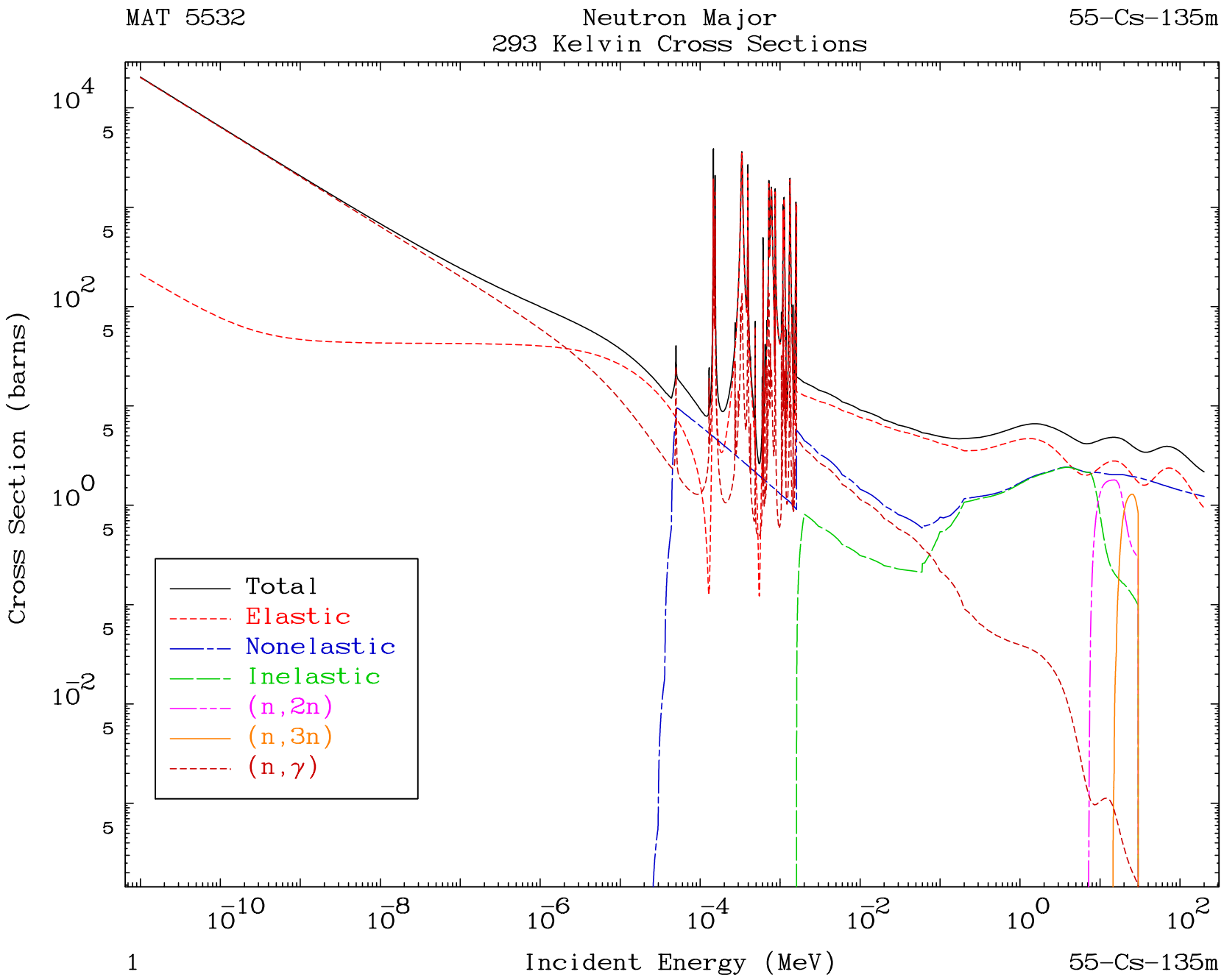
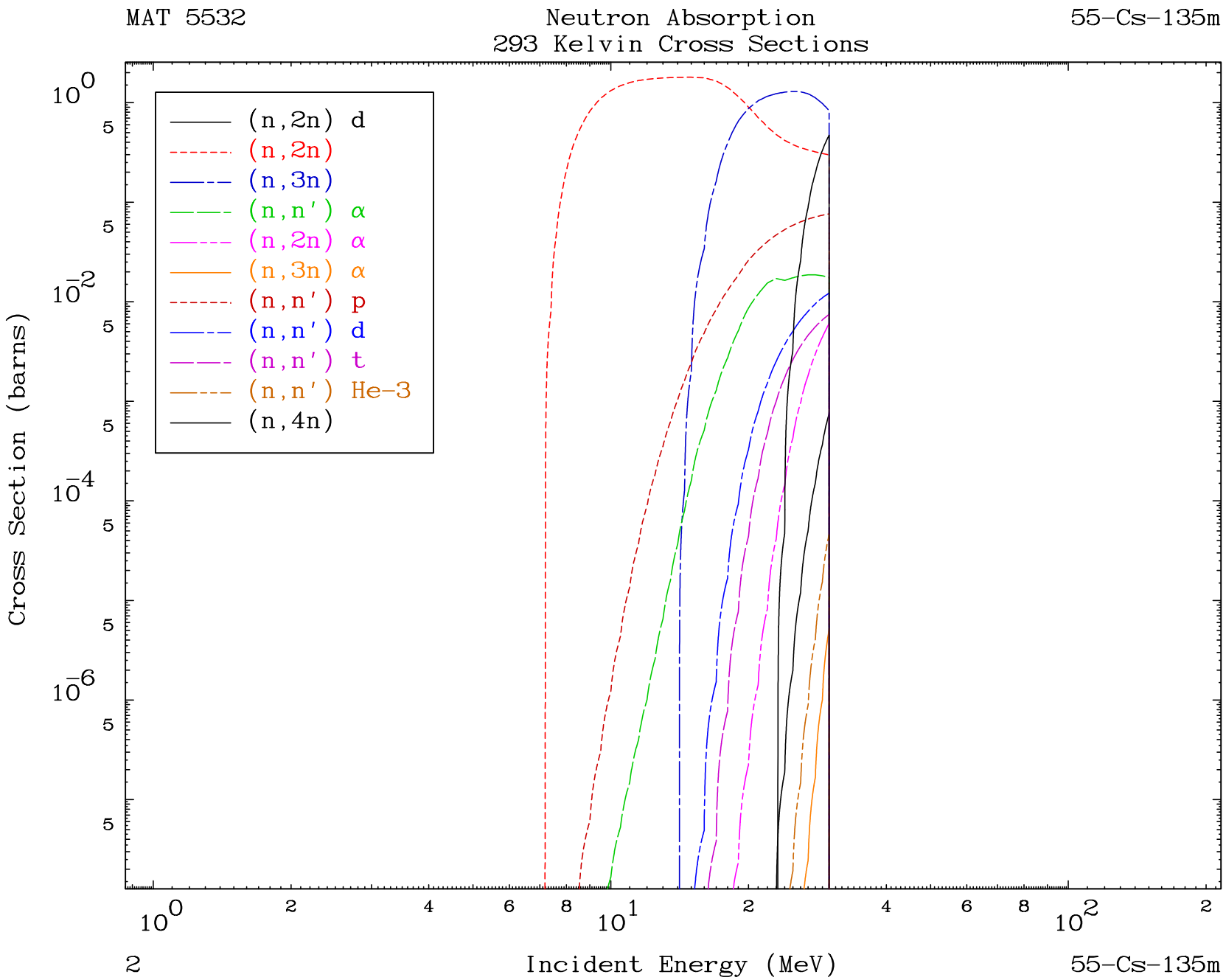
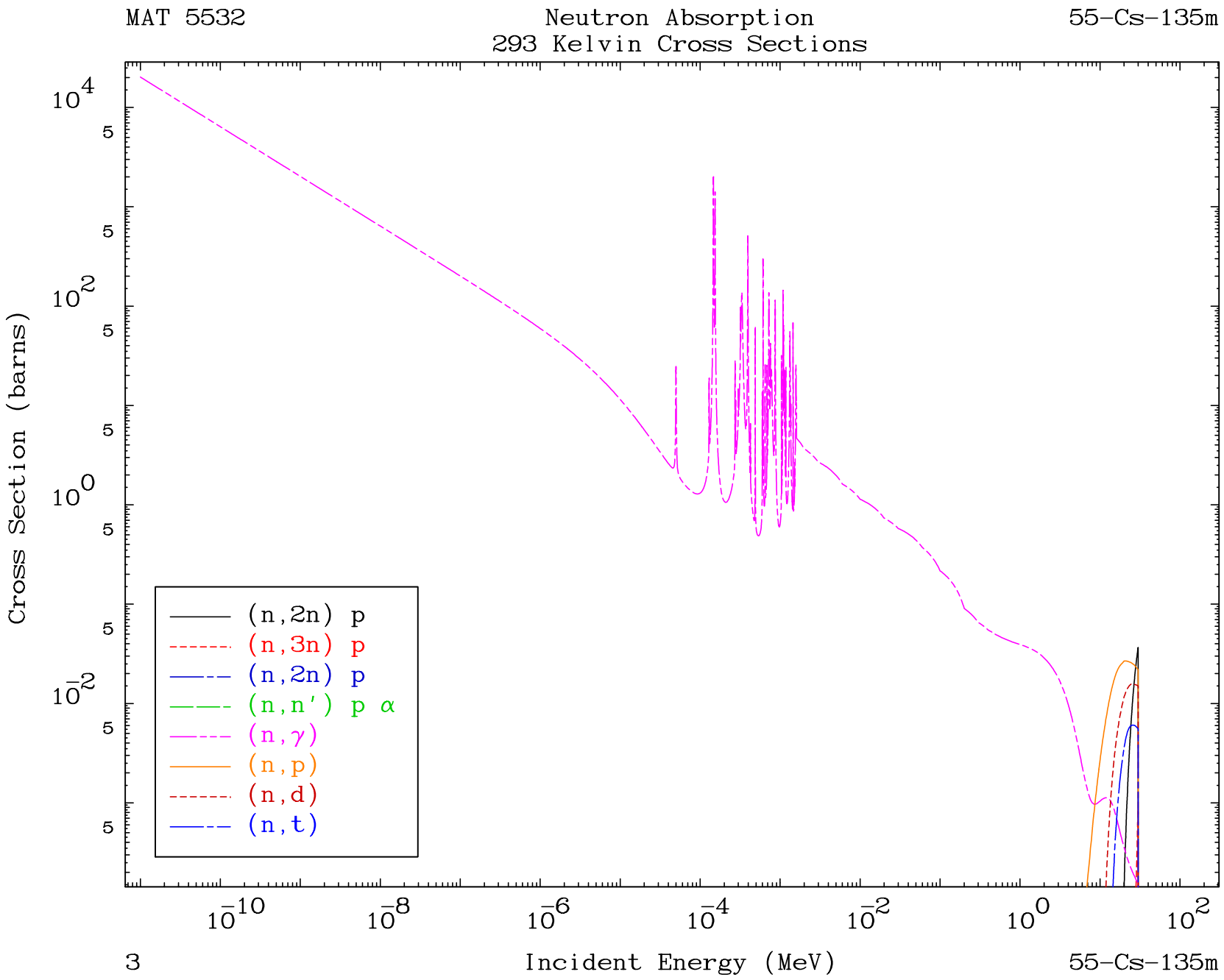
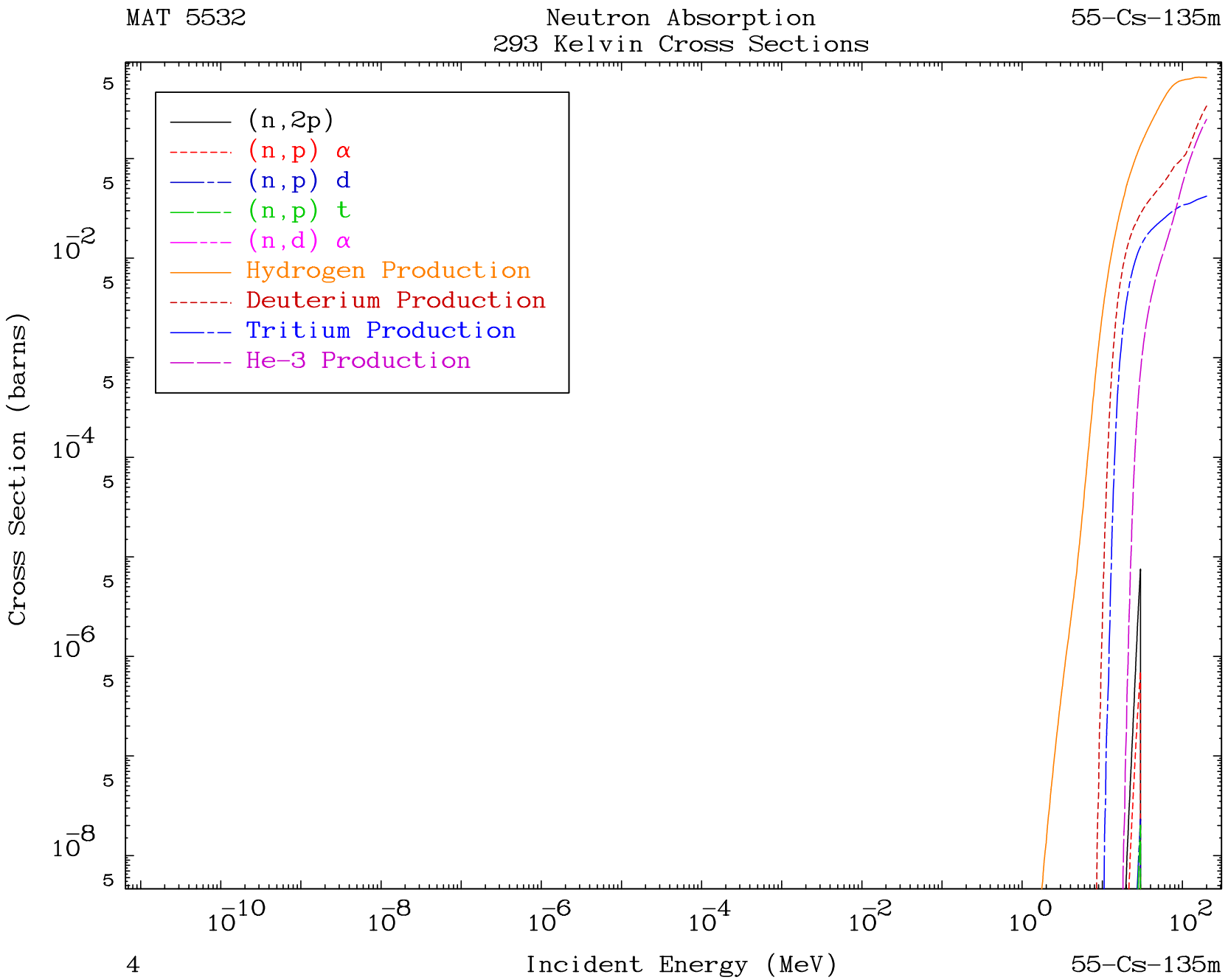
Program EVALPLOT
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

