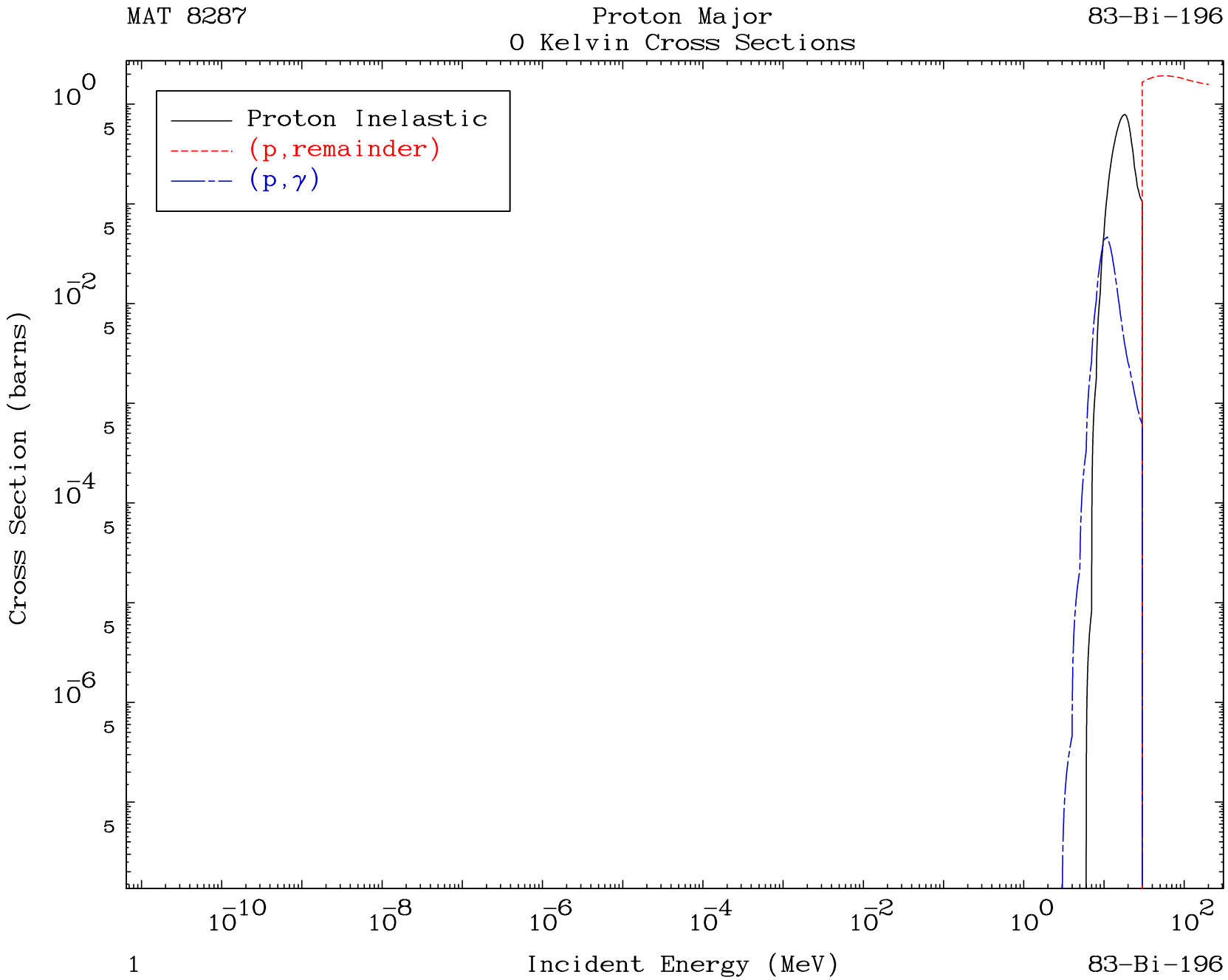
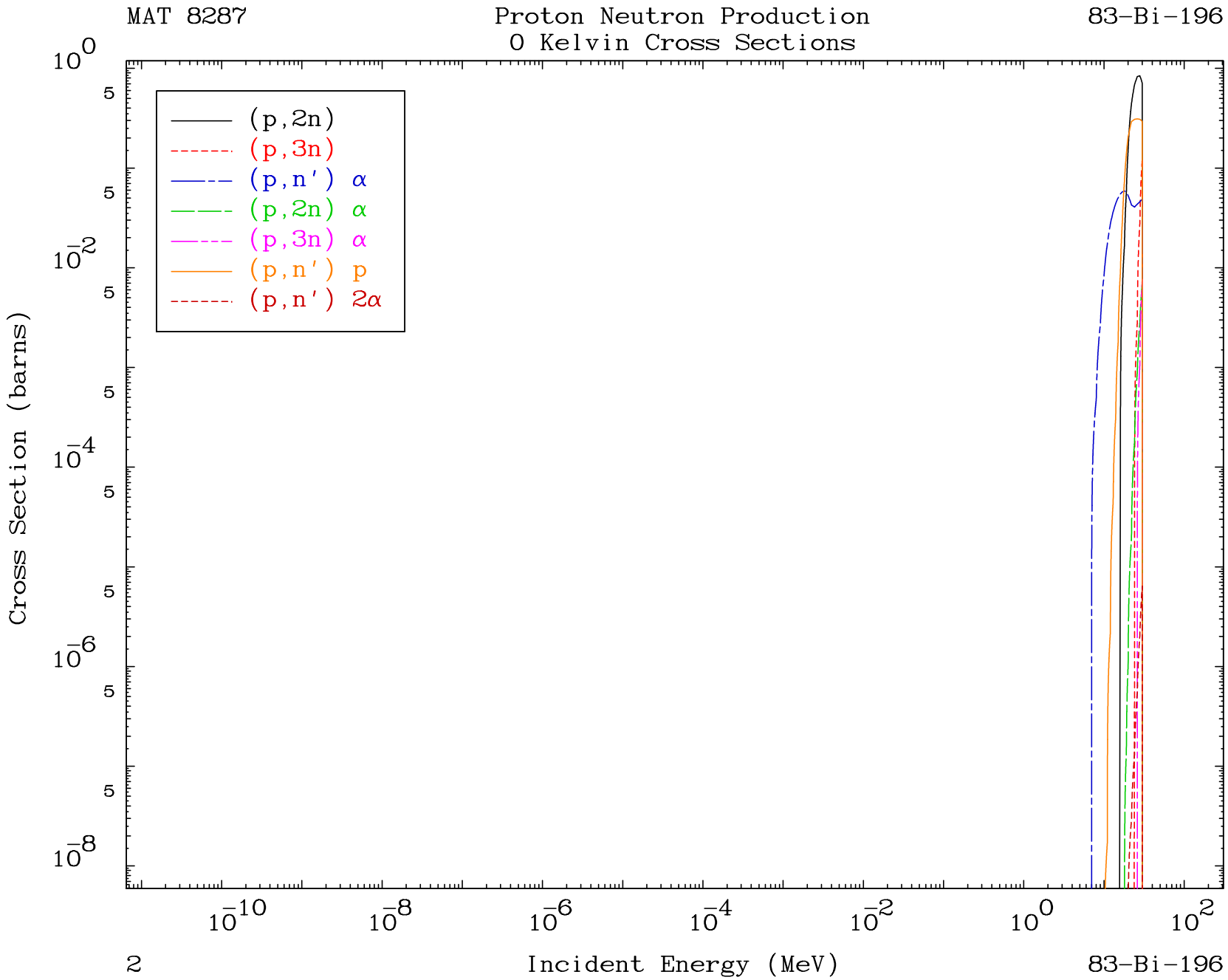
