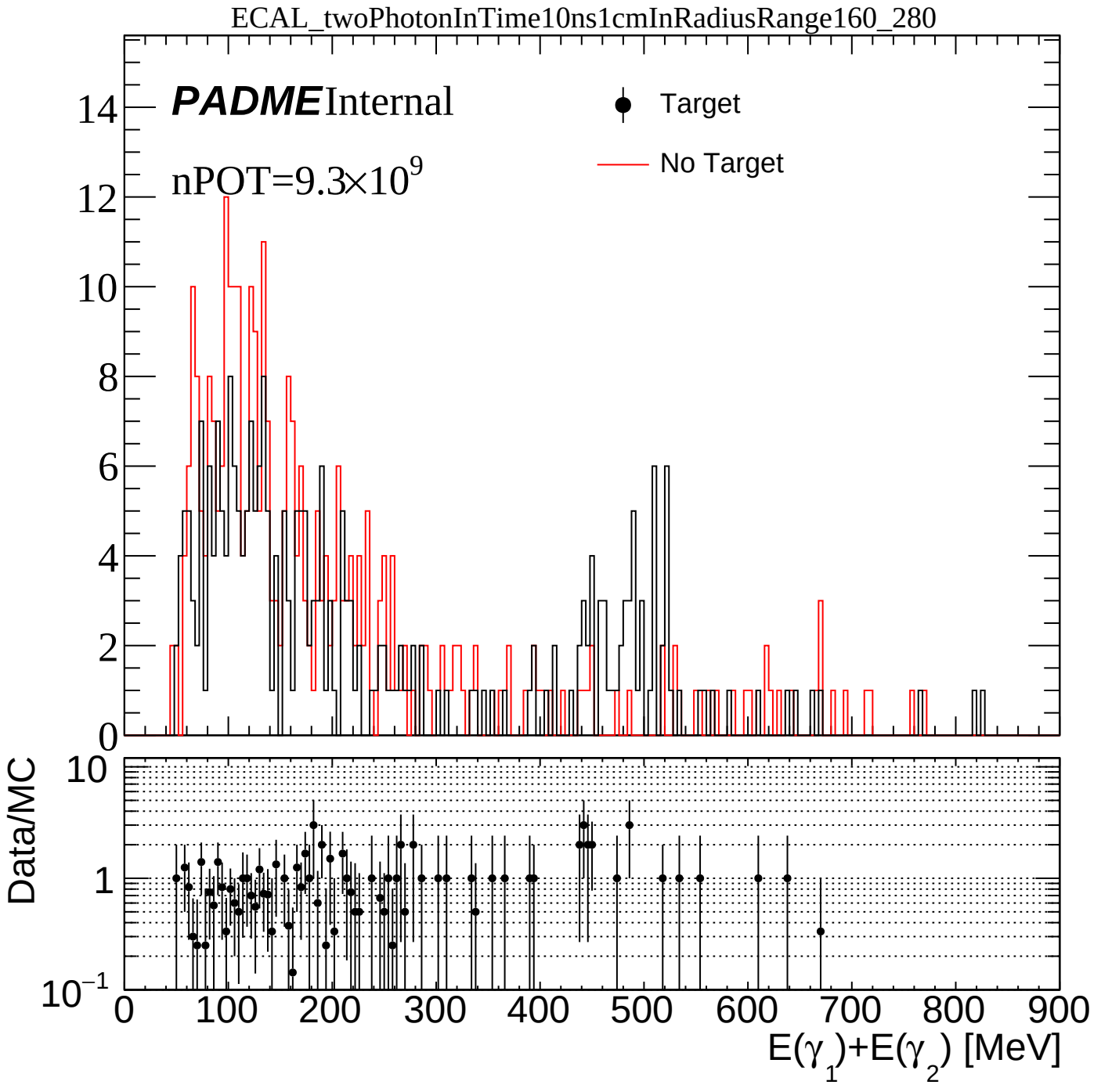

N entries 969
UnderPeak 1154
100
80
60
40
20
0
−20
0
100
200
300
400
500
600
700
800
900