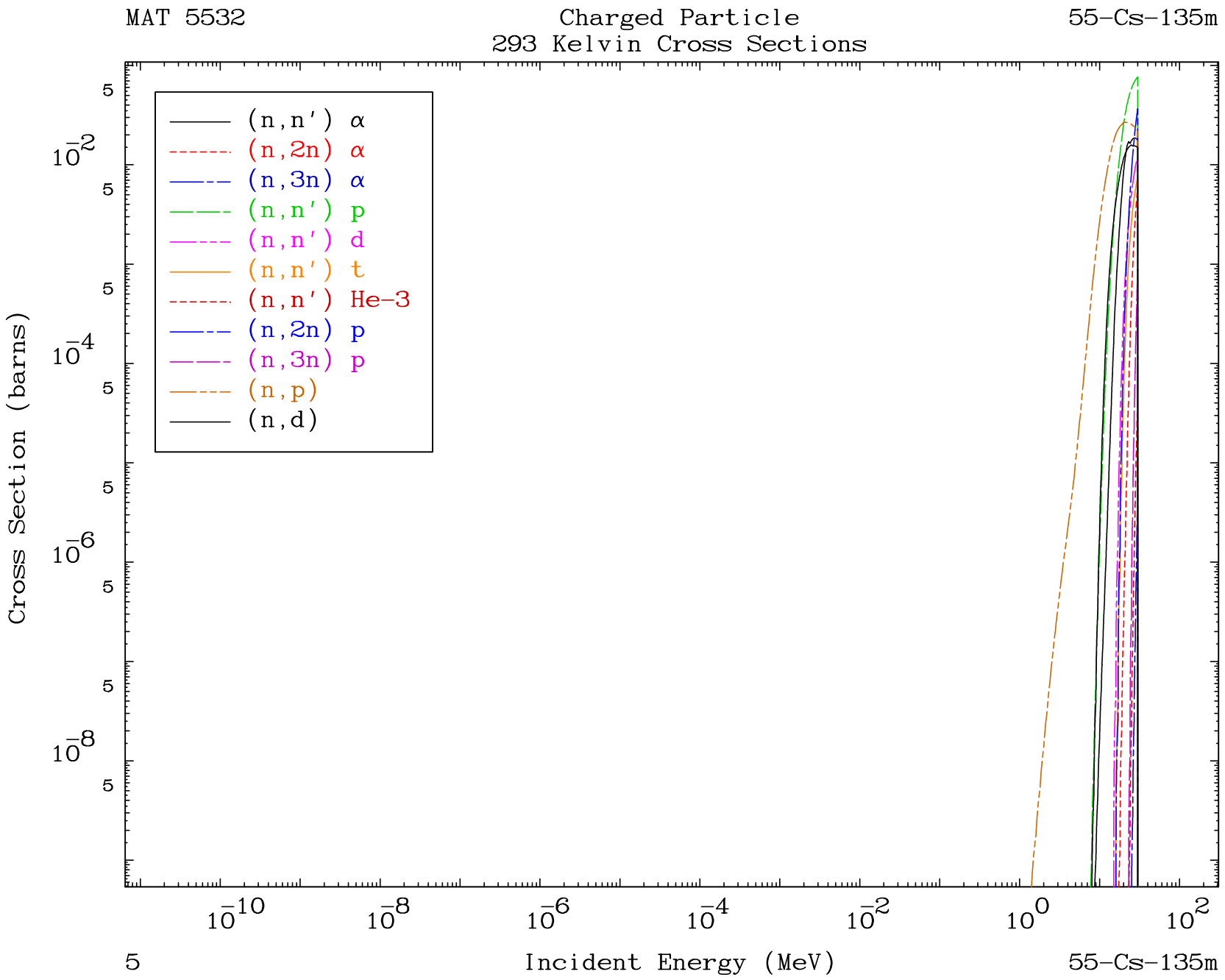
Press Mouse Button to Start

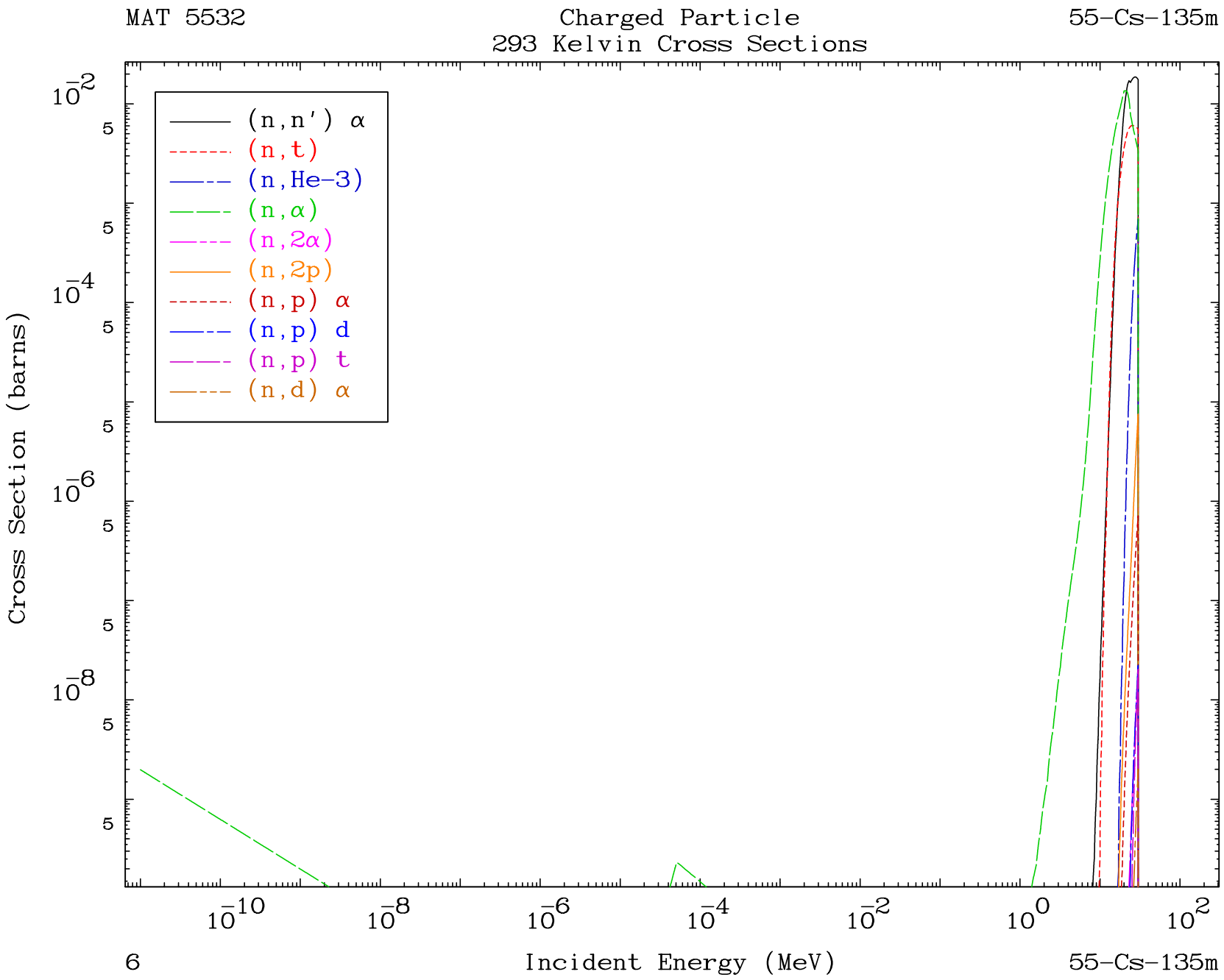

MAT 5532
Neutron Major
293 Kelvin Cross Sections
55-Cs-135m
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
55-Cs-135m
1

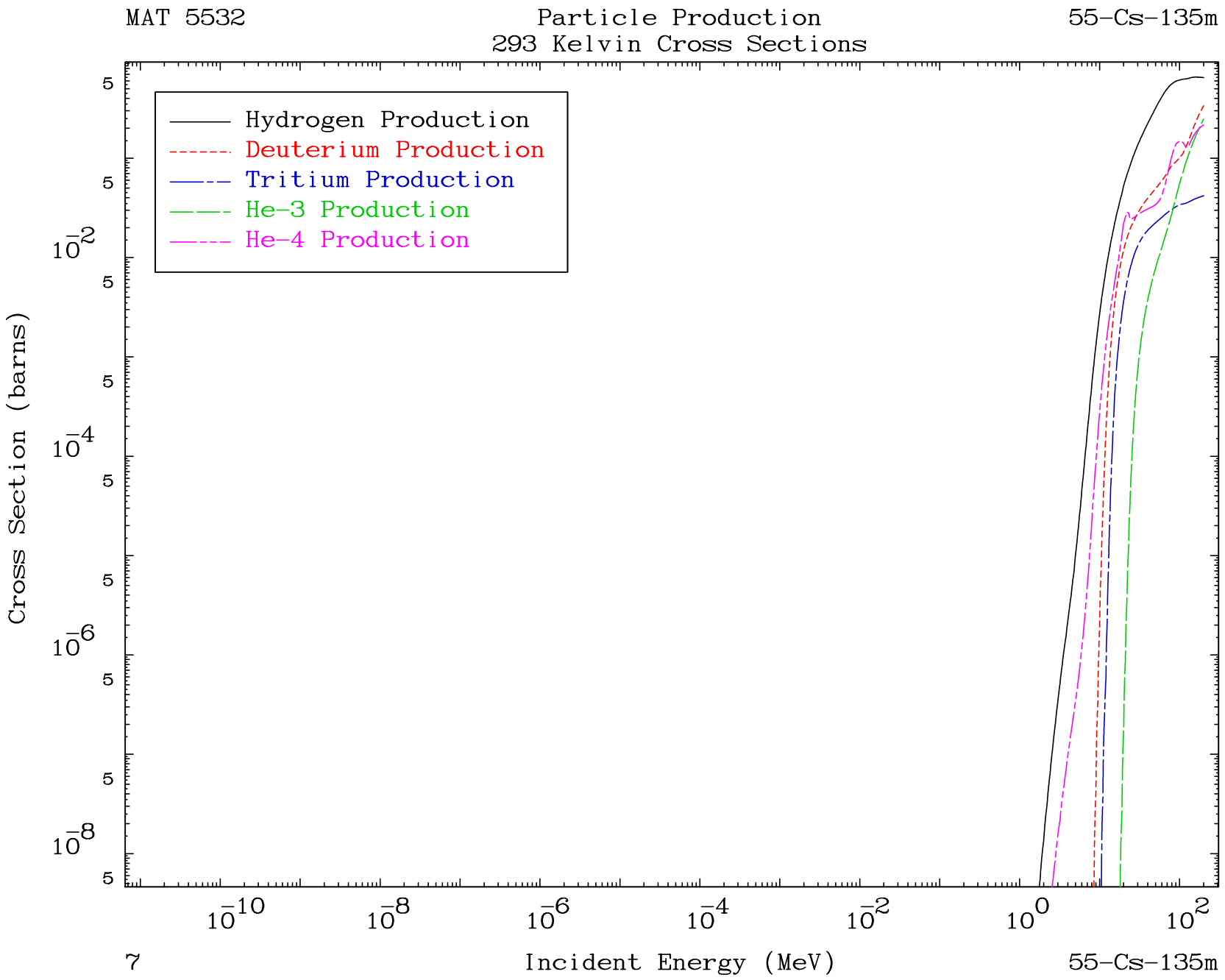

MAT 5532
Neutron Absorption
293 Kelvin Cross Sections
55-Cs-135m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m

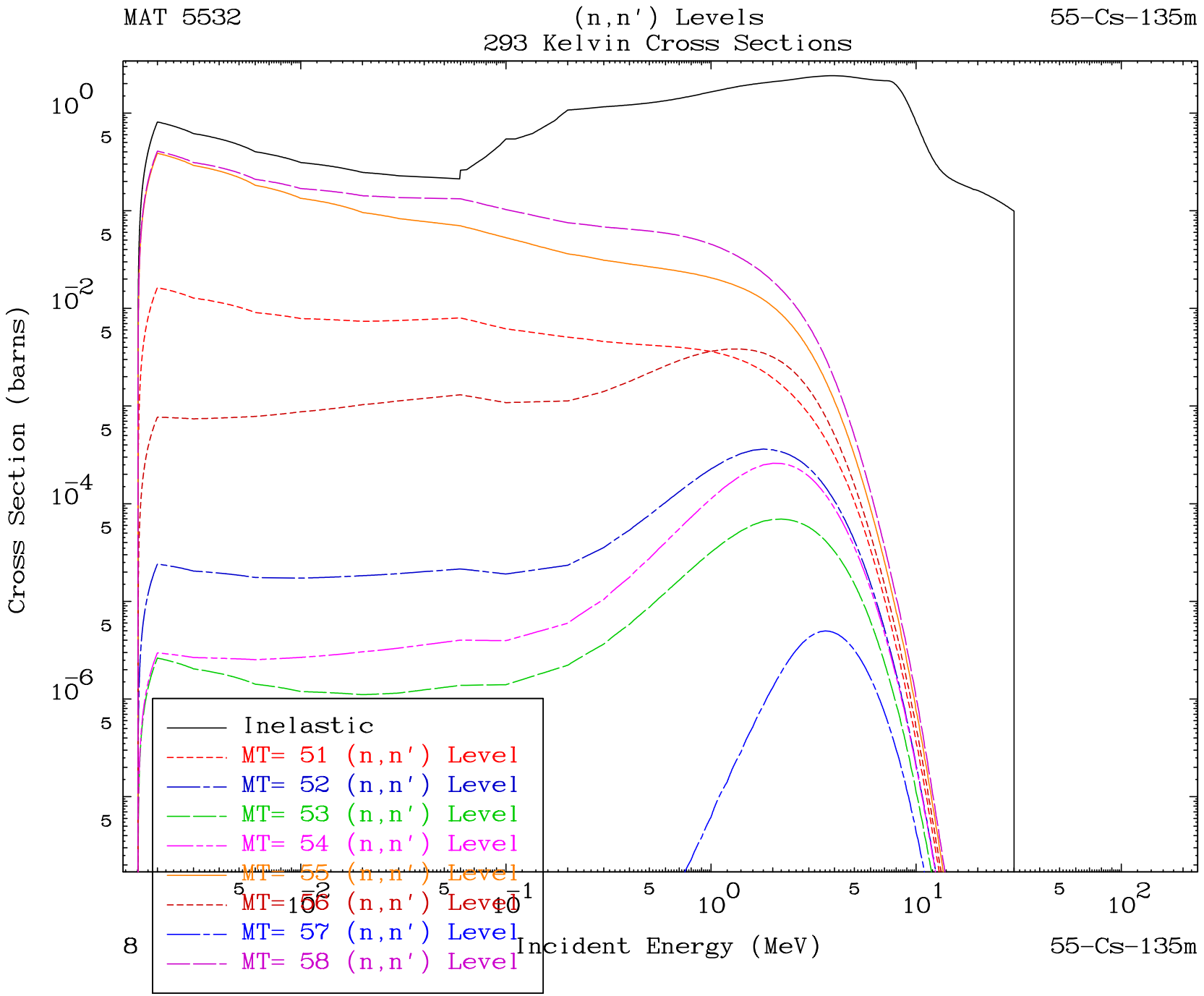

MAT 5532
Neutron Absorption
293 Kelvin Cross Sections
55-Cs-135m
Cross Section (barns)
Incident Energy (MeV)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
3
55-Cs-135m

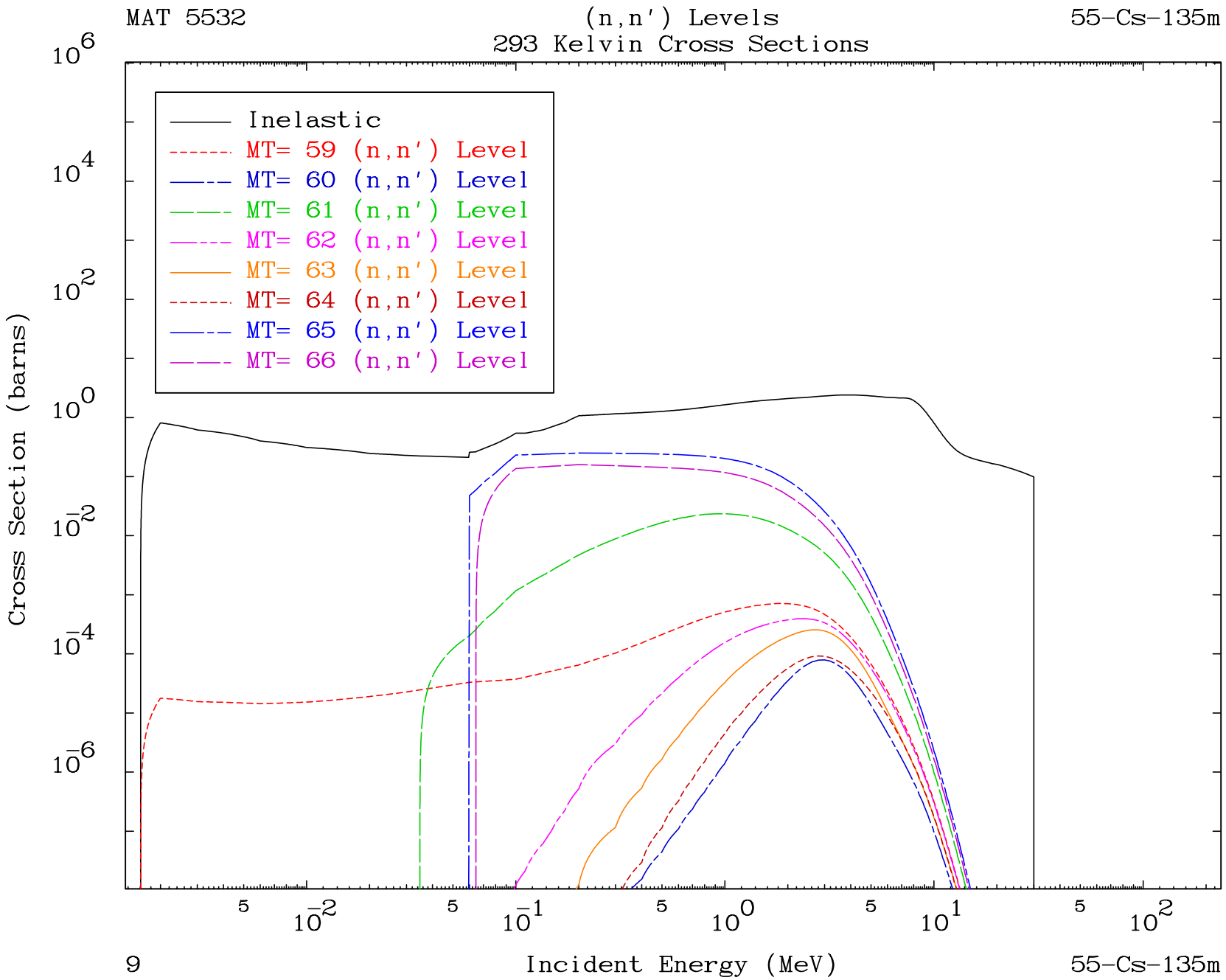

MAT 5532
Neutron Absorption
293 Kelvin Cross Sections
55-Cs-135m
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m
4

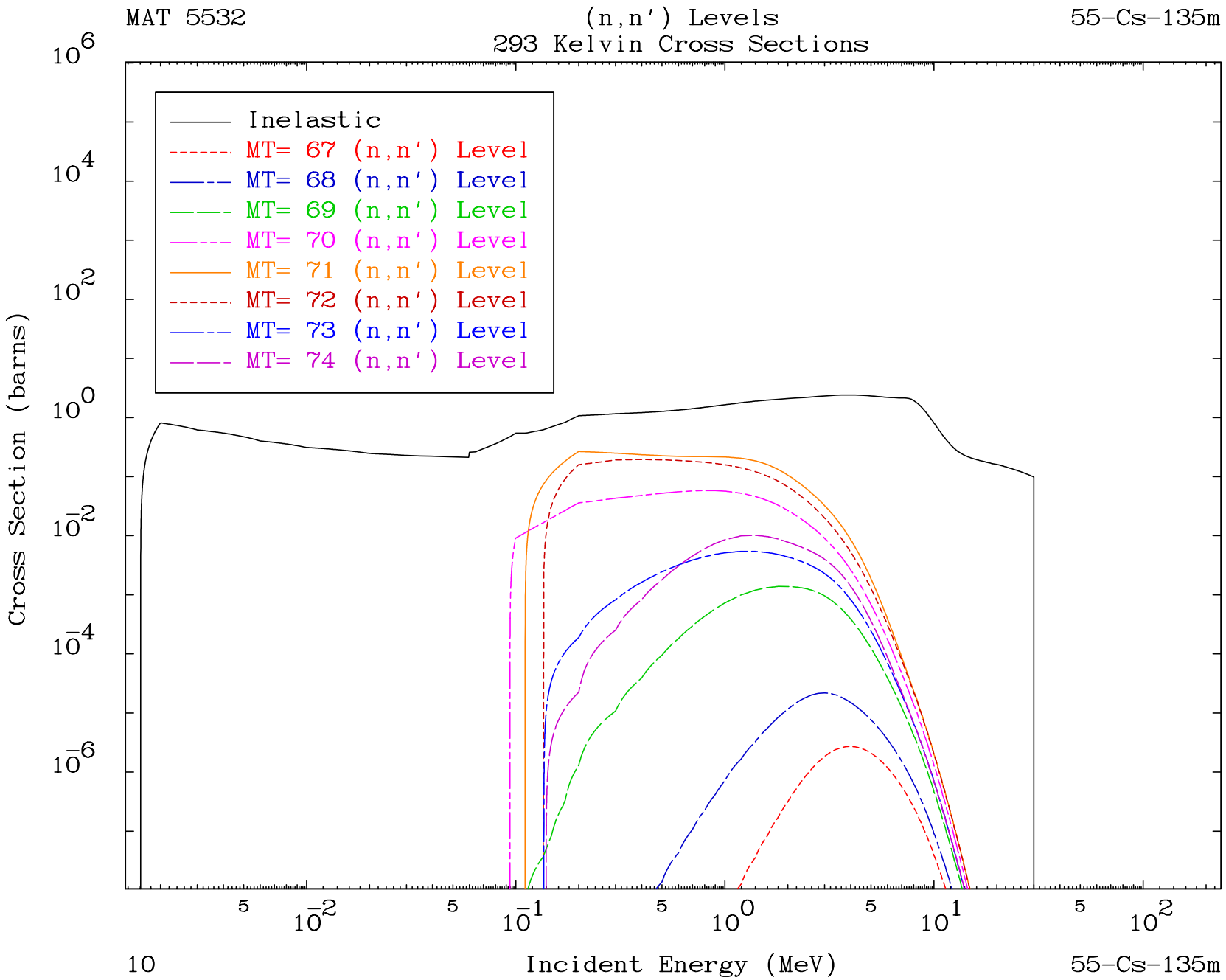

MAT 5532
Charged Particle
293 Kelvin Cross Sections
55-Cs-135m
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m