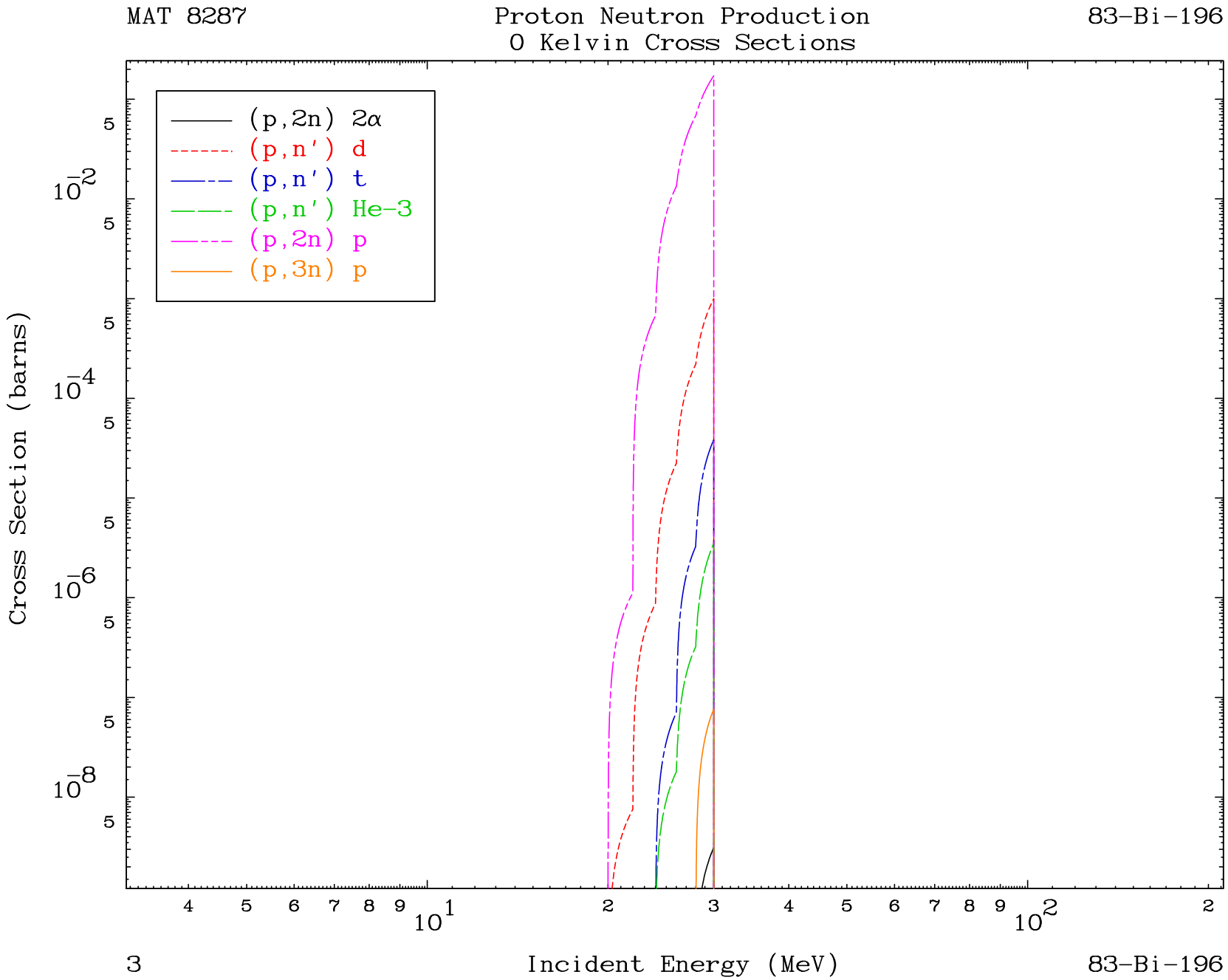
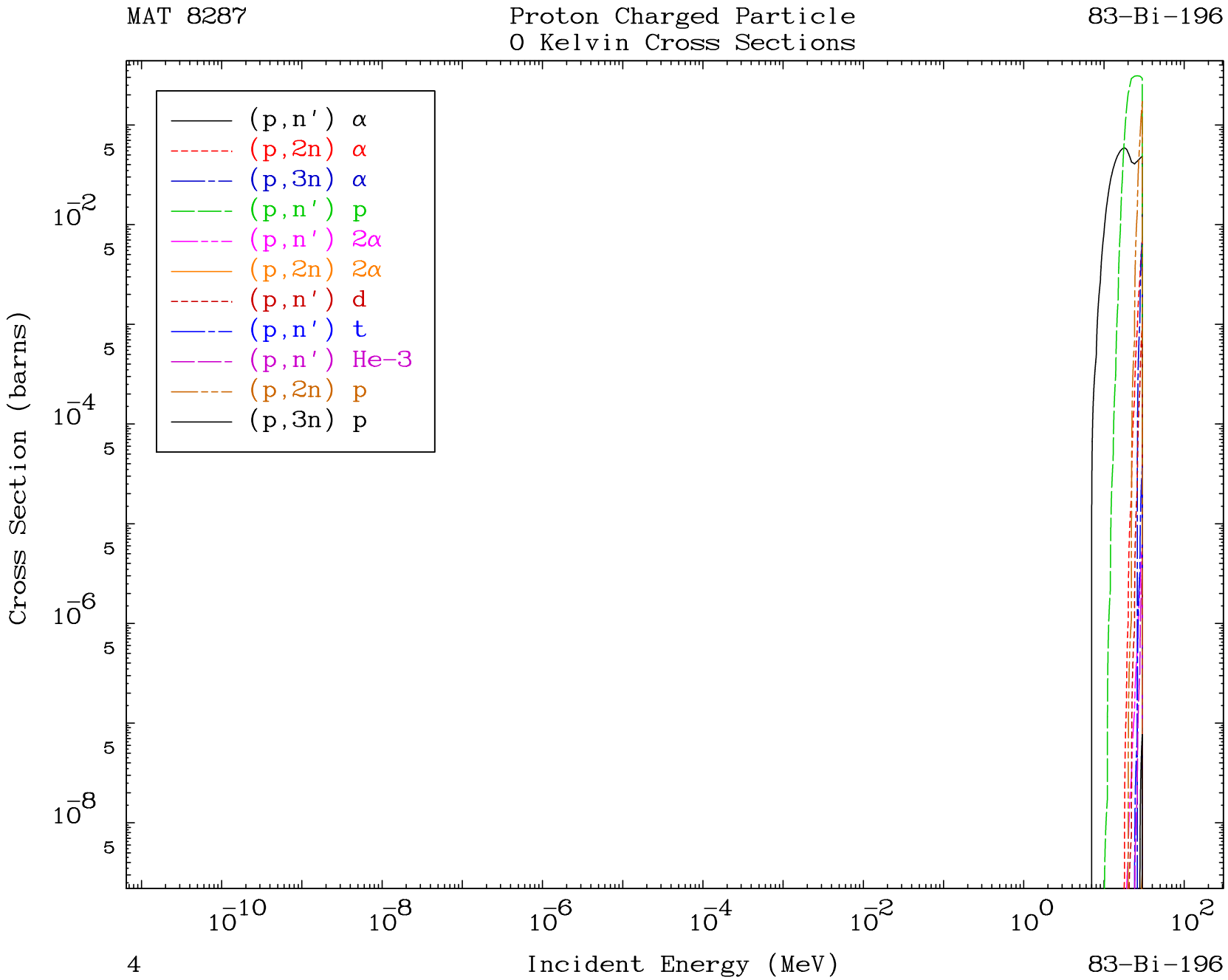
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