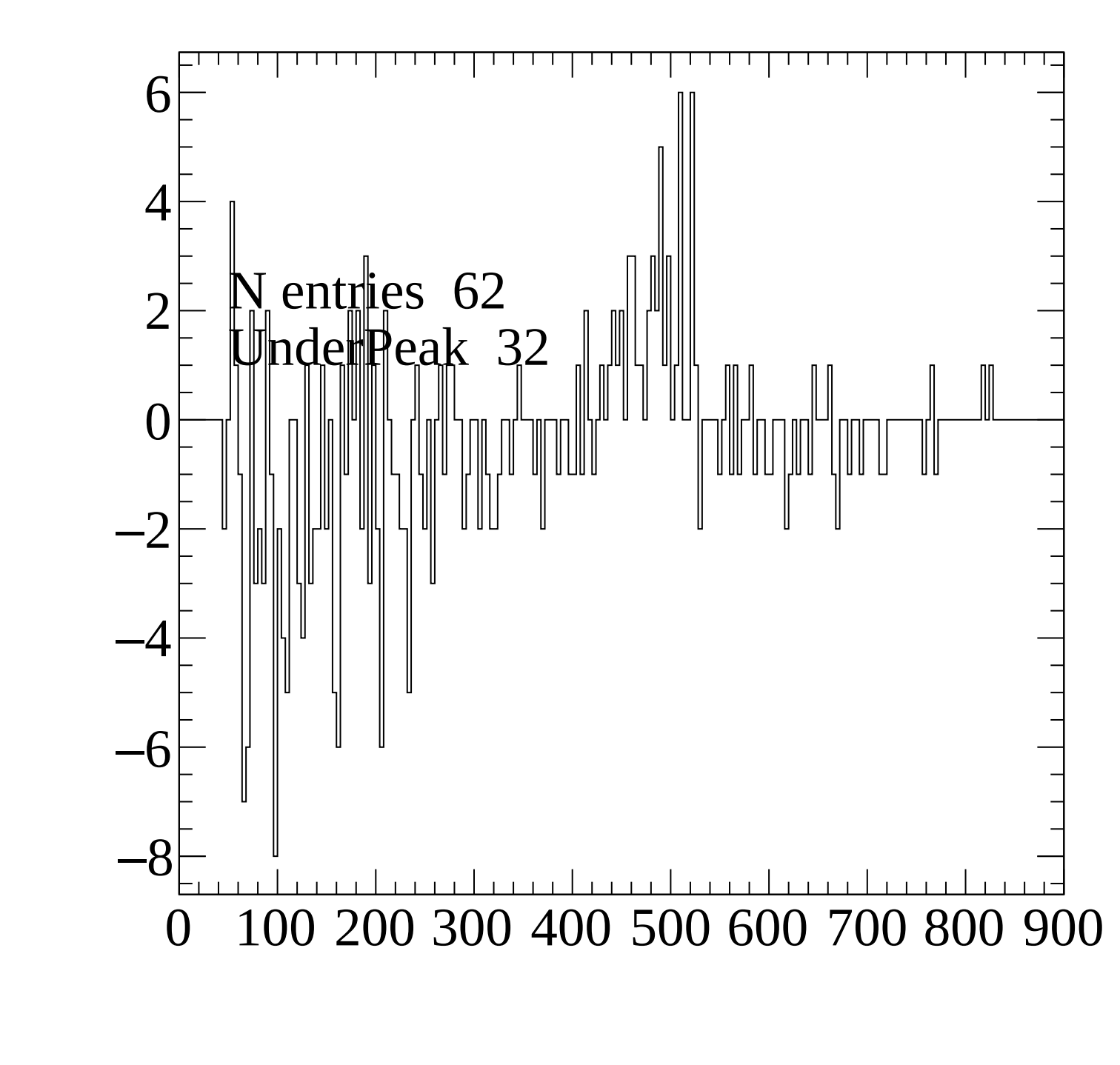

ECAL_twoPhotonInTime10ns1cmInRadiusRange130_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]


N entries 569
UnderPeak 694
70
60
50
40
30
20
10
0
−10
0
100
200
300
400
500
600
700
800
900


ECAL_twoPhotonInTime10ns1cmInRadiusRange150_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]


N entries 125
UnderPeak 233
30
25
20
15
10
5
0
−5
−10
0
100
200
300
400
500
600
700
800
900


ECAL_twoPhotonInTime10ns1cmInRadiusRange160_280
PADME Internal
nPOT=9.3×10^9
Target
No Target
Data/MC
E(γ1)+E(γ2) [MeV]


N entries 62
UnderPeak 32
6
4
2
0
−2
−4
−6
−8
0
100
200
300
400
500
600
700
800
900