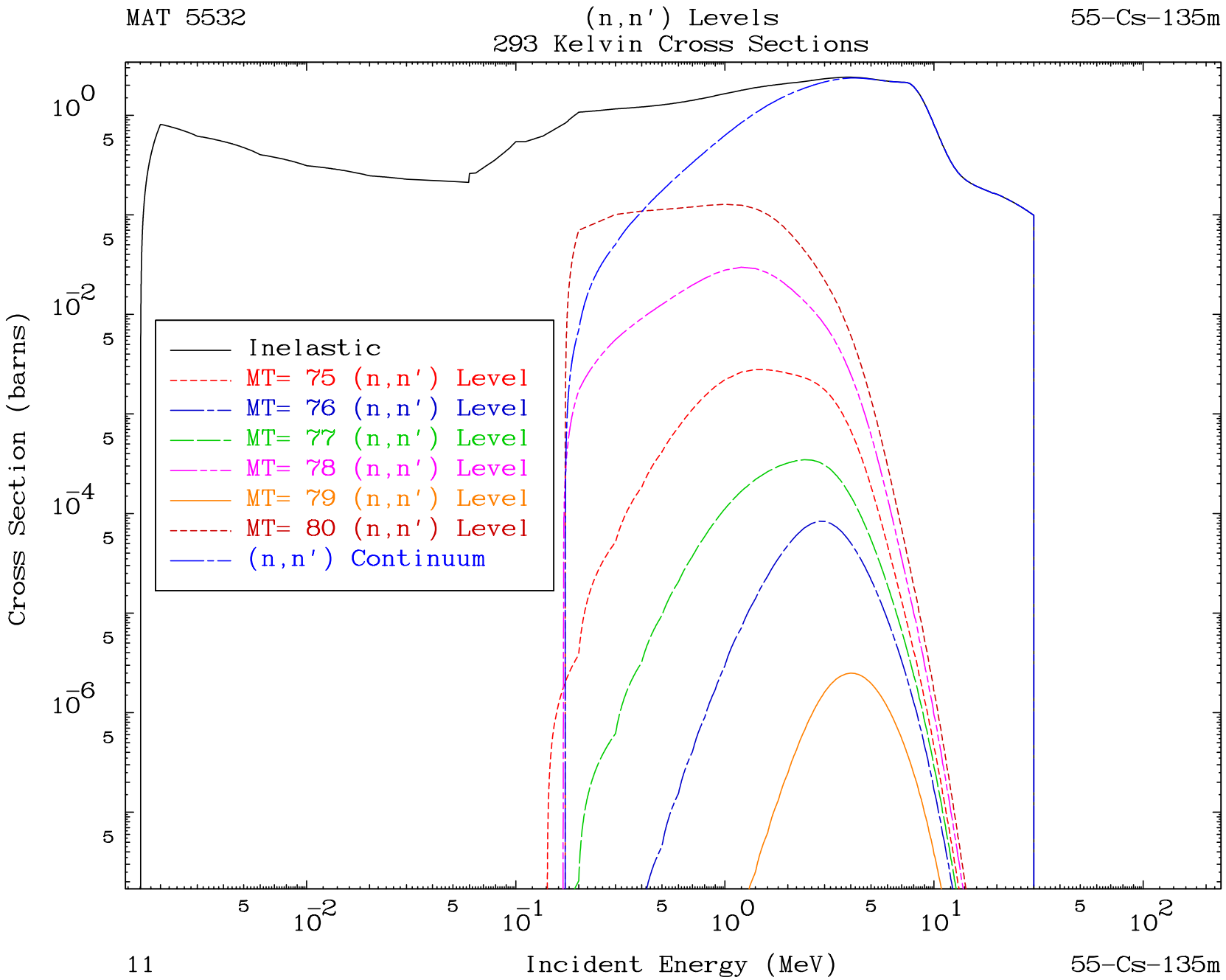

MAT 5532
Charged Particle
293 Kelvin Cross Sections
55-Cs-135m
(n,n') α
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
6
55-Cs-135m

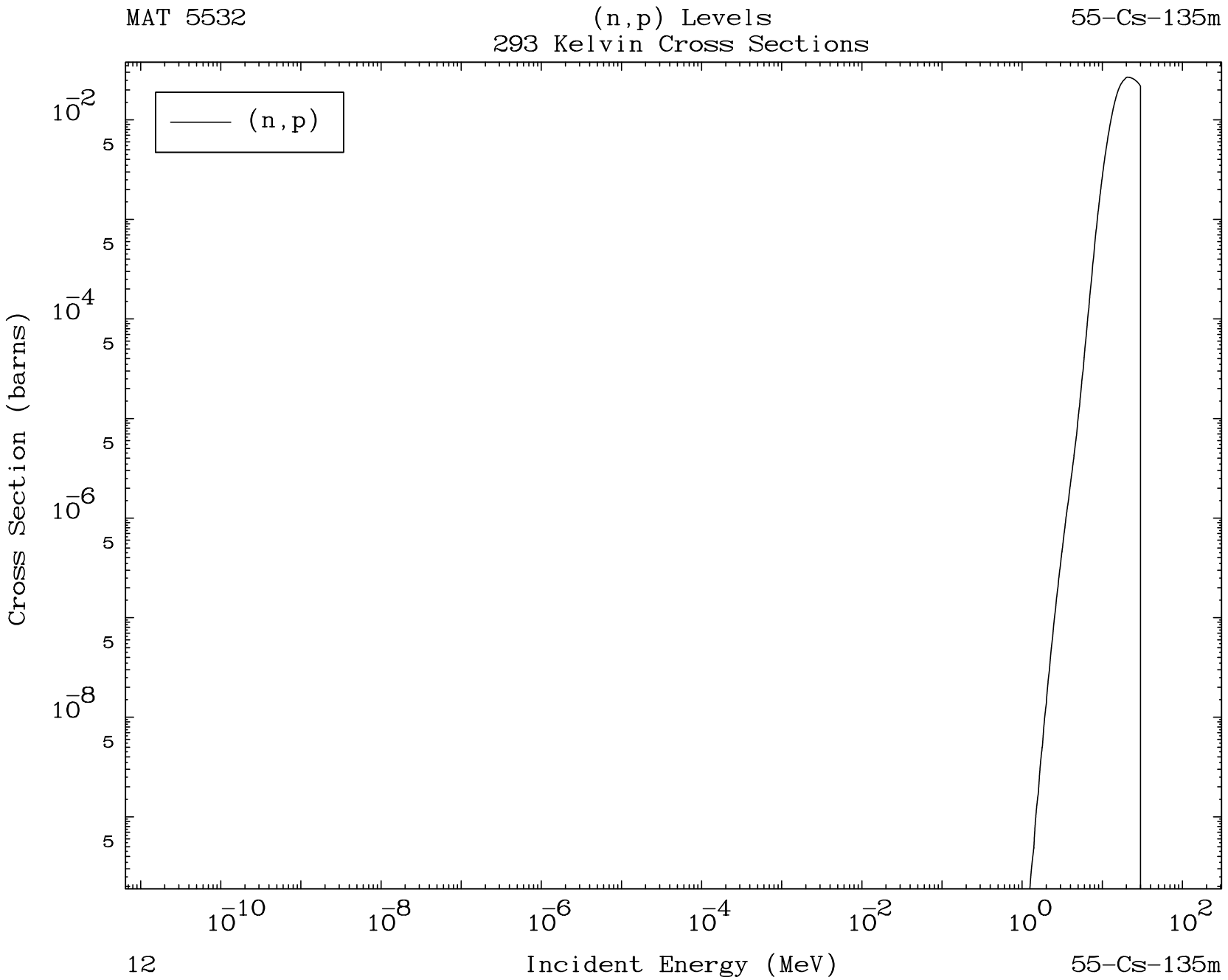

MAT 5532
Particle Production
293 Kelvin Cross Sections
55-Cs-135m
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m
7

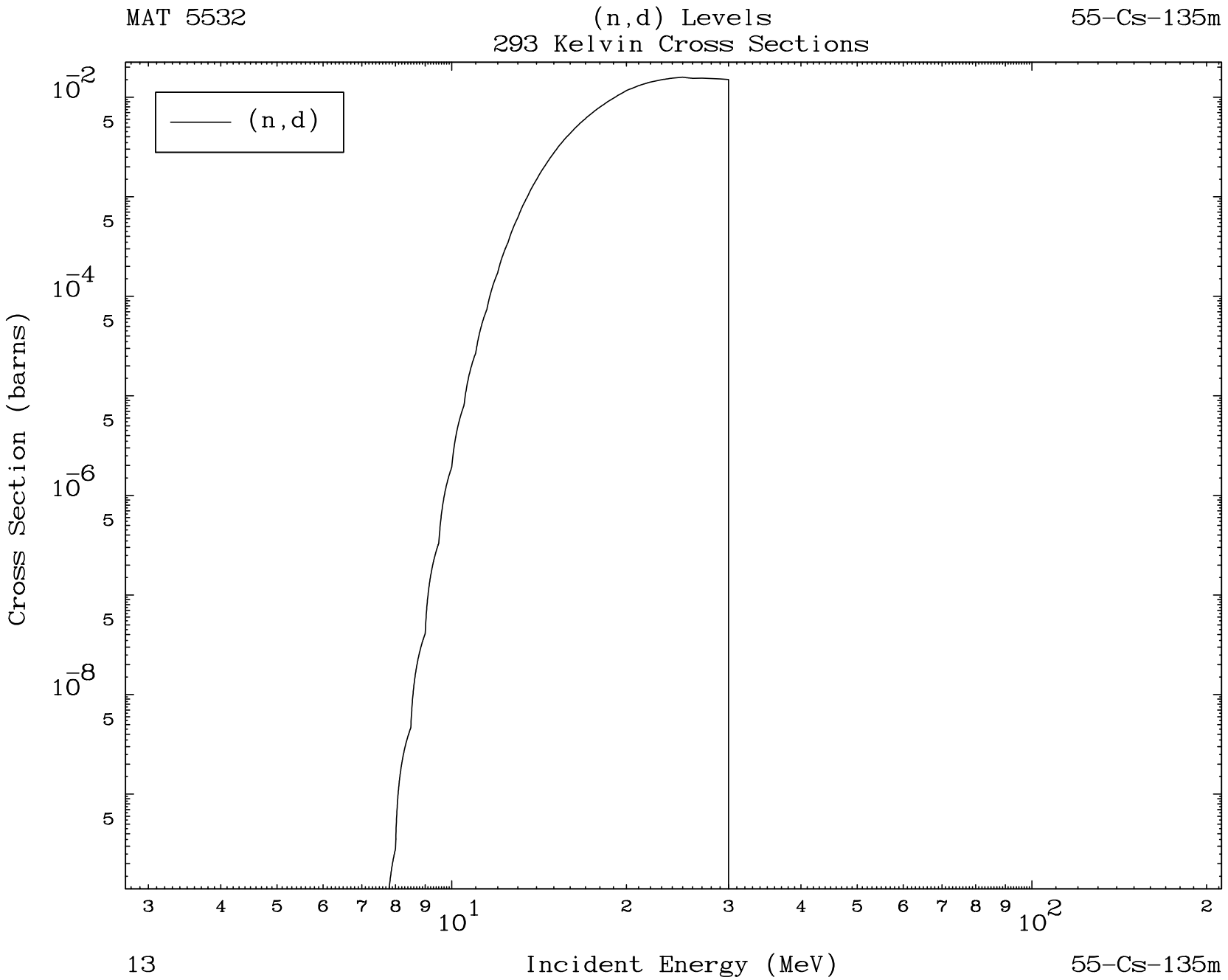

MAT 5532
(n,n') Levels
293 Kelvin Cross Sections
55-Cs-135m
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level

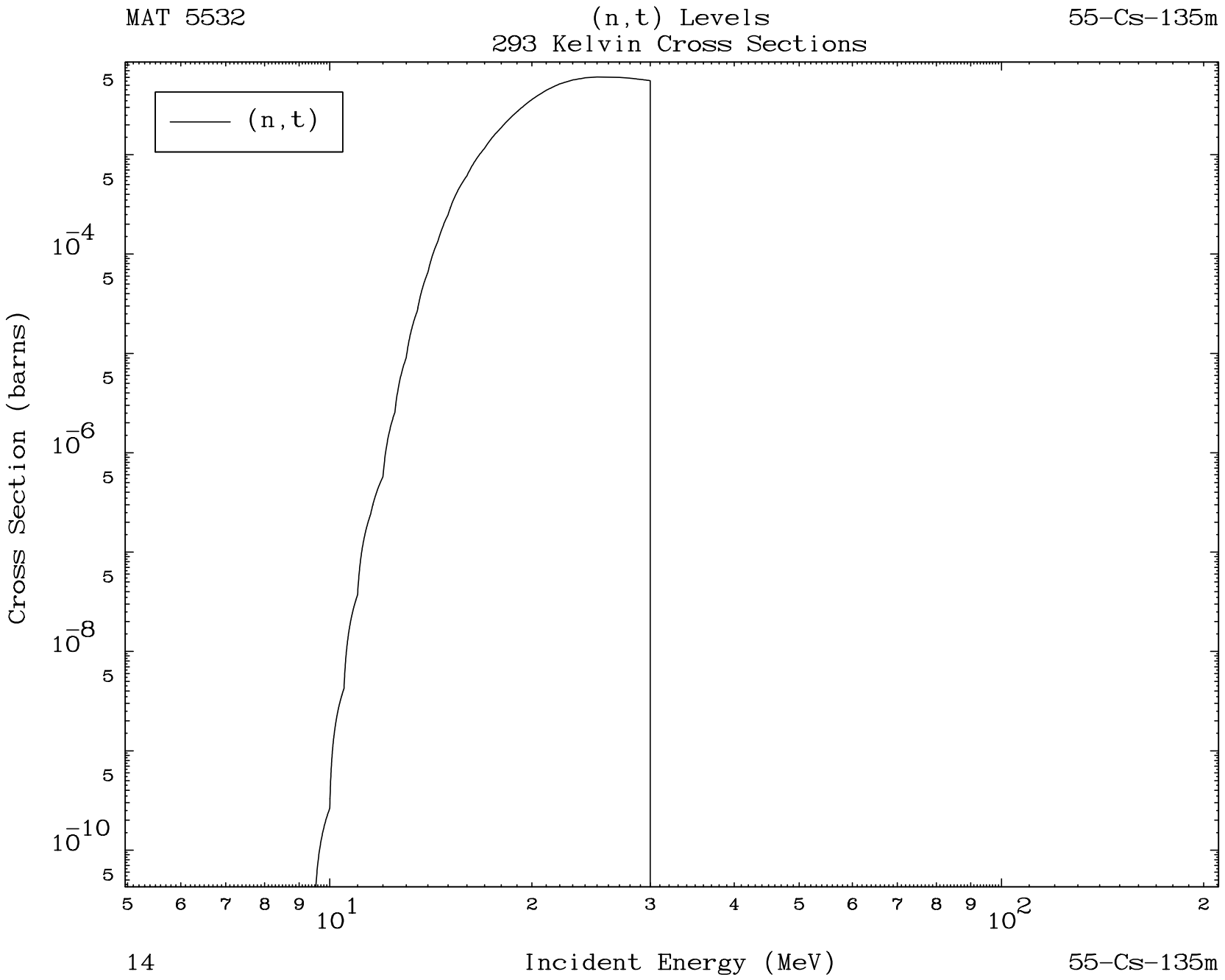

MAT 5532
(n,n') Levels
293 Kelvin Cross Sections
55-Cs-135m
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
9
55-Cs-135m

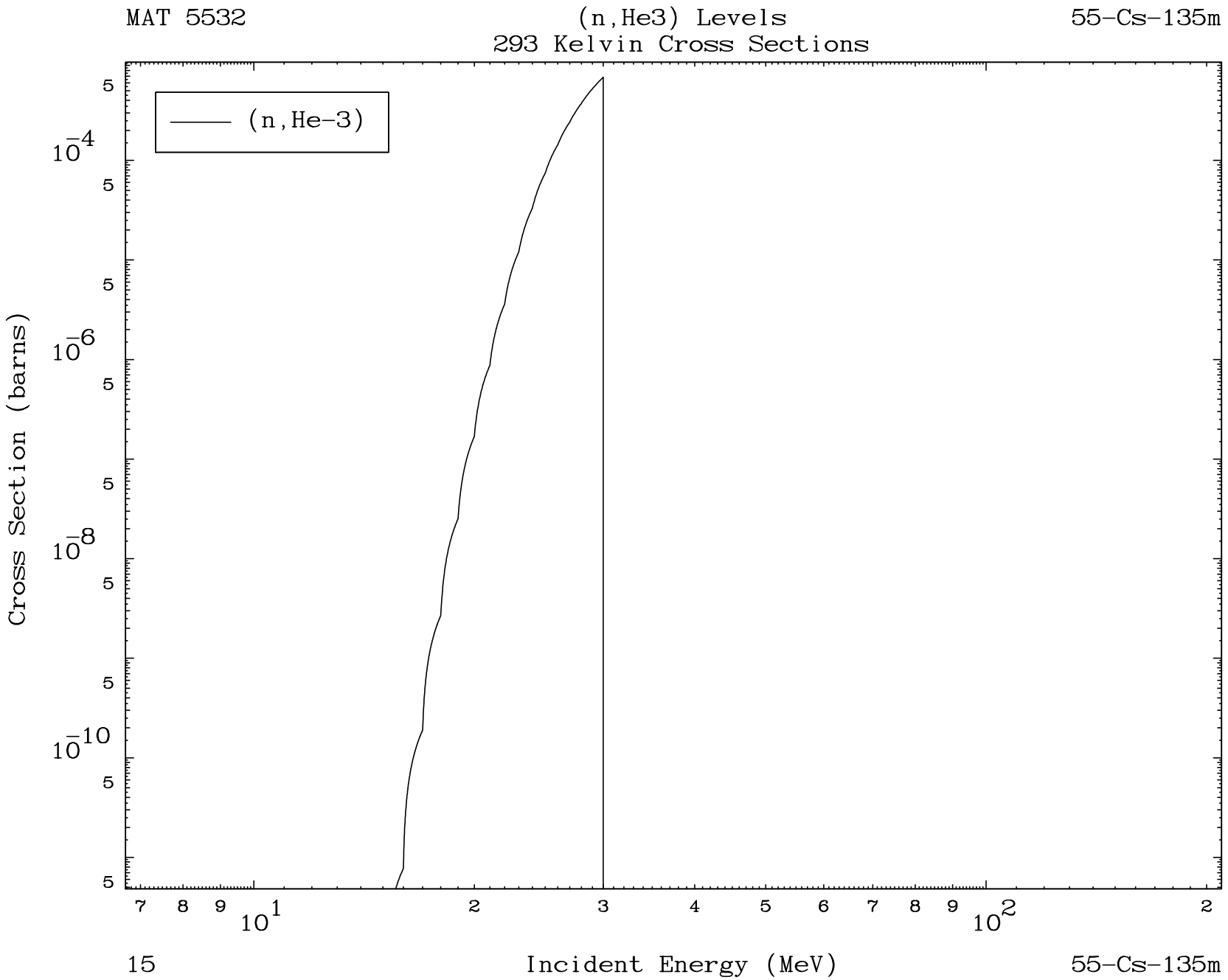

MAT 5532
(n,n') Levels
293 Kelvin Cross Sections
55-Cs-135m
Inelastic
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
55-Cs-135m