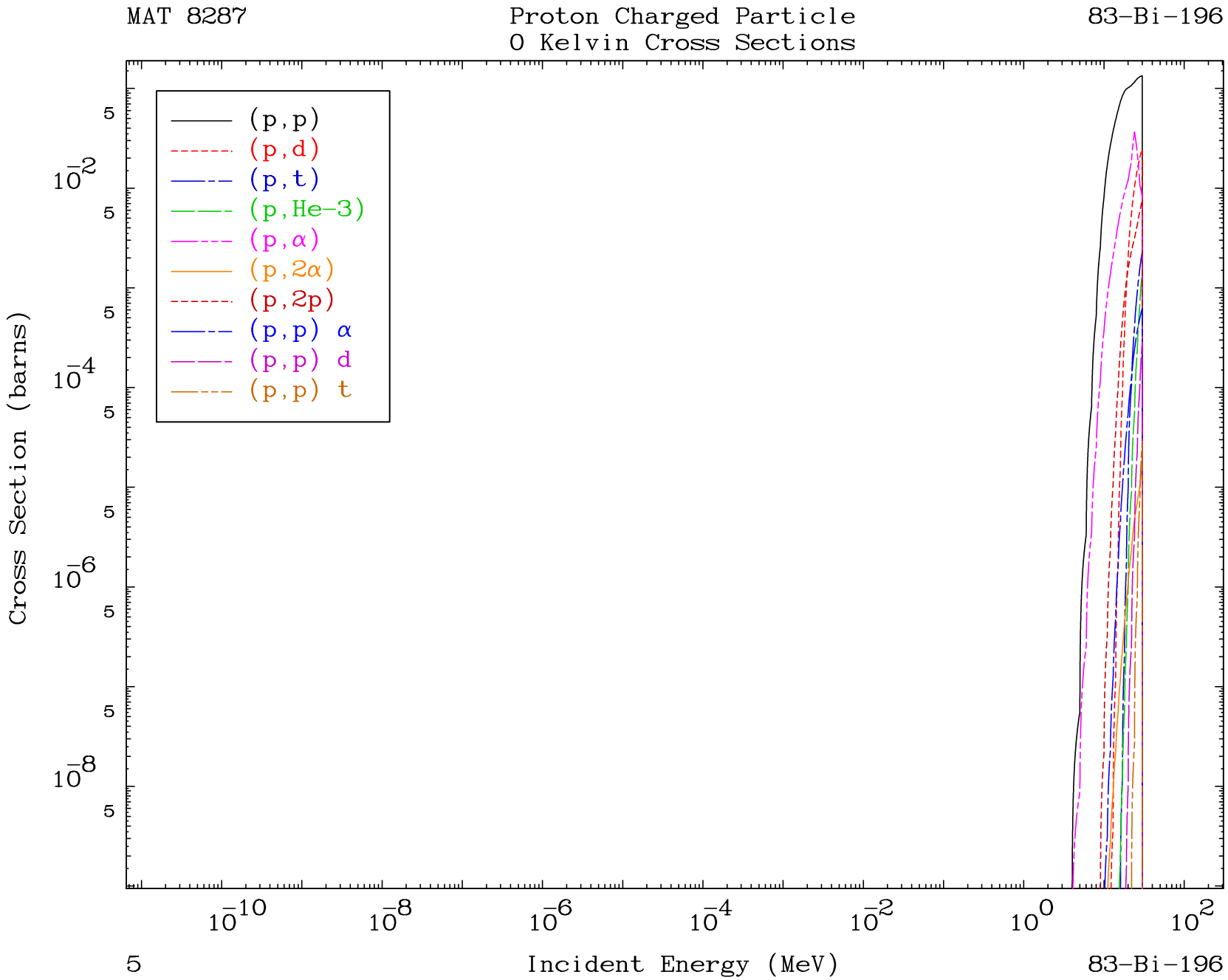
Press Mouse Button to Start

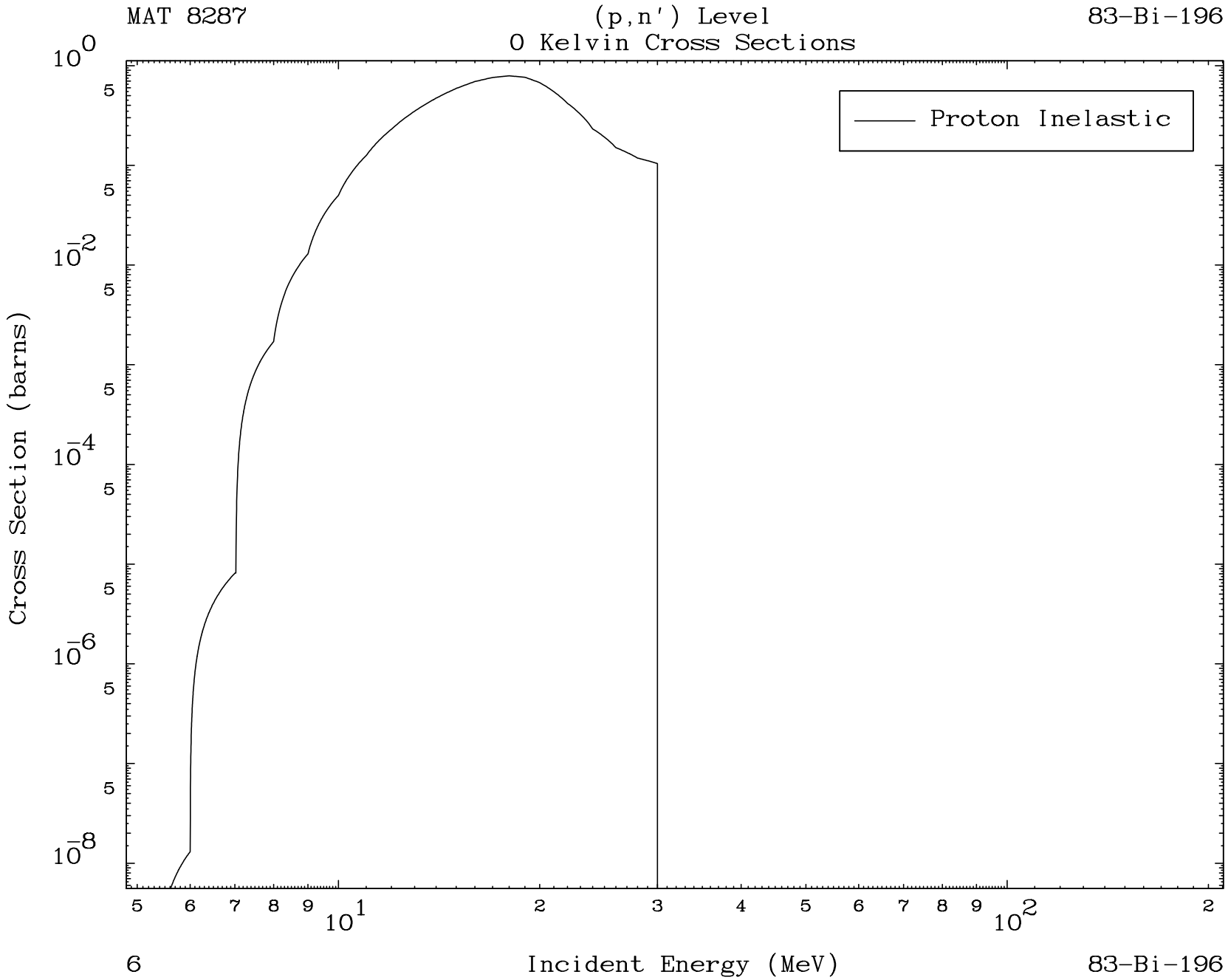

MAT 8287
Proton Major
83-Bi-196
0 Kelvin Cross Sections
Proton Inelastic
(p,remainder)
(p,γ)
Cross Section (barns)
Incident Energy (MeV)
1
83-Bi-196