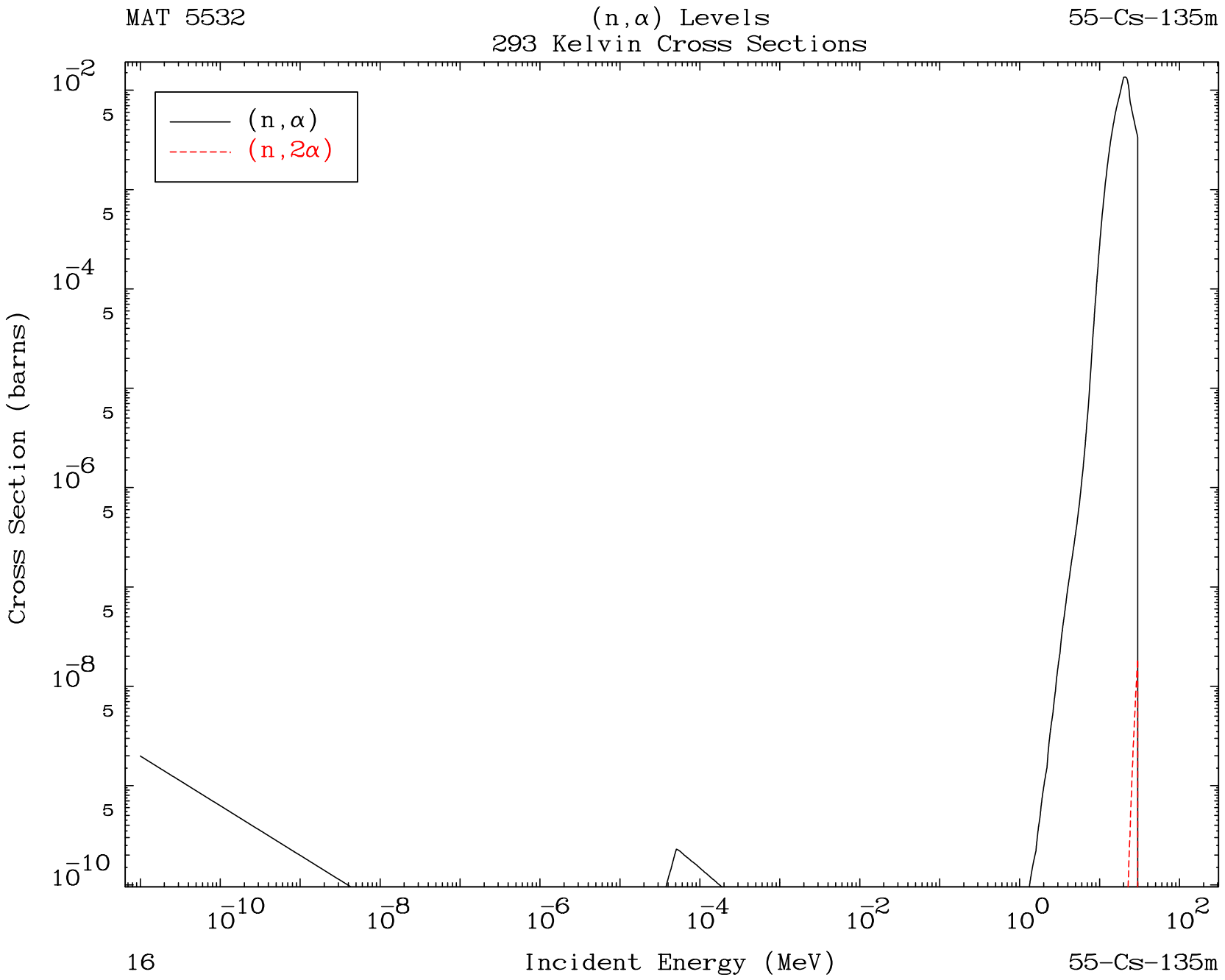

MAT 5532
(n,n') Levels
293 Kelvin Cross Sections
55-Cs-135m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
11
55-Cs-135m

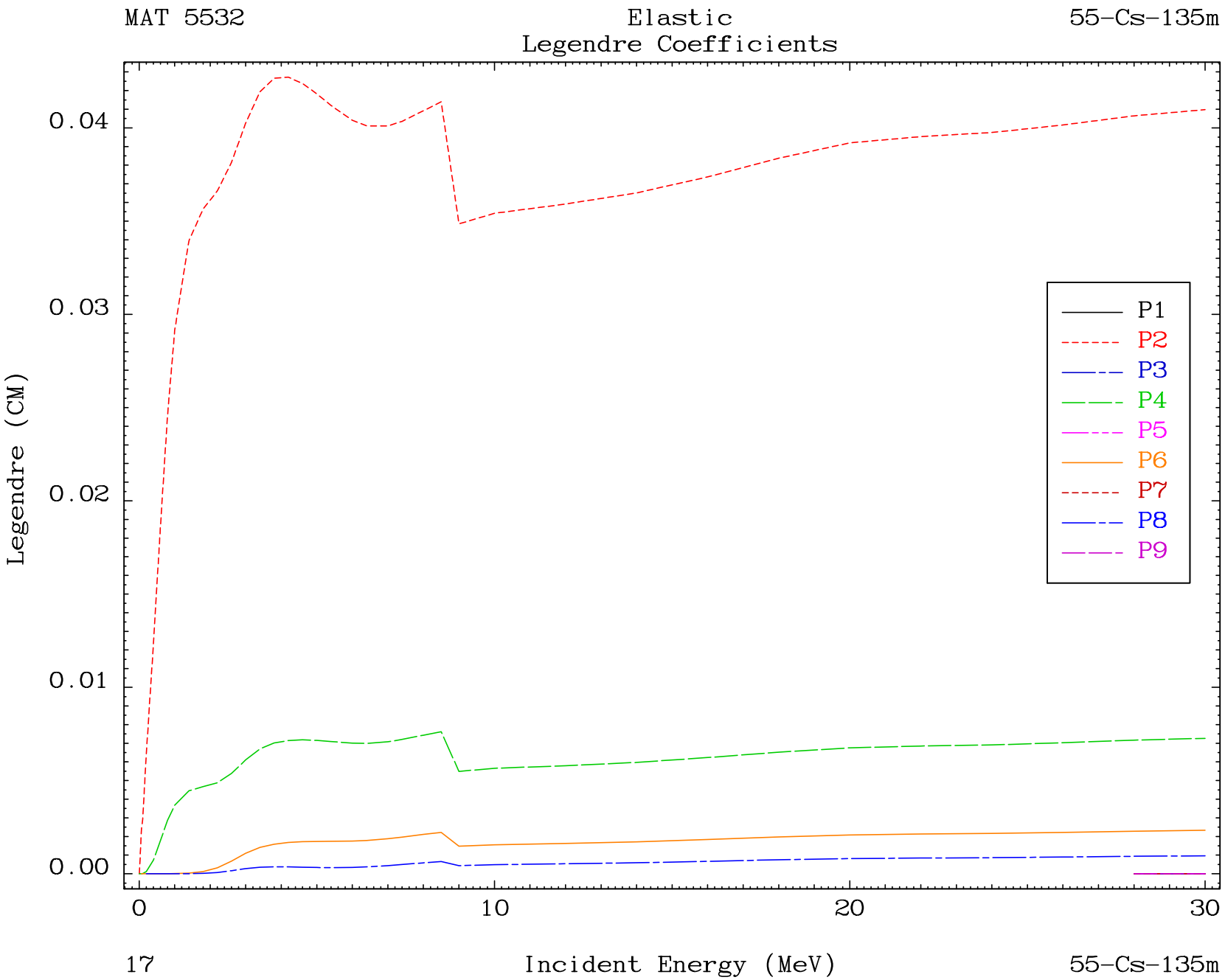

MAT 5532
(n,p) Levels
293 Kelvin Cross Sections
55-Cs-135m
(n,p)
Cross Section (barns)
Incident Energy (MeV)
12
55-Cs-135m

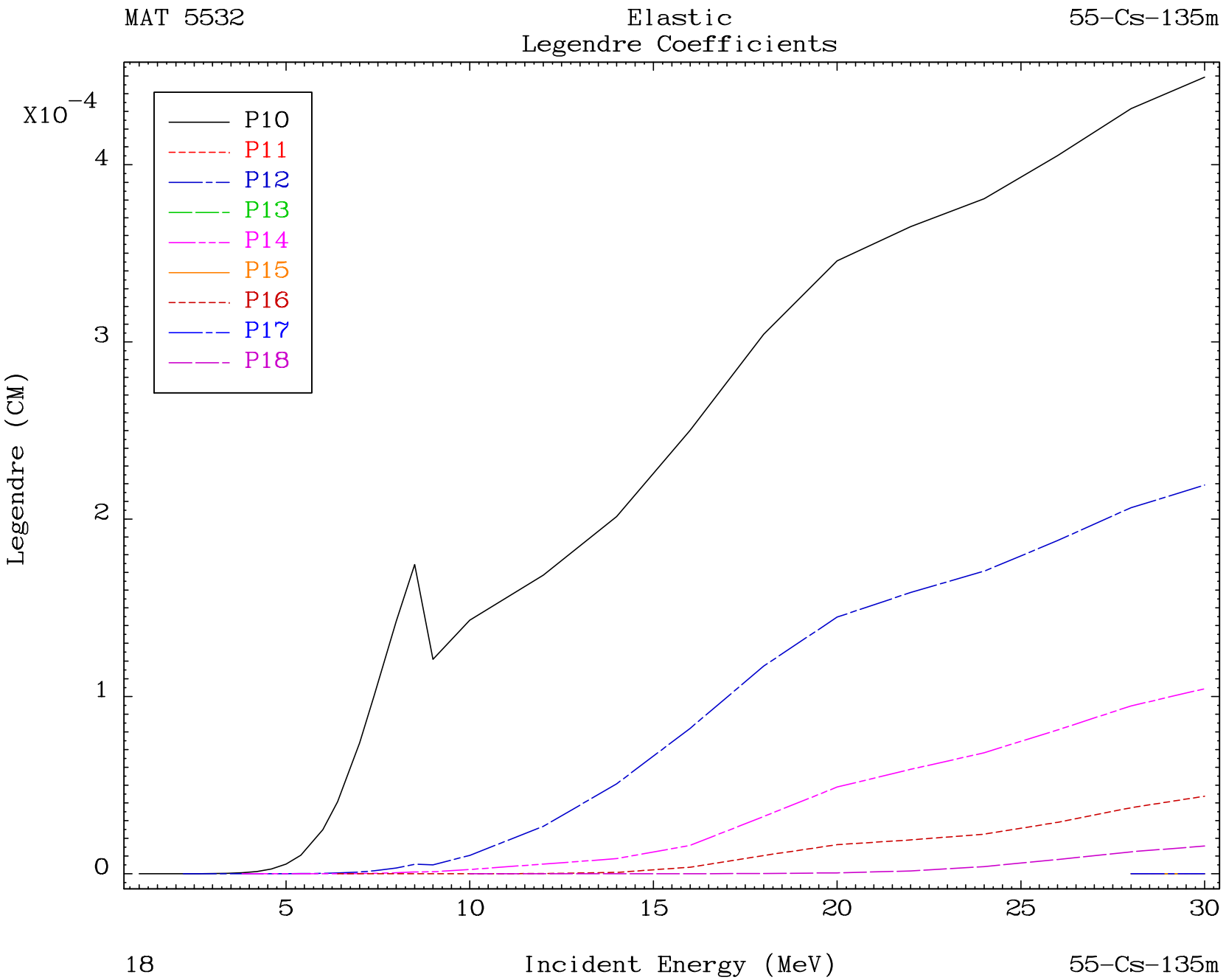

MAT 5532
(n,d) Levels
55-Cs-135m
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10-2
10-4
10-6
10-8
3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
13
Incident Energy (MeV)
55-Cs-135m

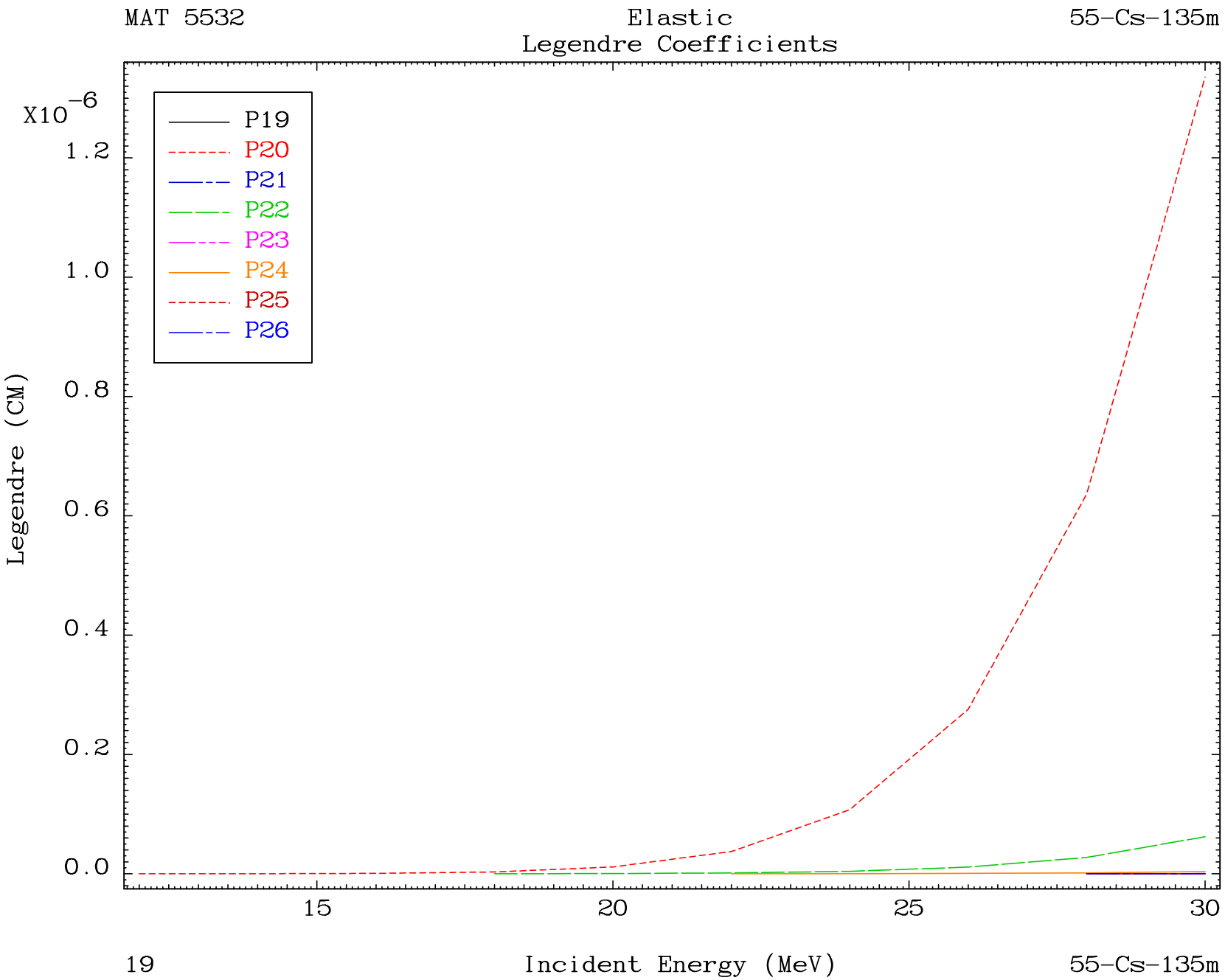

MAT 5532
(n,t) Levels
55-Cs-135m
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
14
55-Cs-135m

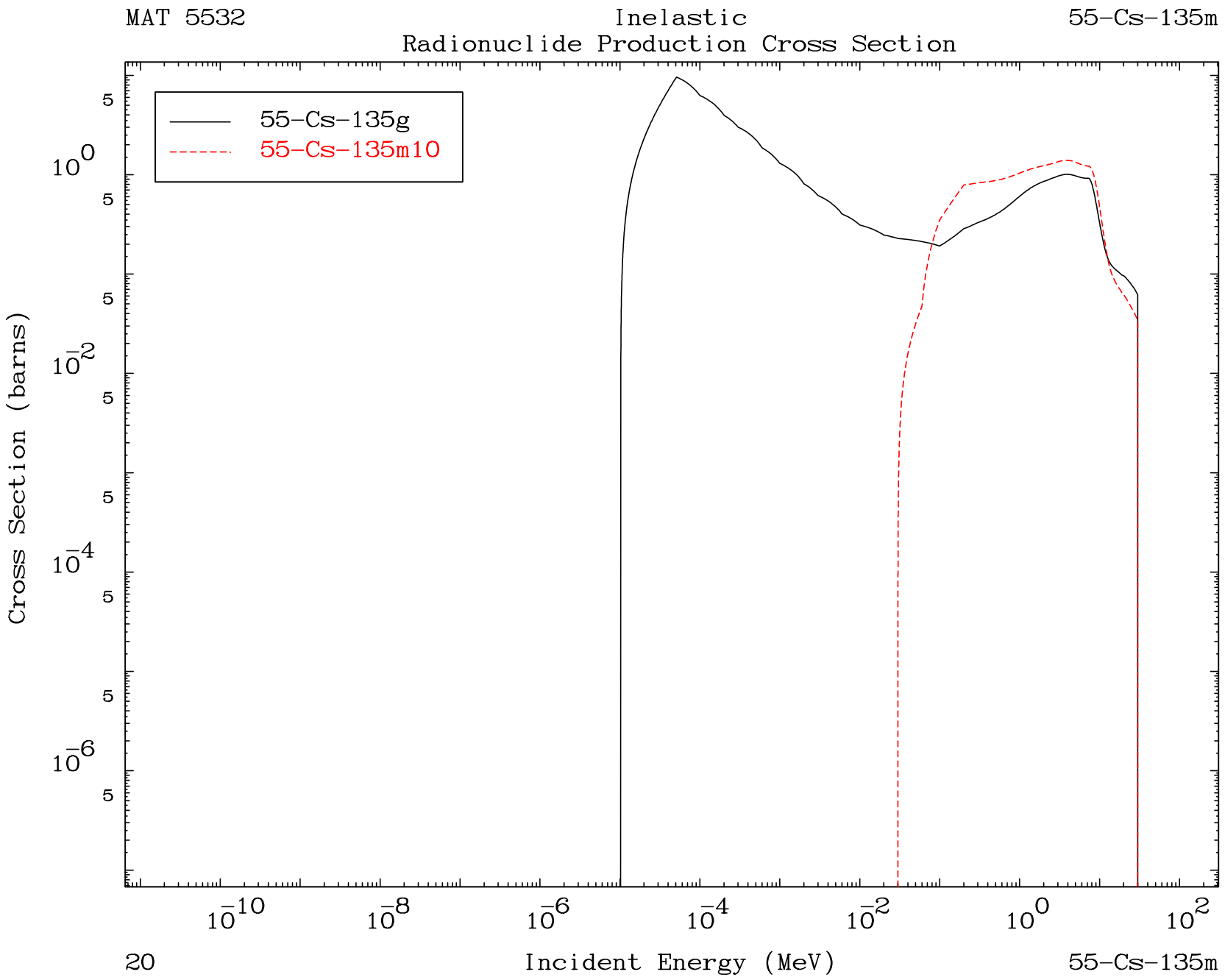

MAT 5532
(n,He3) Levels
55-Cs-135m
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
15
55-Cs-135m

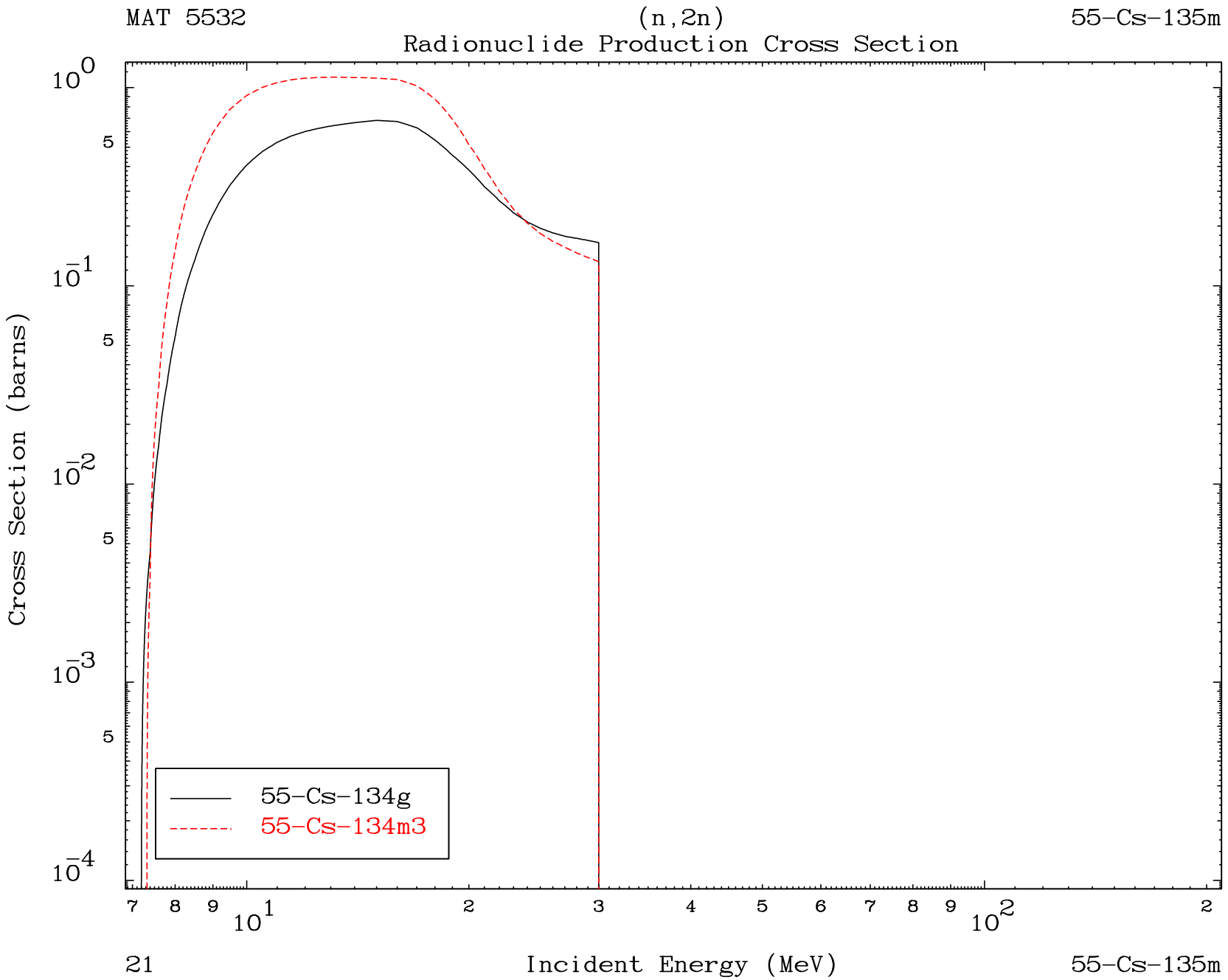

MAT 5532
(n,α) Levels
293 Kelvin Cross Sections
55-Cs-135m
(n,α)
(n,2α)
Cross Section (barns)
Incident Energy (MeV)
16
55-Cs-135m

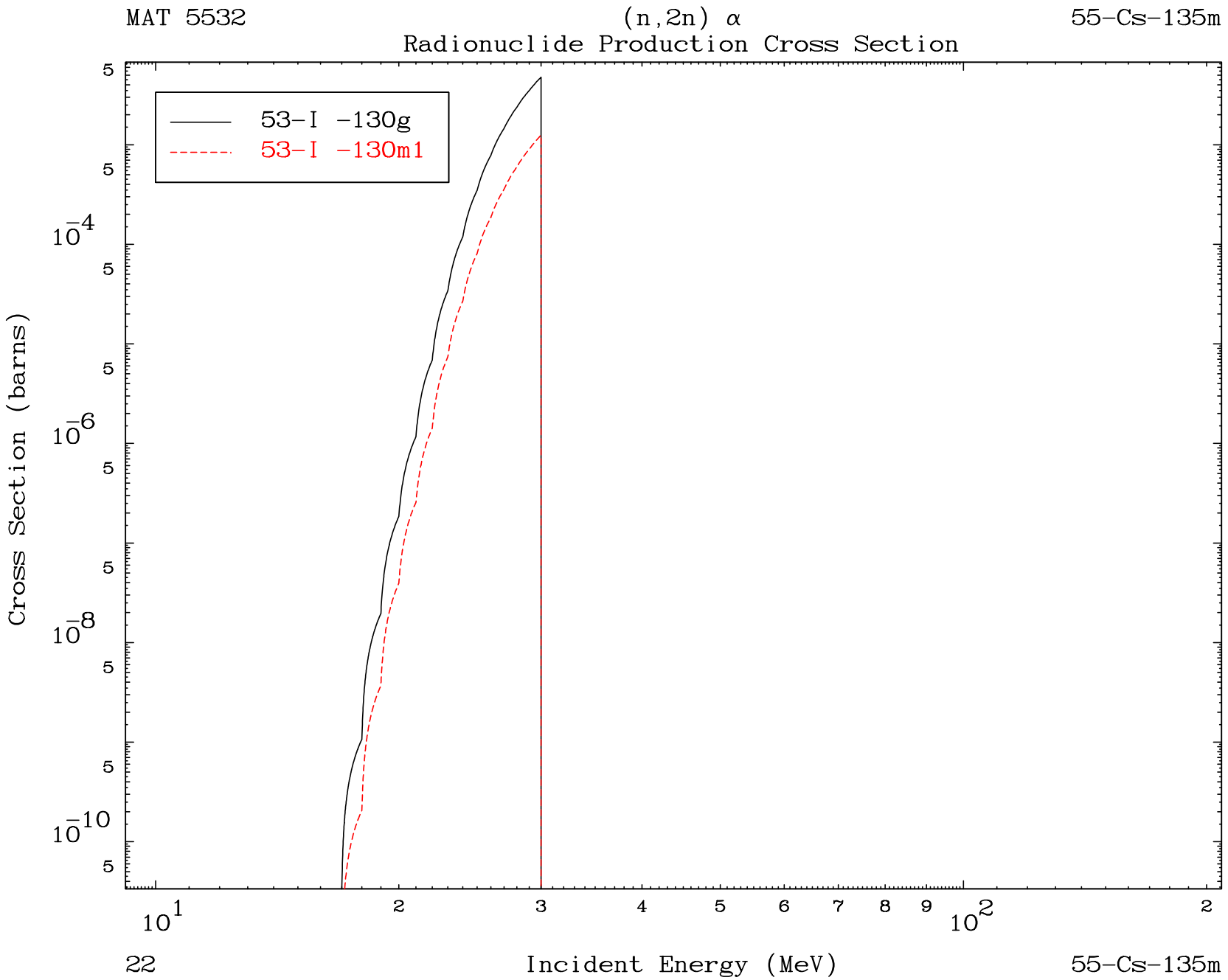

MAT 5532
Elastic
Legendre Coefficients
55-Cs-135m
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
10
20
30
17
Incident Energy (MeV)
55-Cs-135m

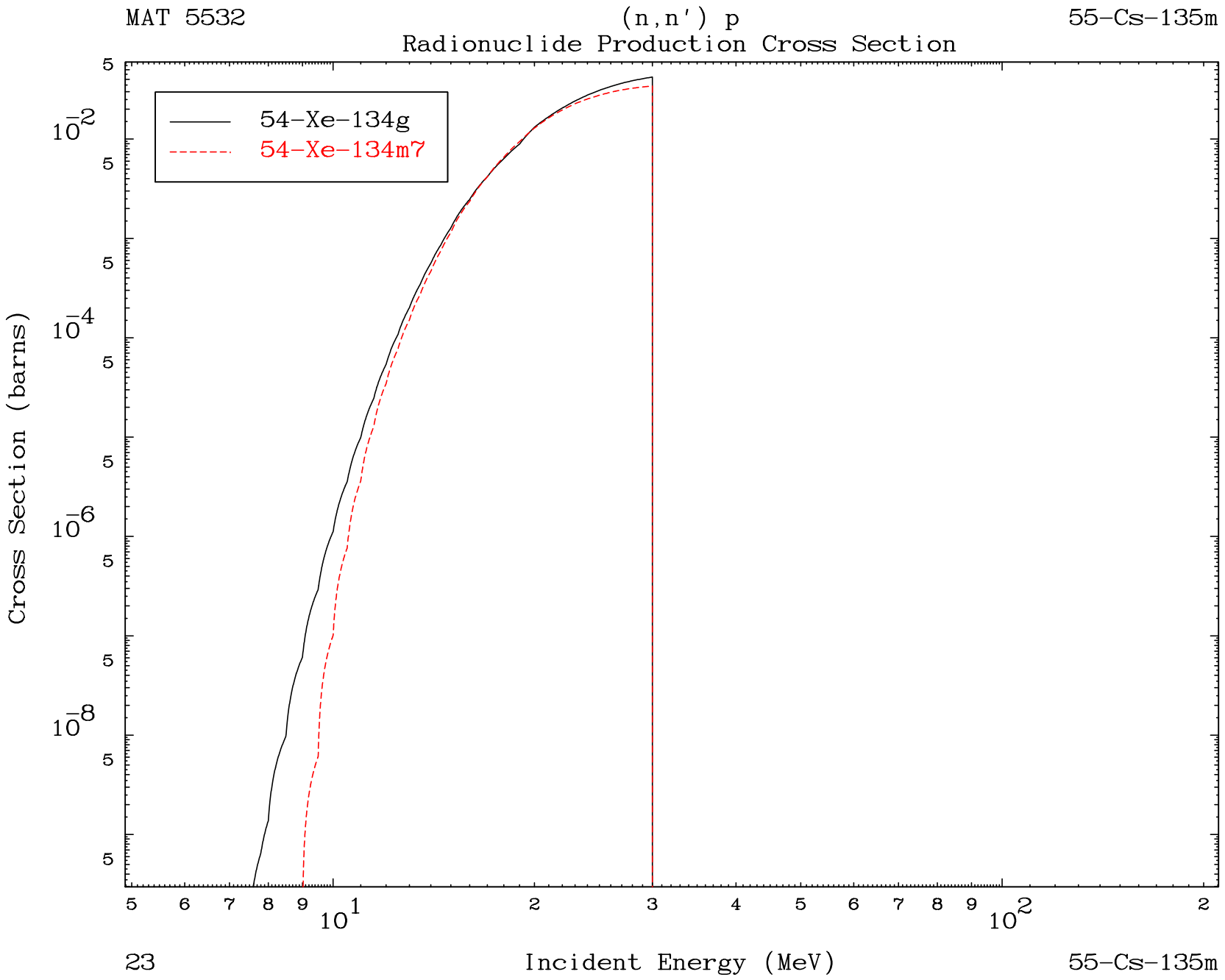

MAT 5532
Elastic
Legendre Coefficients
55-Cs-135m
X10^{-4}
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0
1
2
3
4
5
10
15
20
25
30
18
Incident Energy (MeV)
55-Cs-135m

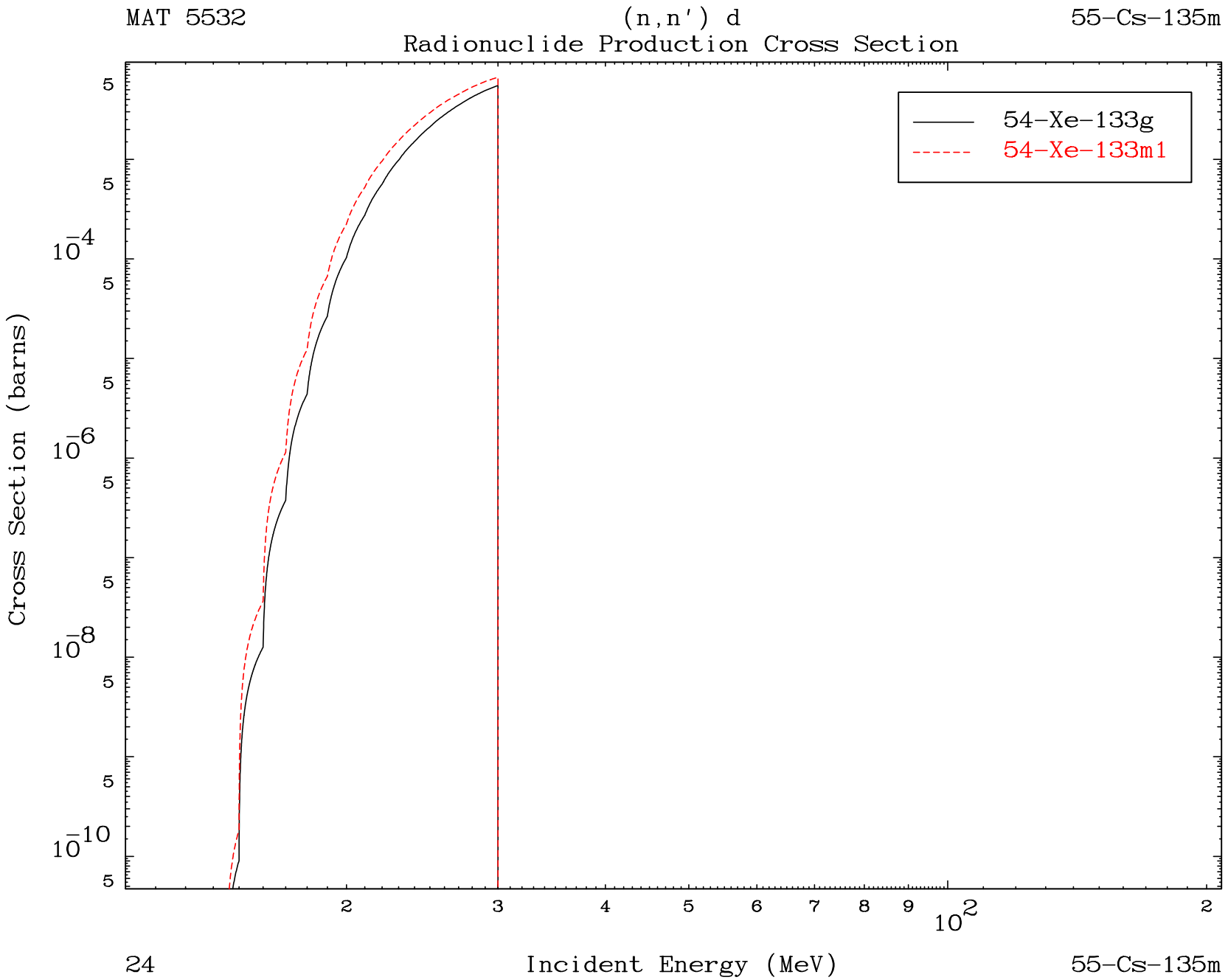

MAT 5532
Elastic
Legendre Coefficients
55-Cs-135m
X10 −6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
15
20
25
30
19
Incident Energy (MeV)
55-Cs-135m