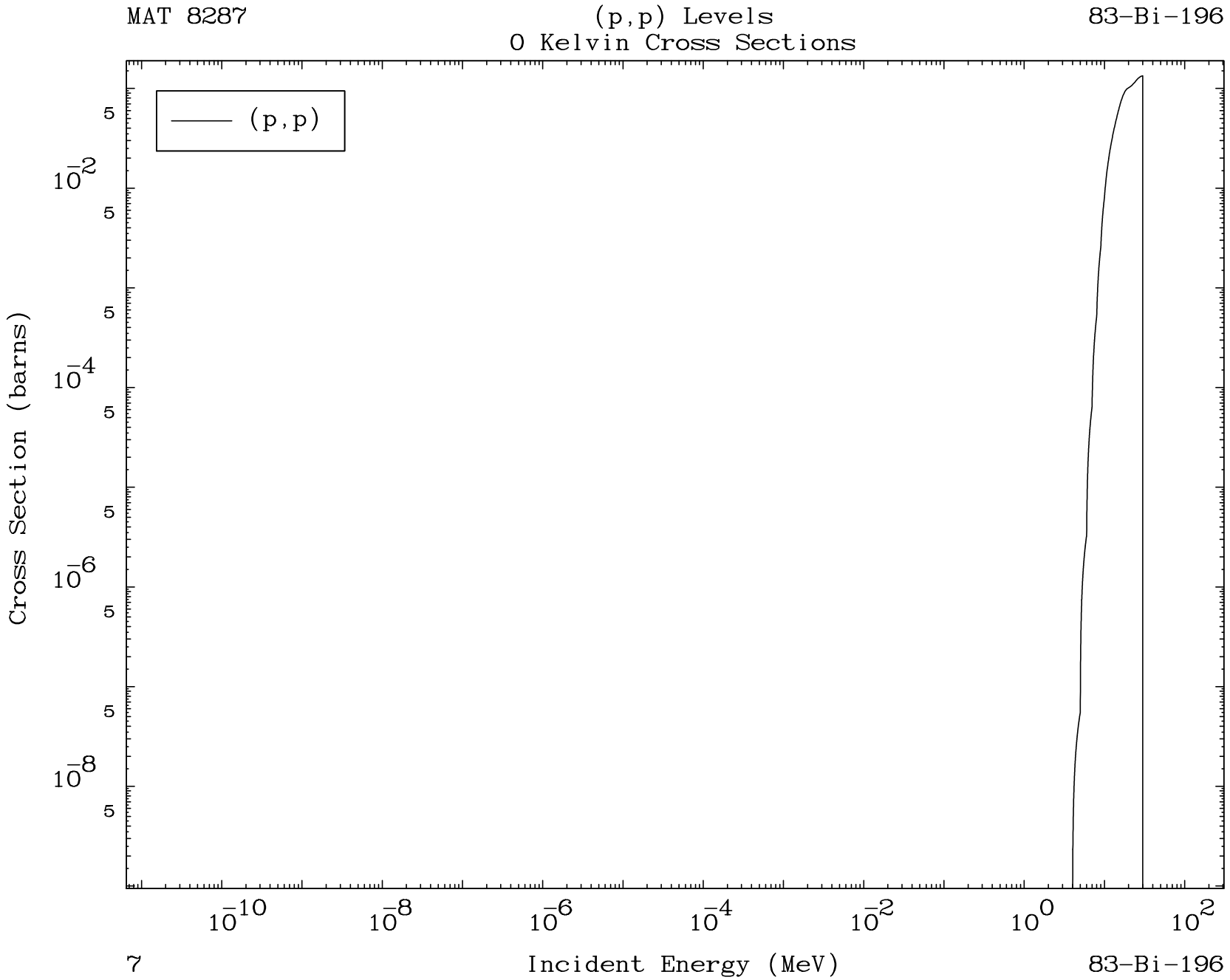

MAT 8287
Proton Neutron Production
0 Kelvin Cross Sections
83-Bi-196
(p,2n)
(p,3n)
(p,n') α
(p,2n) α
(p,3n) α
(p,n') p
(p,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
83-Bi-196

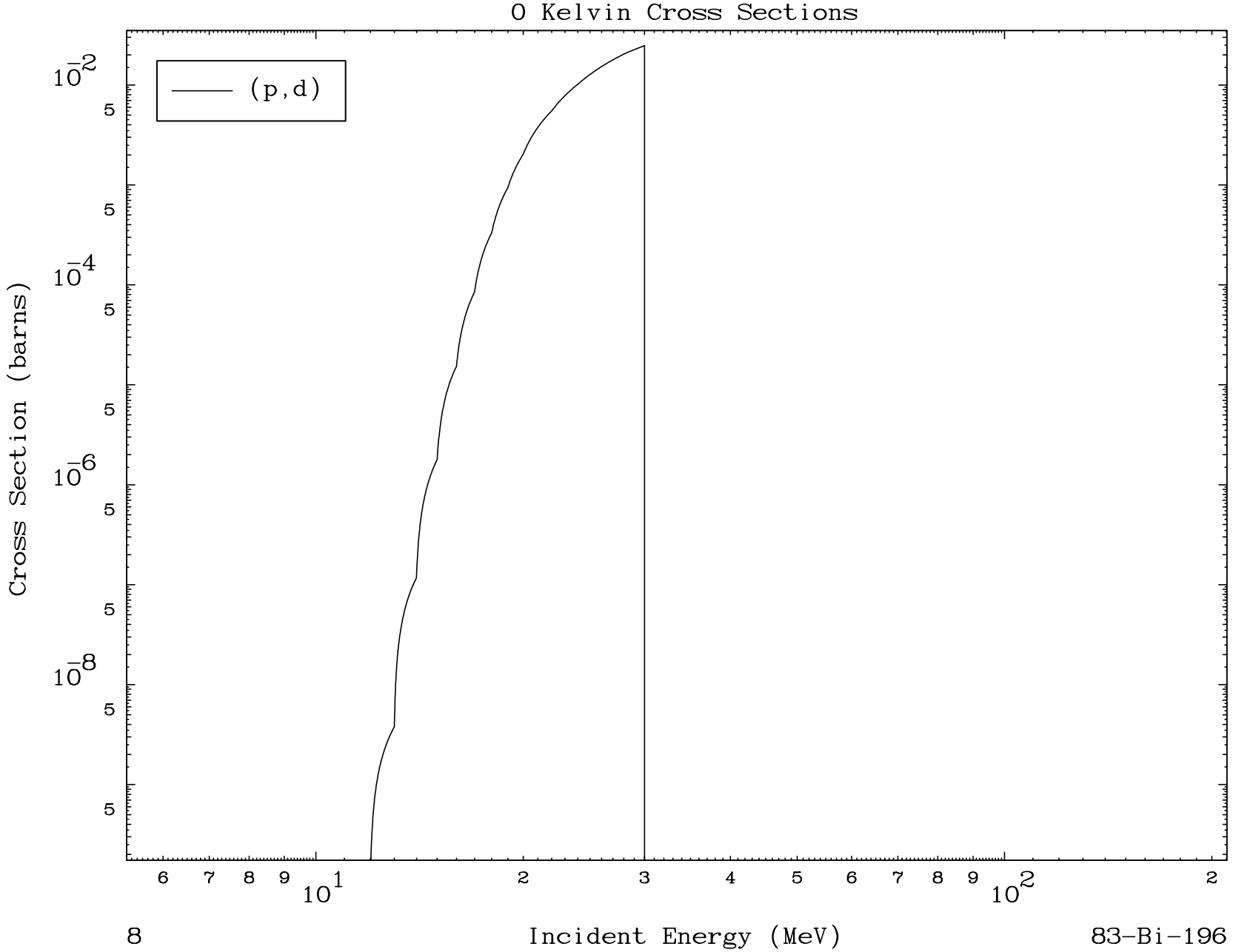

MAT 8287
Proton Neutron Production
0 Kelvin Cross Sections
83-Bi-196
(p,2n) 2α
(p,n') d
(p,n') t
(p,n') He-3
(p,2n) p
(p,3n) p
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
10^1
10^2
Incident Energy (MeV)
3
83-Bi-196