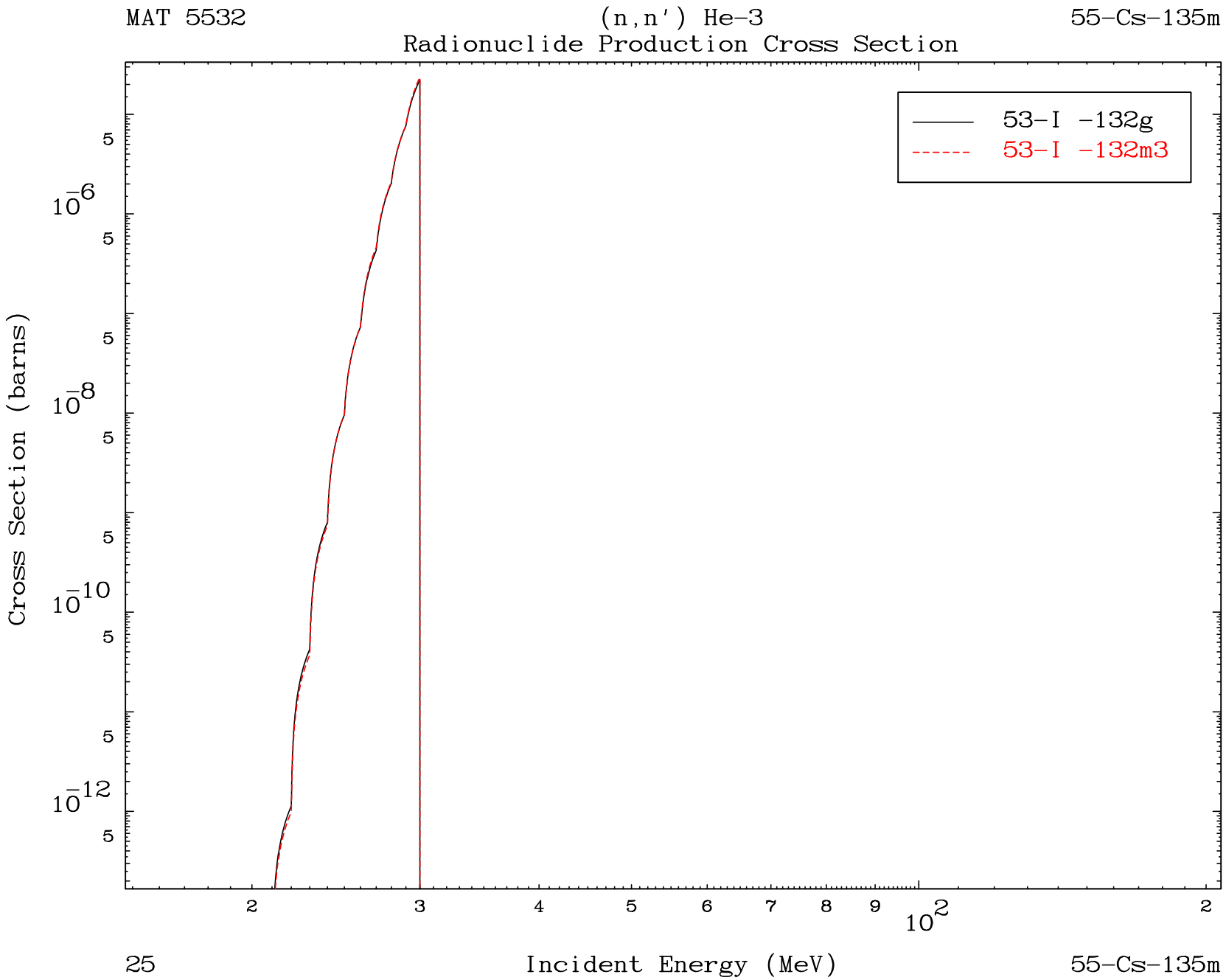

MAT 5532
Inelastic
55-Cs-135m
Radionuclide Production Cross Section
55-Cs-135g
55-Cs-135m10
Cross Section (barns)
Incident Energy (MeV)
20
55-Cs-135m

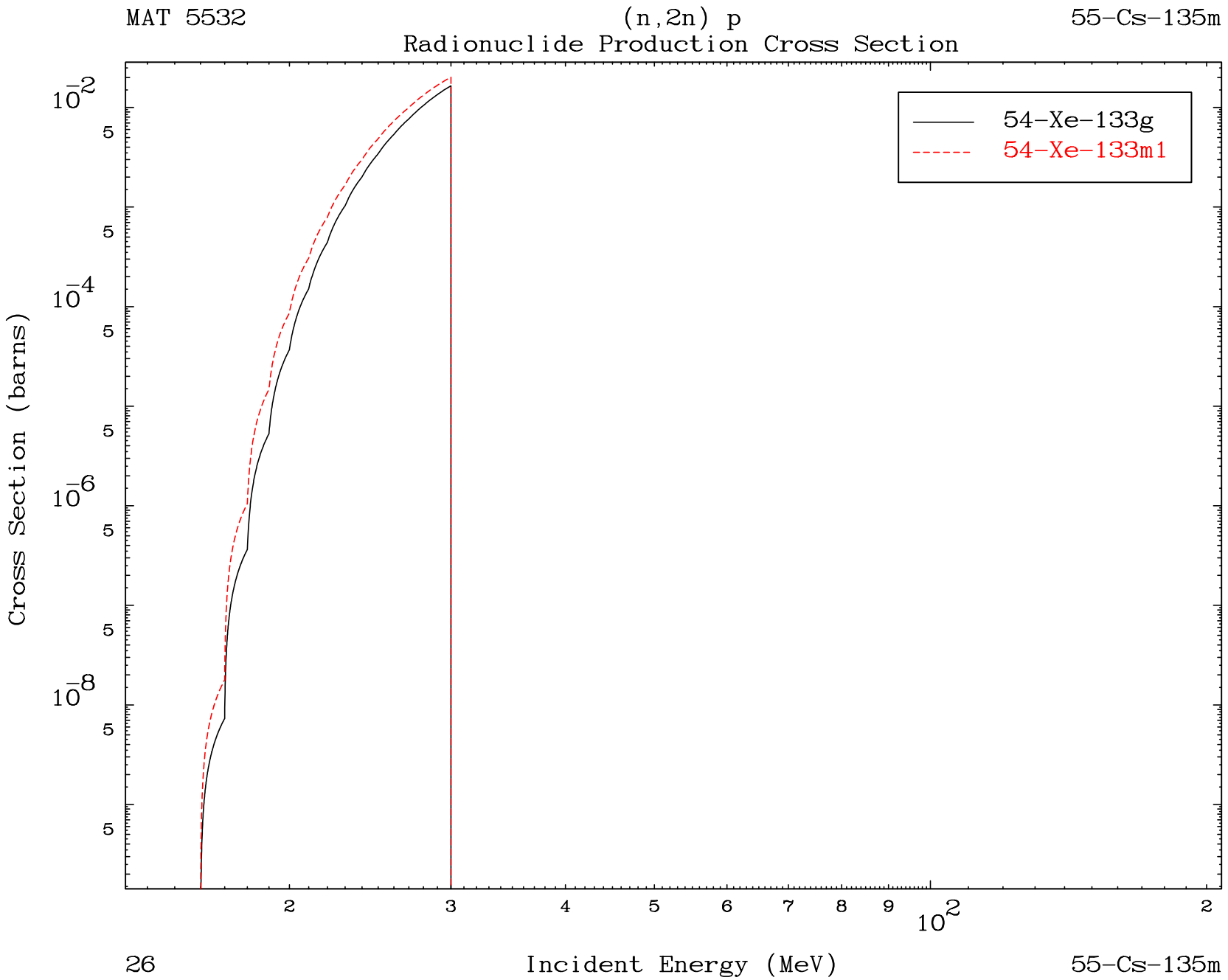

MAT 5532
(n,2n)
55-Cs-135m
Radionuclide Production Cross Section
Cross Section (barns)
10^0
5
10^-1
5
10^-2
5
10^-3
5
10^-4
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
55-Cs-134g
55-Cs-134m3
21
55-Cs-135m

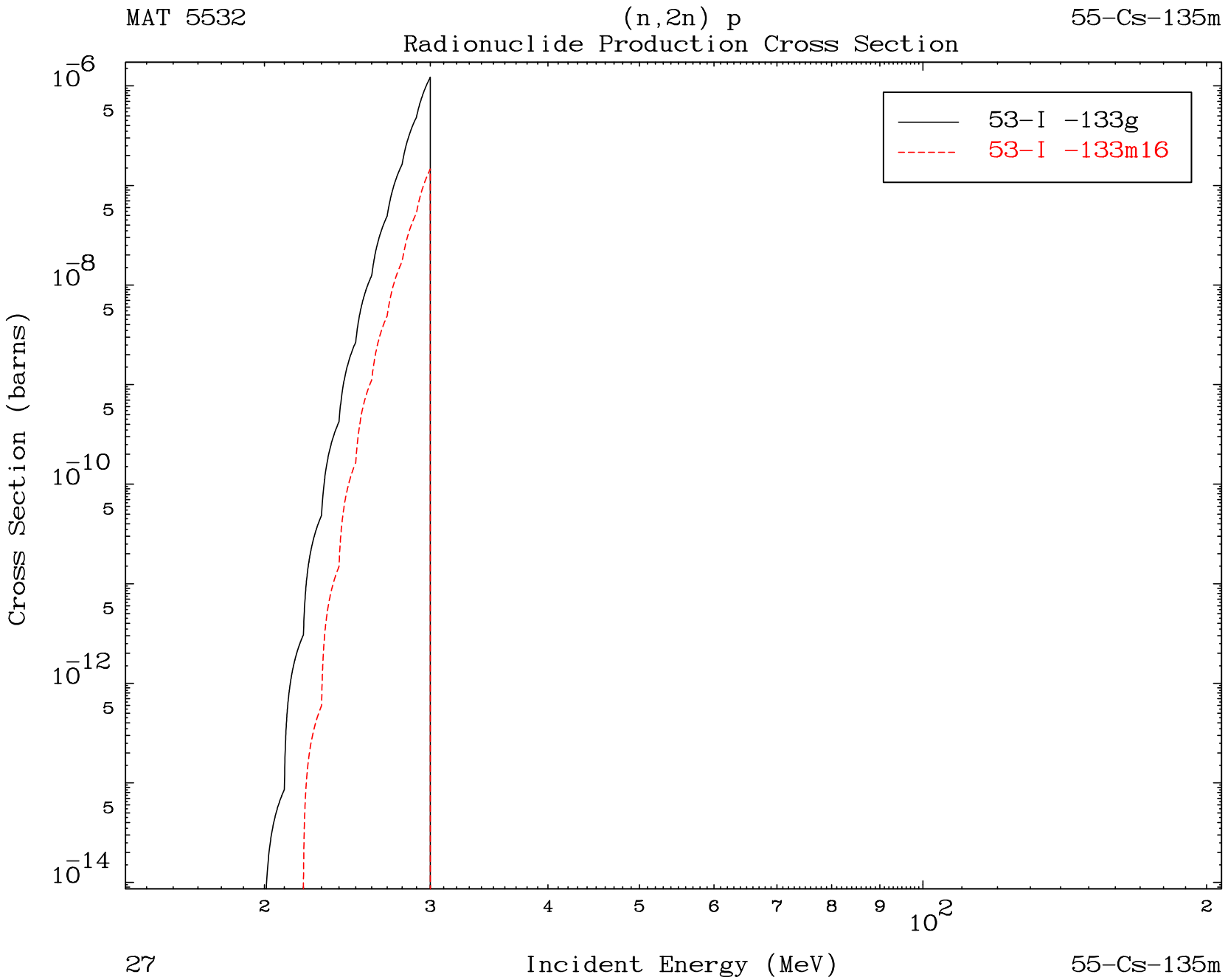

MAT 5532
(n,2n) α
55-Cs-135m
Radionuclide Production Cross Section
53-I -130g
53-I -130m1
Cross Section (barns)
Incident Energy (MeV)
22
55-Cs-135m

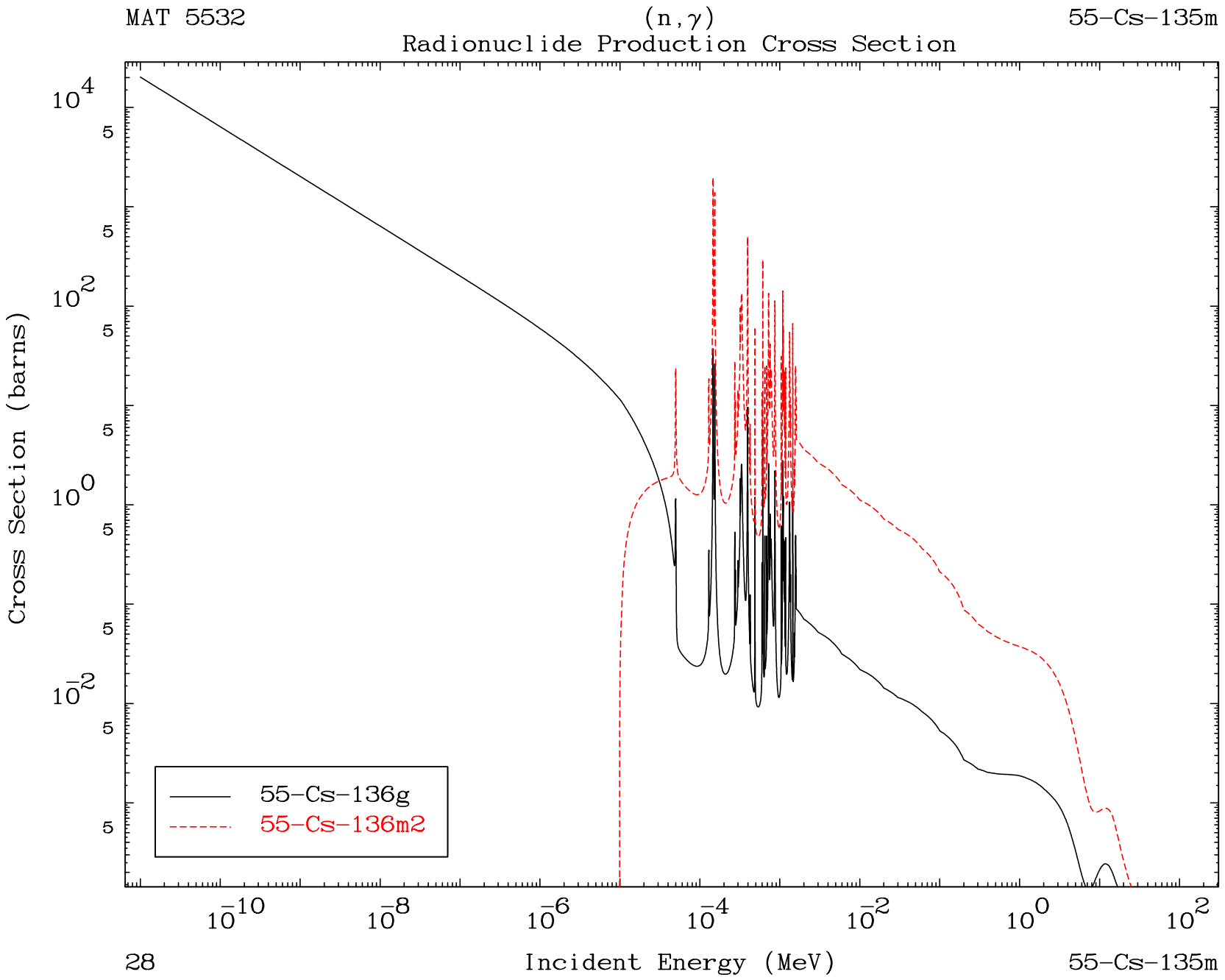

MAT 5532
(n,n') p
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-134g
54-Xe-134m7
Cross Section (barns)
Incident Energy (MeV)
23
55-Cs-135m

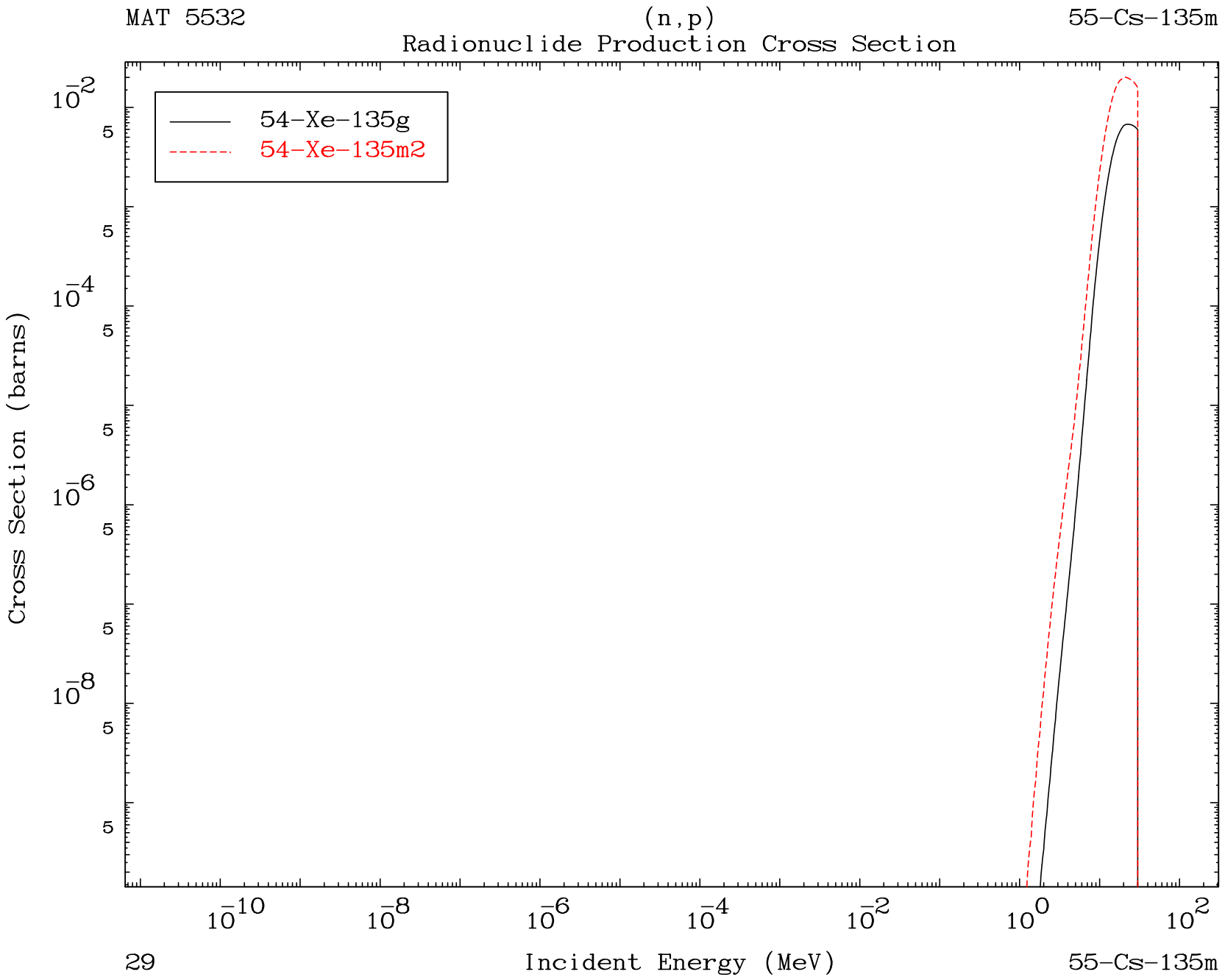

MAT 5532
(n,n') d
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-133g
54-Xe-133m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
55-Cs-135m

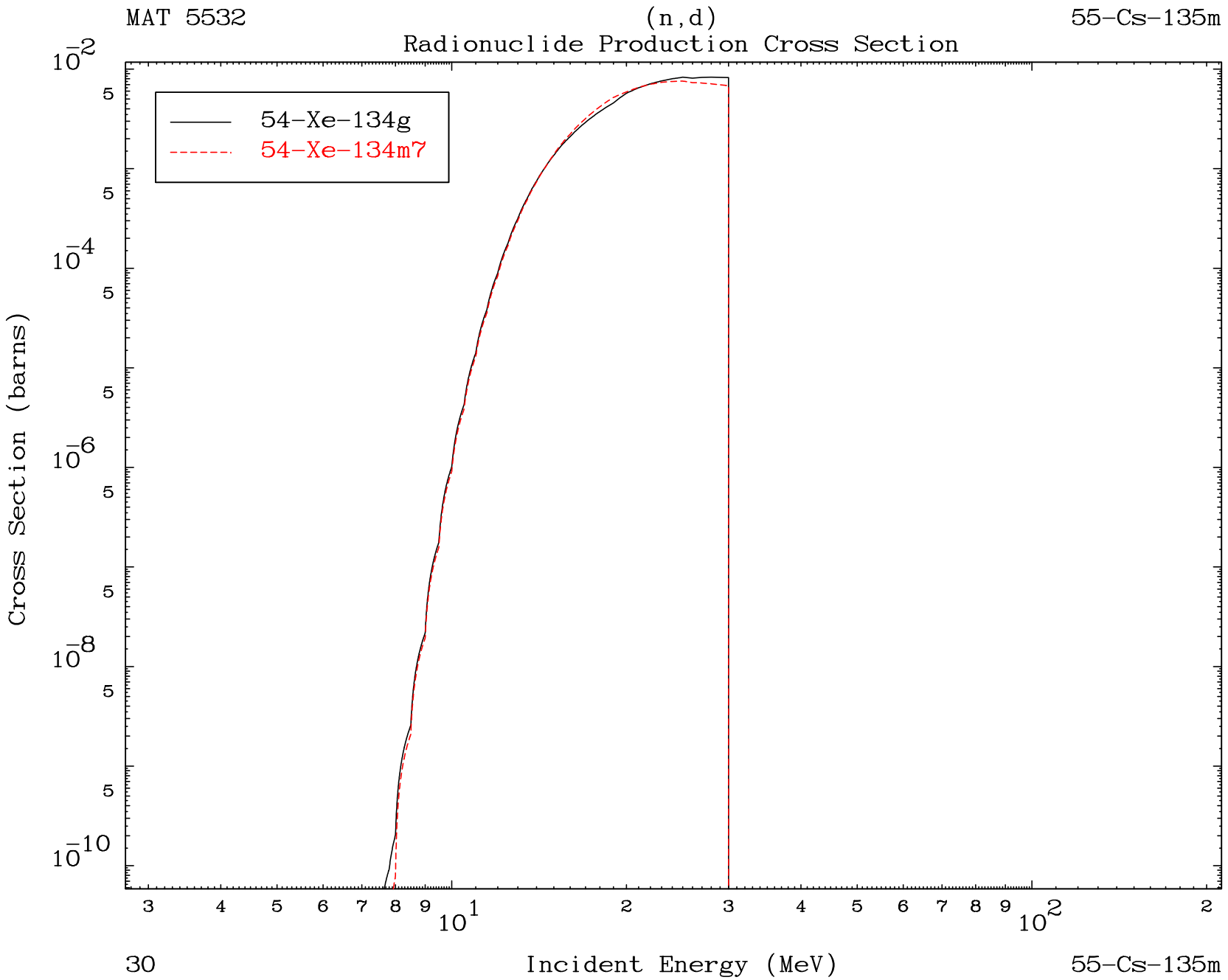

MAT 5532
(n,n') He-3
55-Cs-135m
Radionuclide Production Cross Section
53-I -132g
53-I -132m3
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
25
Incident Energy (MeV)
55-Cs-135m

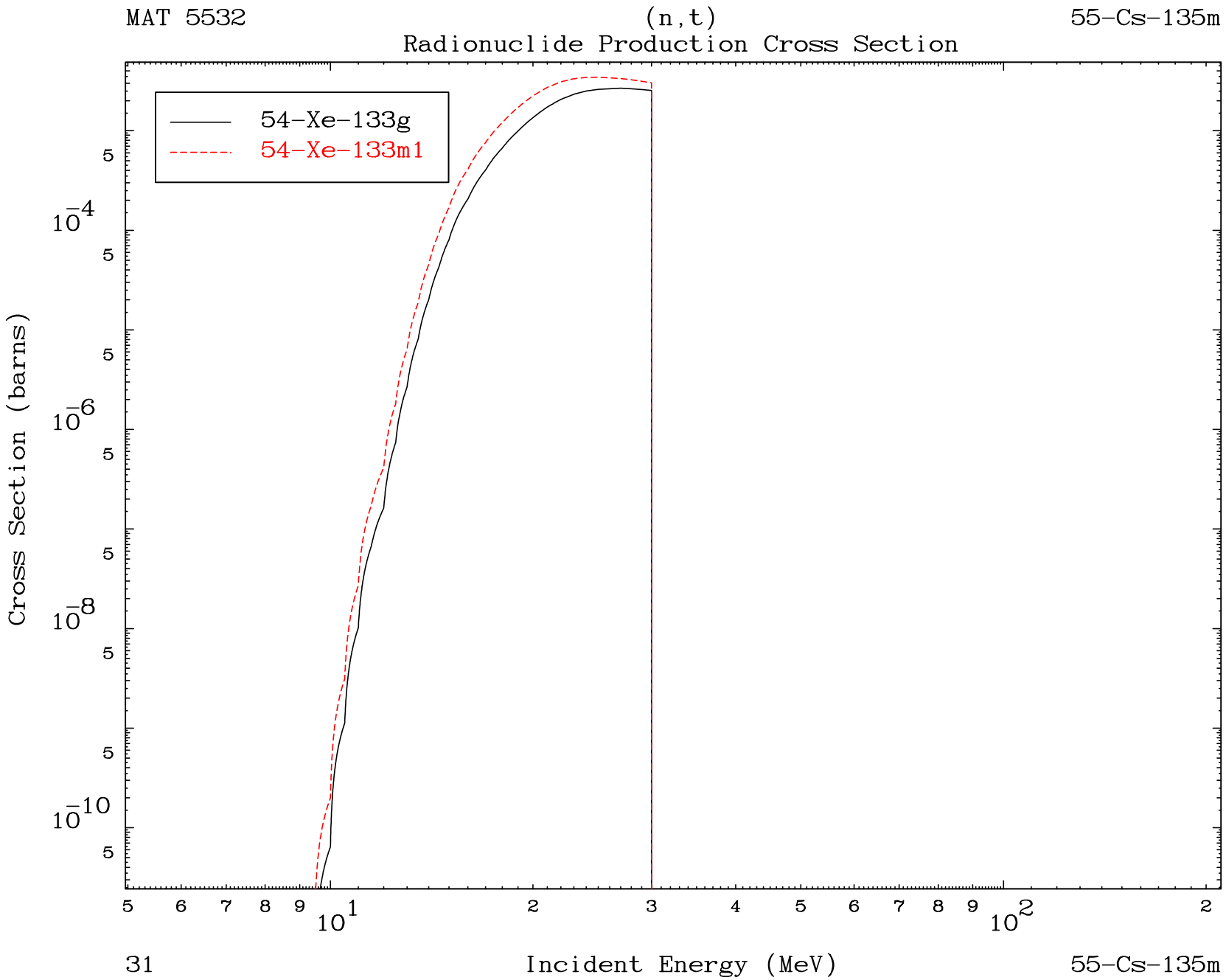

MAT 5532
(n,2n) p
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-133g
54-Xe-133m1
Cross Section (barns)
Incident Energy (MeV)
26
55-Cs-135m

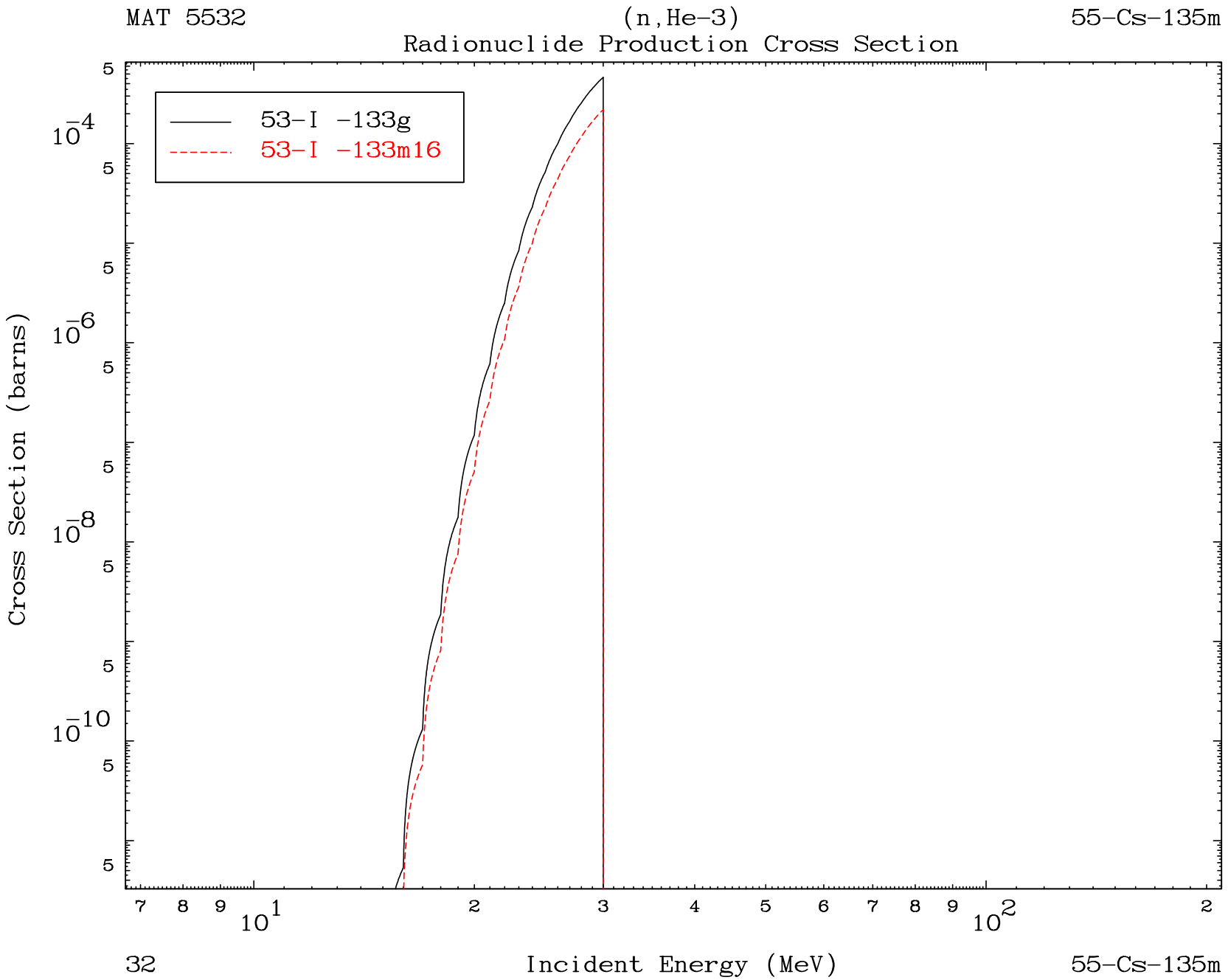

MAT 5532
(n,2n) p
55-Cs-135m
Radionuclide Production Cross Section
Cross Section (barns)
10-6
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
53-I -133g
53-I -133m16
27
Incident Energy (MeV)
55-Cs-135m

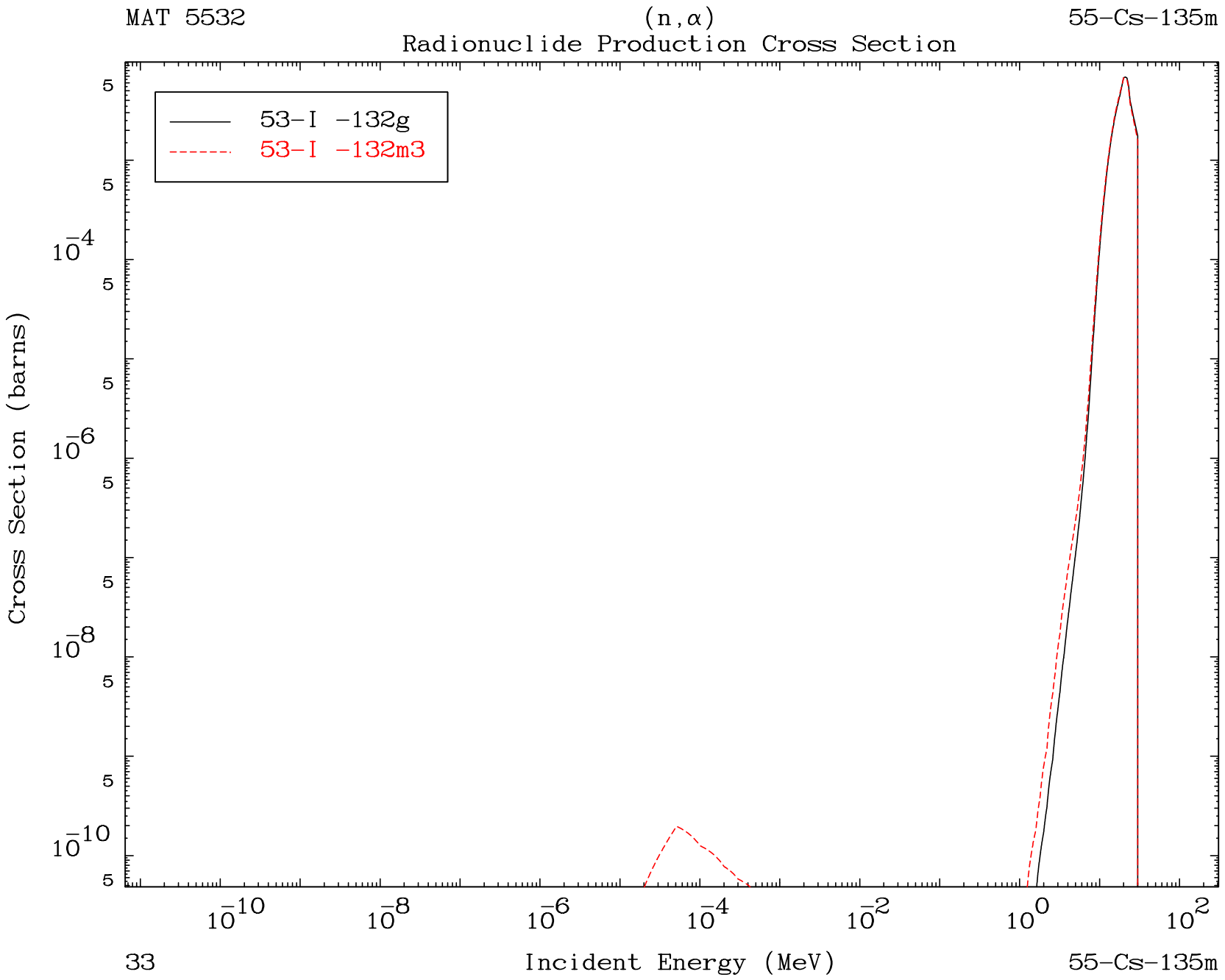

MAT 5532
(n,γ)
55-Cs-135m
Radionuclide Production Cross Section
Cross Section (barns)
10^4
10^2
10^0
10^-2
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
55-Cs-136g
55-Cs-136m2
28
55-Cs-135m

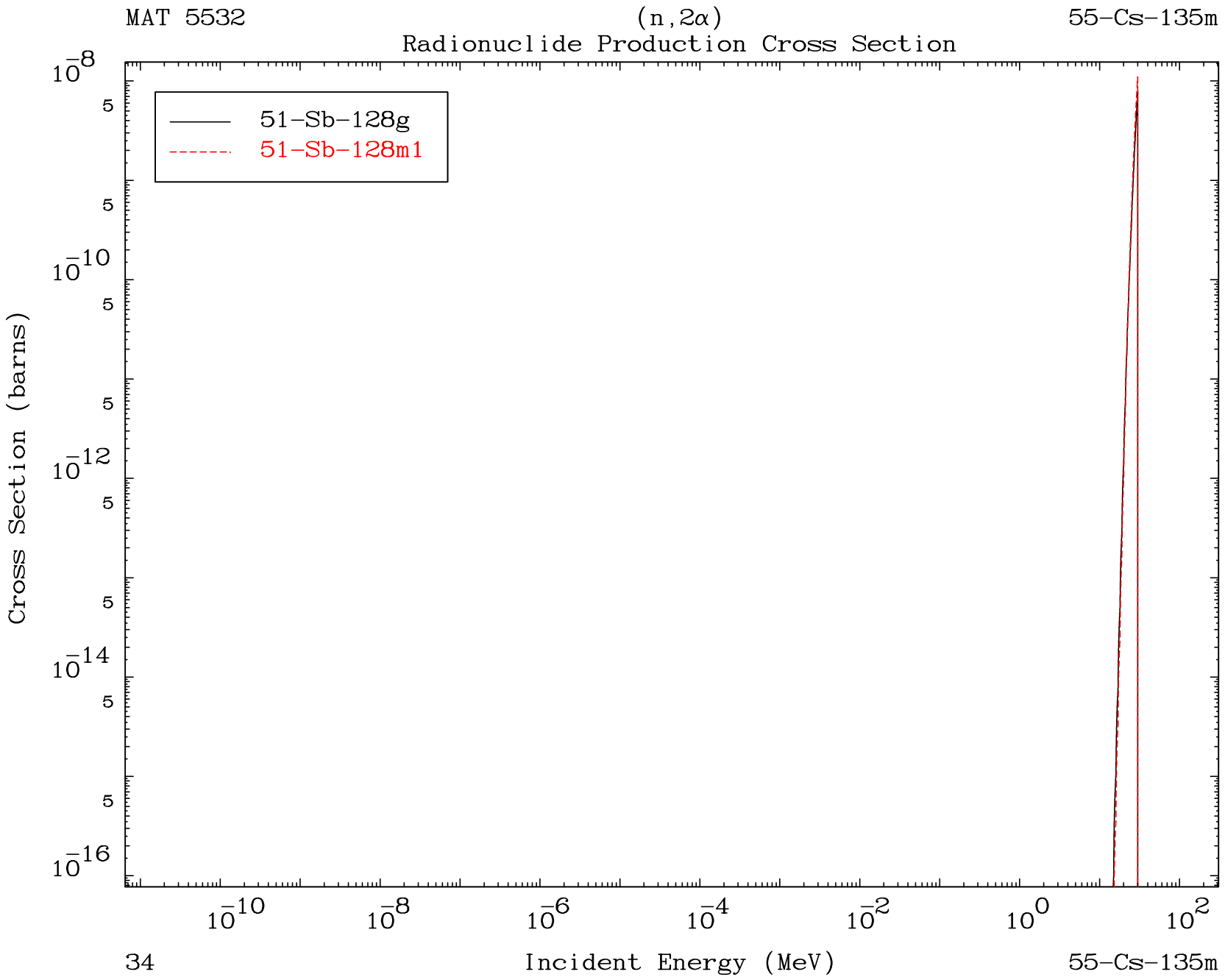

MAT 5532
(n,p)
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-135g
54-Xe-135m2
Cross Section (barns)
Incident Energy (MeV)
29
55-Cs-135m