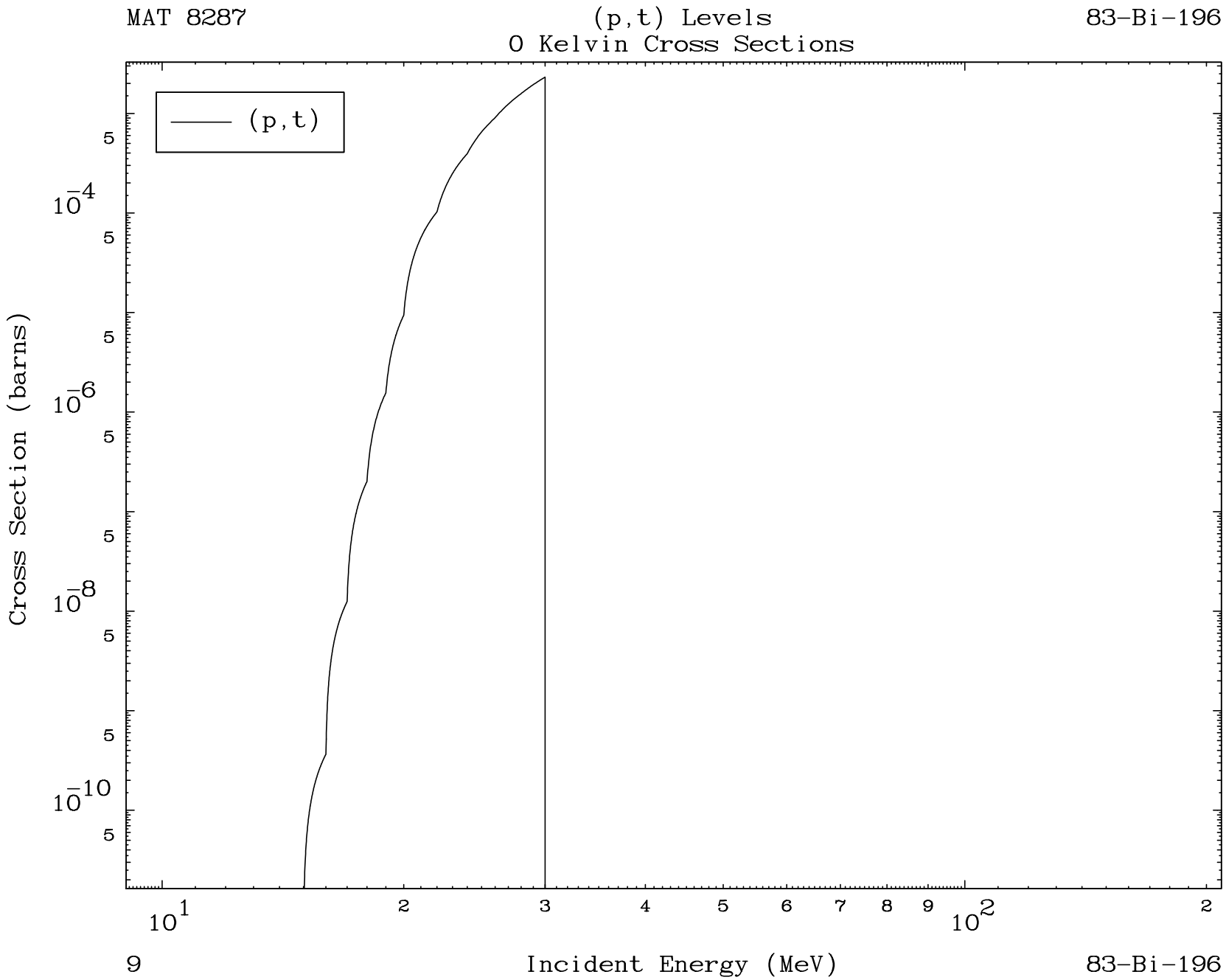

MAT 8287
Proton Charged Particle
0 Kelvin Cross Sections
83-Bi-196
(p,n') α
(p,2n) α
(p,3n) α
(p,n') p
(p,n') 2α
(p,2n) 2α
(p,n') d
(p,n') t
(p,n') He-3
(p,2n) p
(p,3n) p
Cross Section (barns)
Incident Energy (MeV)
4
83-Bi-196