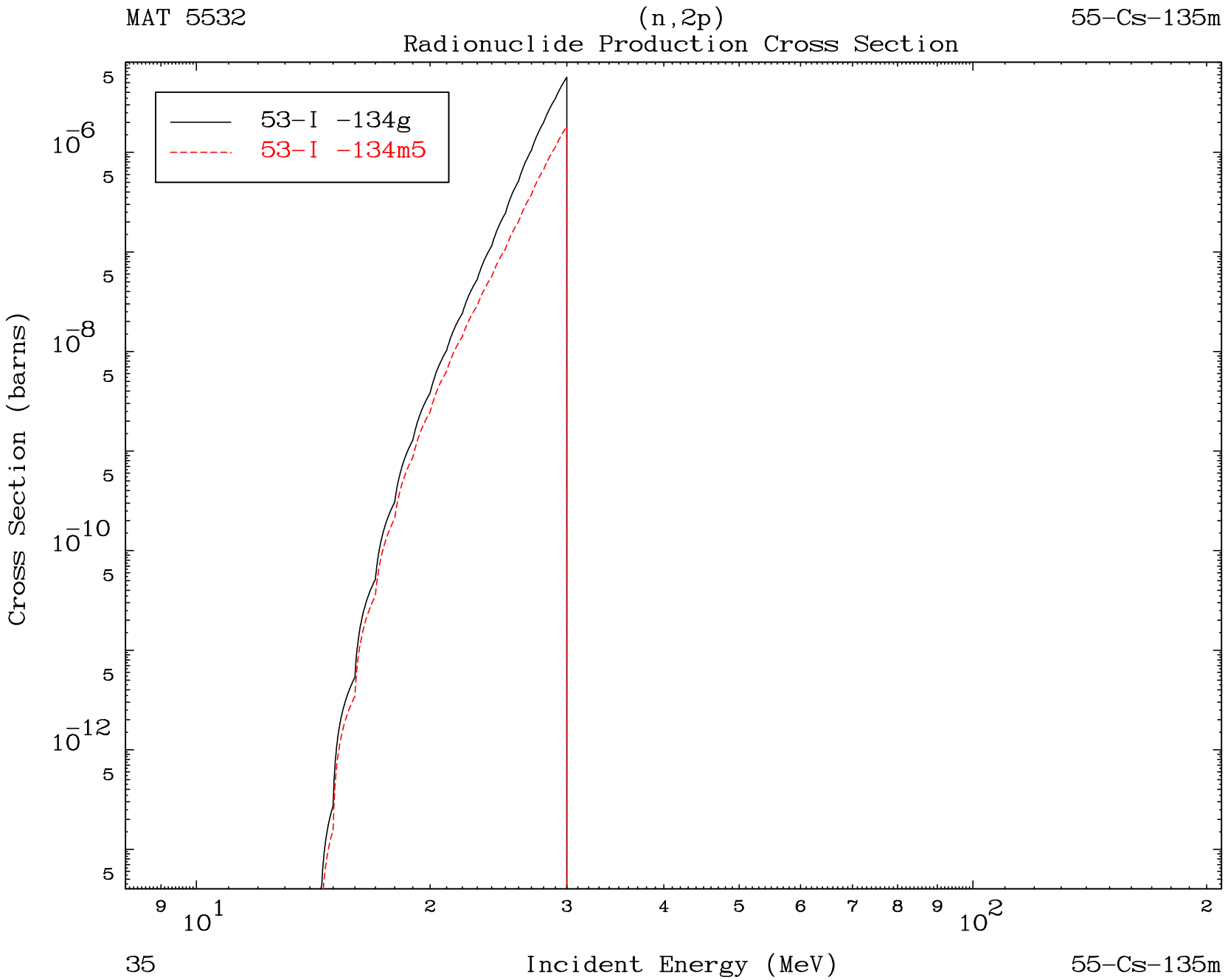

MAT 5532
(n,d)
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-134g
54-Xe-134m7
Cross Section (barns)
Incident Energy (MeV)
30
55-Cs-135m

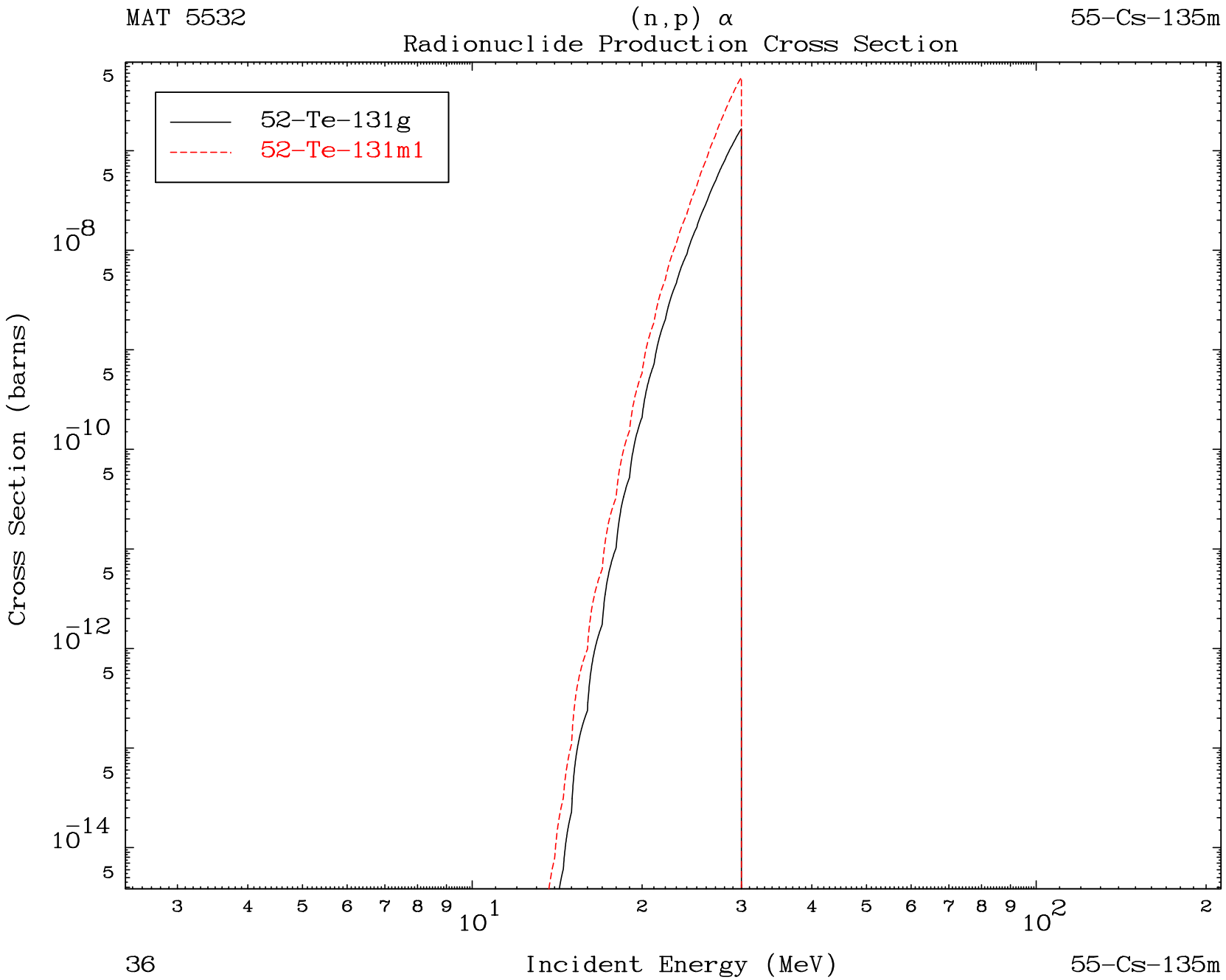

MAT 5532
(n,t)
55-Cs-135m
Radionuclide Production Cross Section
54-Xe-133g
54-Xe-133m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
5
5
5
5
5
5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
31
Incident Energy (MeV)
55-Cs-135m

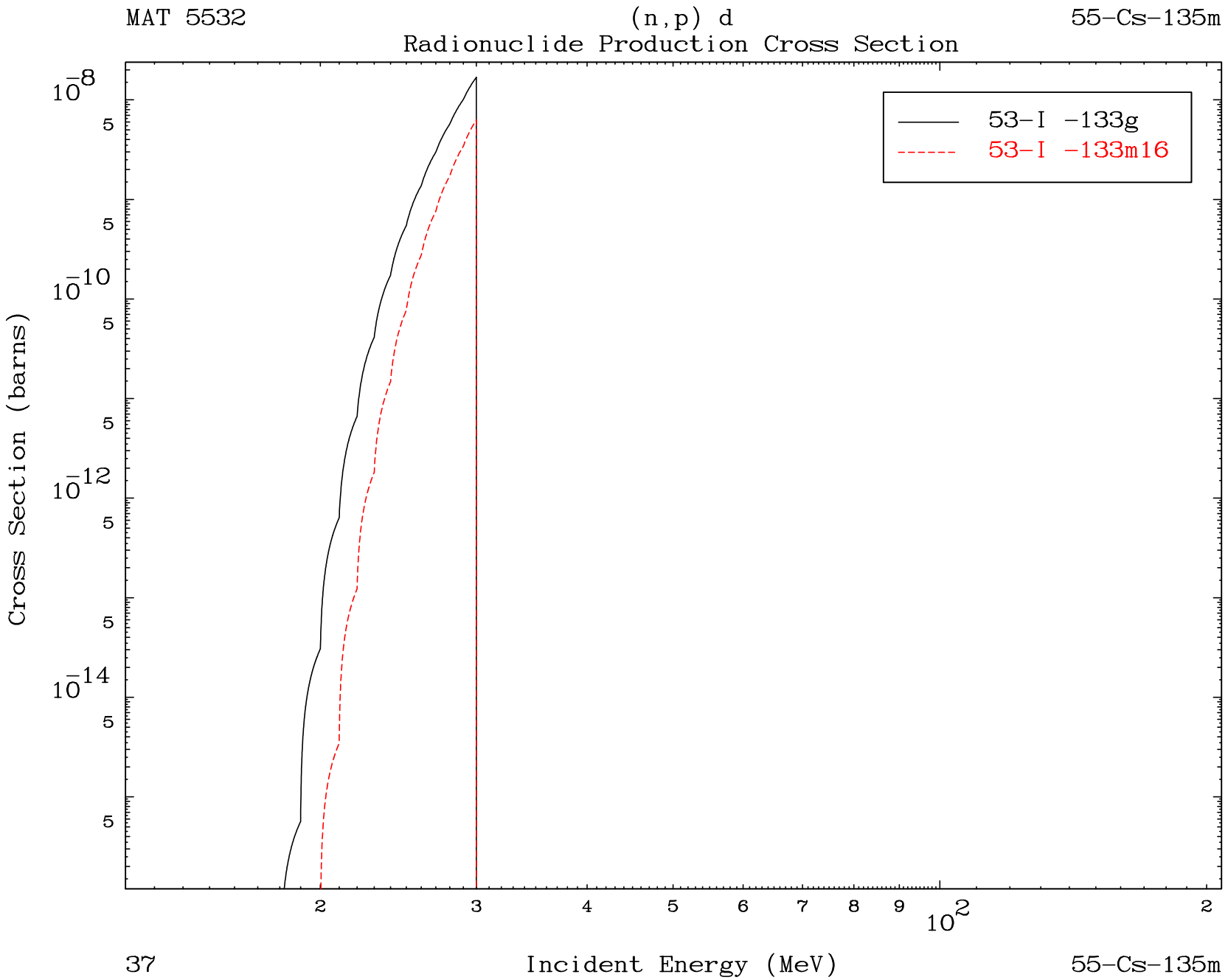

MAT 5532
(n,He-3)
55-Cs-135m
Radionuclide Production Cross Section
53-I -133g
53-I -133m16
Cross Section (barns)
Incident Energy (MeV)
32
55-Cs-135m

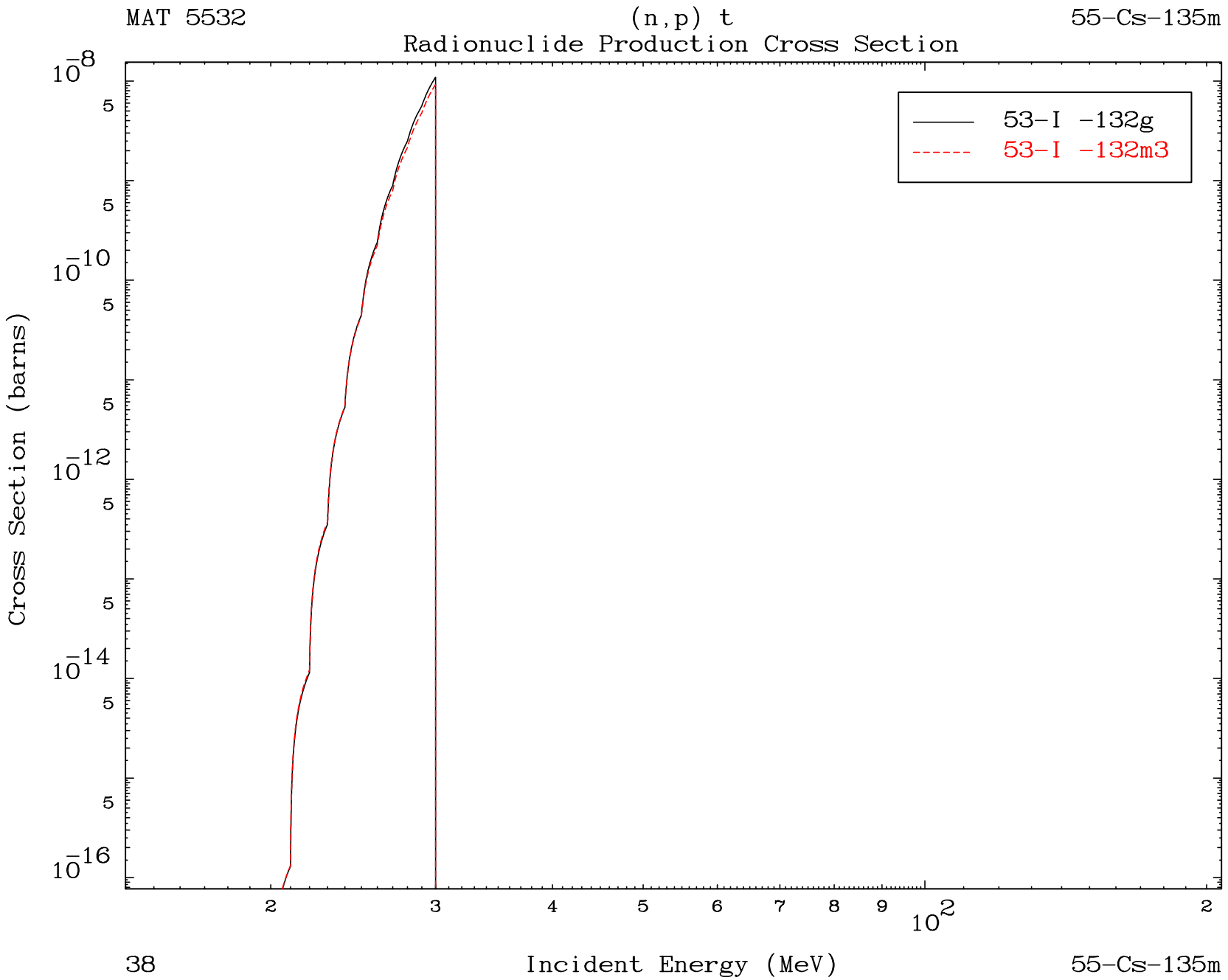

MAT 5532
(n,α)
55-Cs-135m
Radionuclide Production Cross Section
53-I -132g
53-I -132m3
Cross Section (barns)
Incident Energy (MeV)
33
55-Cs-135m


MAT 5532
(n,2α)
55-Cs-135m
Radionuclide Production Cross Section
51-Sb-128g
51-Sb-128m1
Cross Section (barns)
Incident Energy (MeV)
34
55-Cs-135m


MAT 5532
(n,2p)
55-Cs-135m
Radionuclide Production Cross Section
53-I -134g
53-I -134m5
Cross Section (barns)
Incident Energy (MeV)
35
55-Cs-135m


MAT 5532
(n,p) α
55-Cs-135m
Radionuclide Production Cross Section
52-Te-131g
52-Te-131m1
Cross Section (barns)
Incident Energy (MeV)
36
55-Cs-135m


MAT 5532
(n,p) d
55-Cs-135m
Radionuclide Production Cross Section
53-I -133g
53-I -133m16
Cross Section (barns)
Incident Energy (MeV)
37
55-Cs-135m


MAT 5532
(n,p) t
55-Cs-135m
Radionuclide Production Cross Section
53-I -132g
53-I -132m3
Cross Section (barns)
Incident Energy (MeV)
38
55-Cs-135m