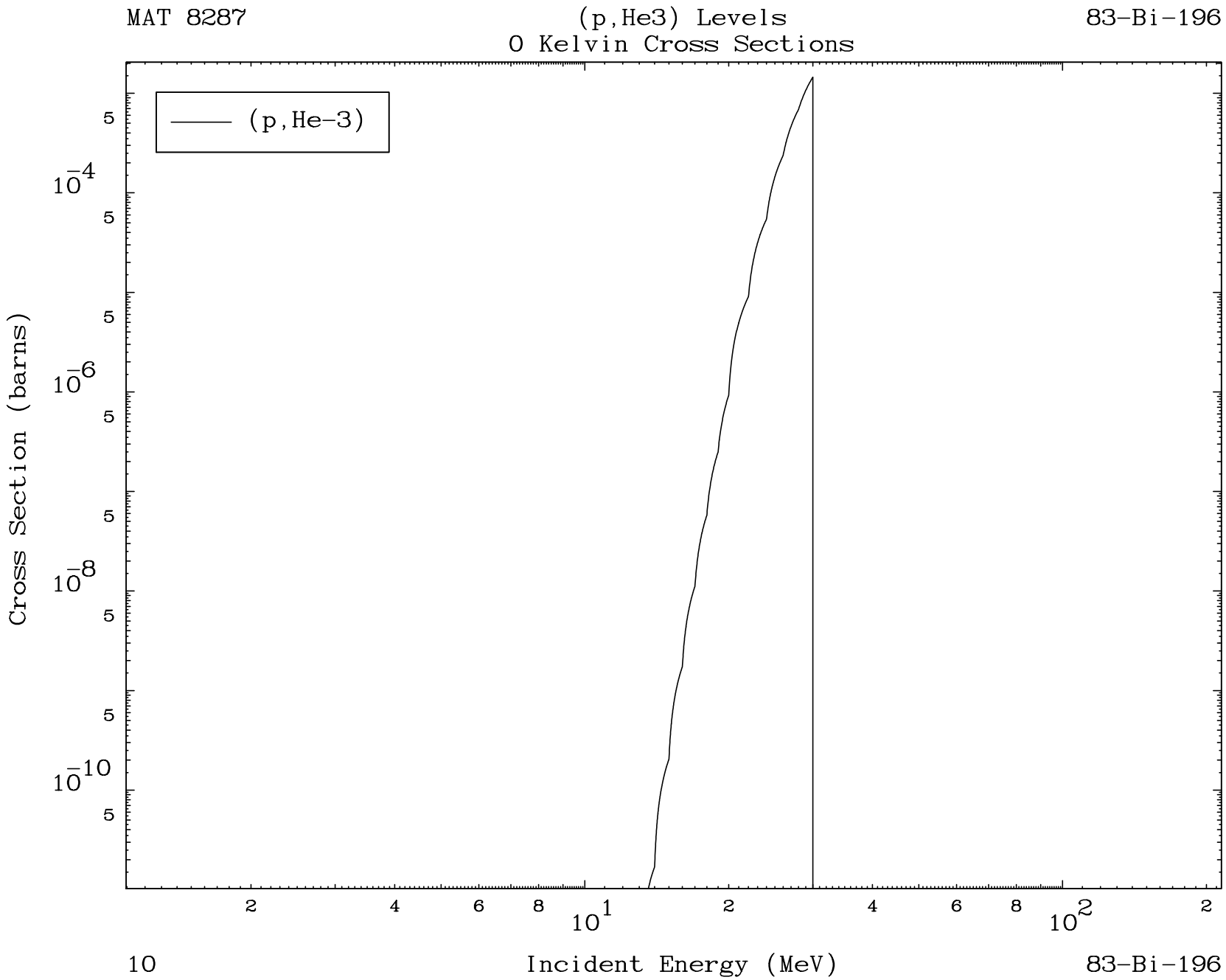

MAT 8287
Proton Charged Particle
0 Kelvin Cross Sections
83-Bi-196
(p,p)
(p,d)
(p,t)
(p,He-3)
(p,α)
(p,2α)
(p,2p)
(p,p) α
(p,p) d
(p,p) t
Cross Section (barns)
Incident Energy (MeV)
83-Bi-196

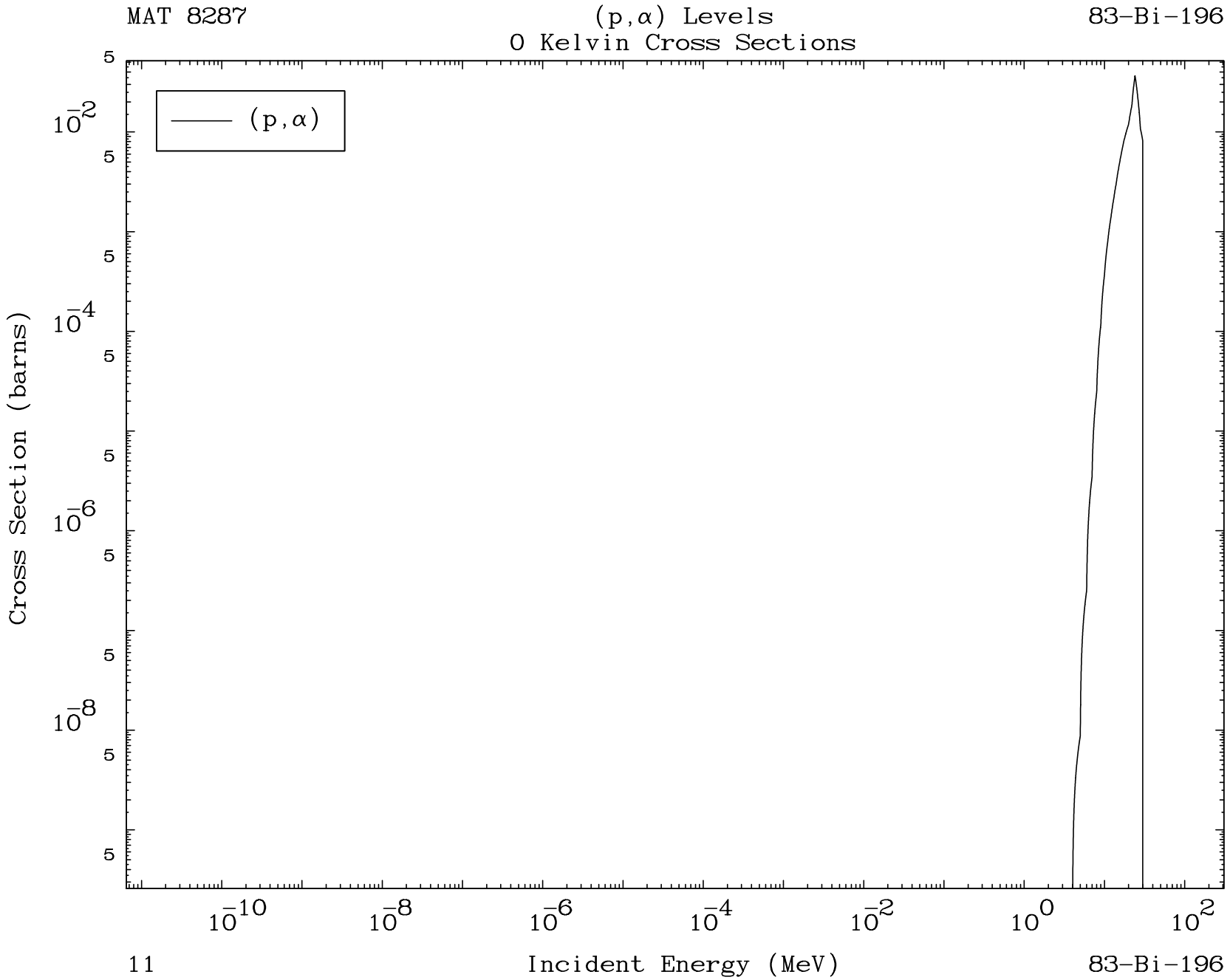

MAT 8287
(p,n') Level
83-Bi-196
0 Kelvin Cross Sections
Proton Inelastic
Cross Section (barns)
Incident Energy (MeV)
6
83-Bi-196

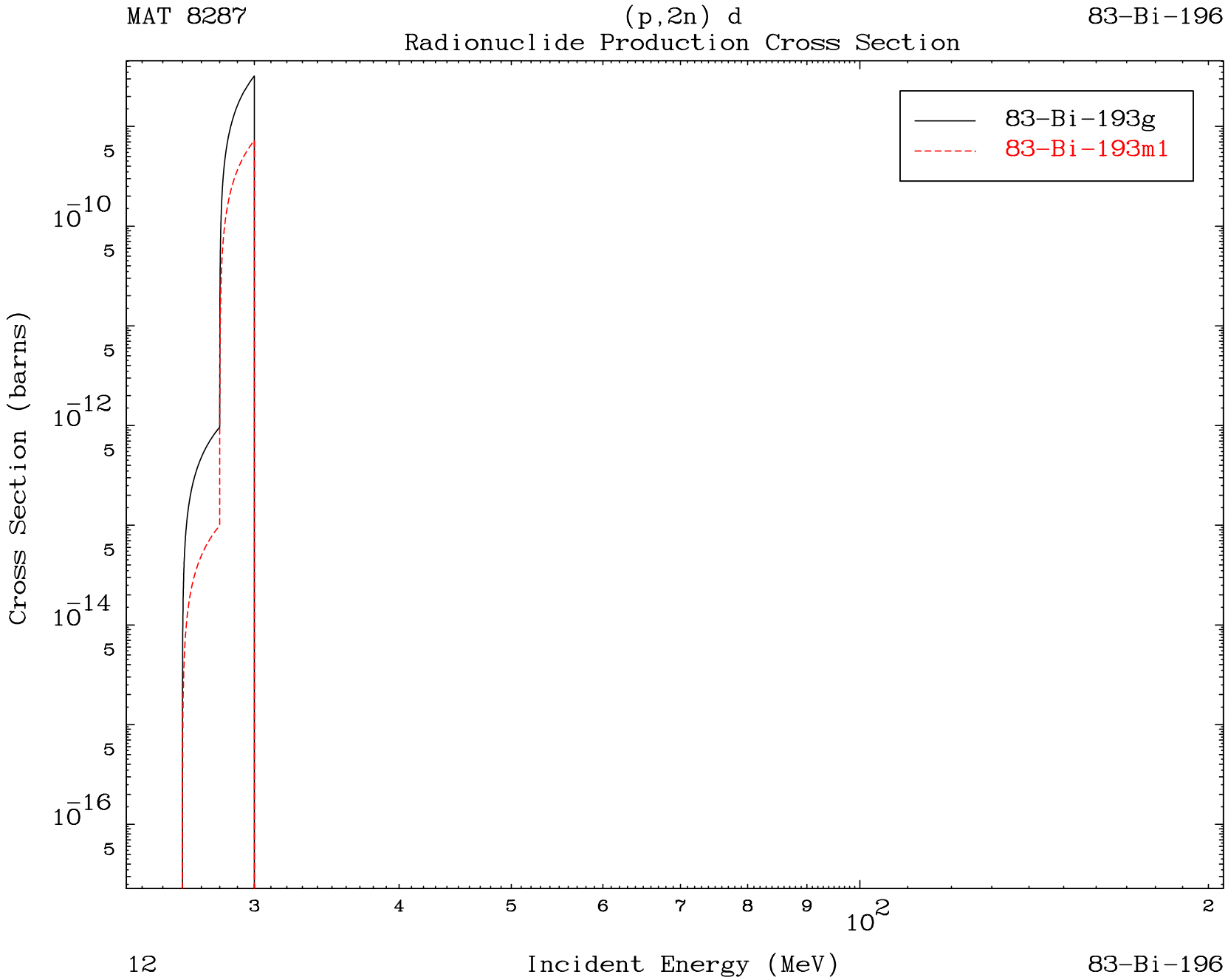

MAT 8287
(p,p) Levels
83-Bi-196
0 Kelvin Cross Sections
(p,p)
Cross Section (barns)
Incident Energy (MeV)
7
83-Bi-196

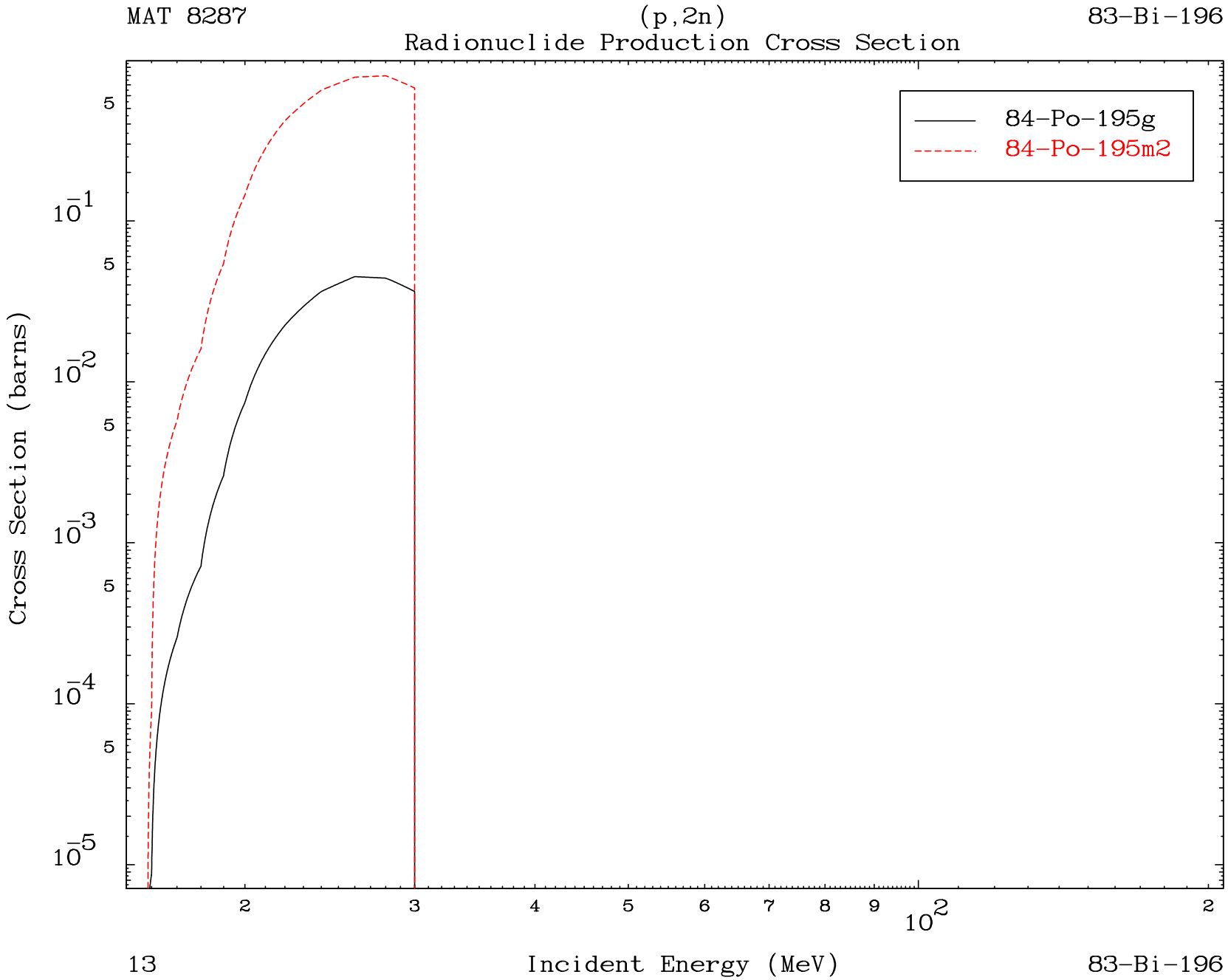

0 Kelvin Cross Sections
(p,d)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)

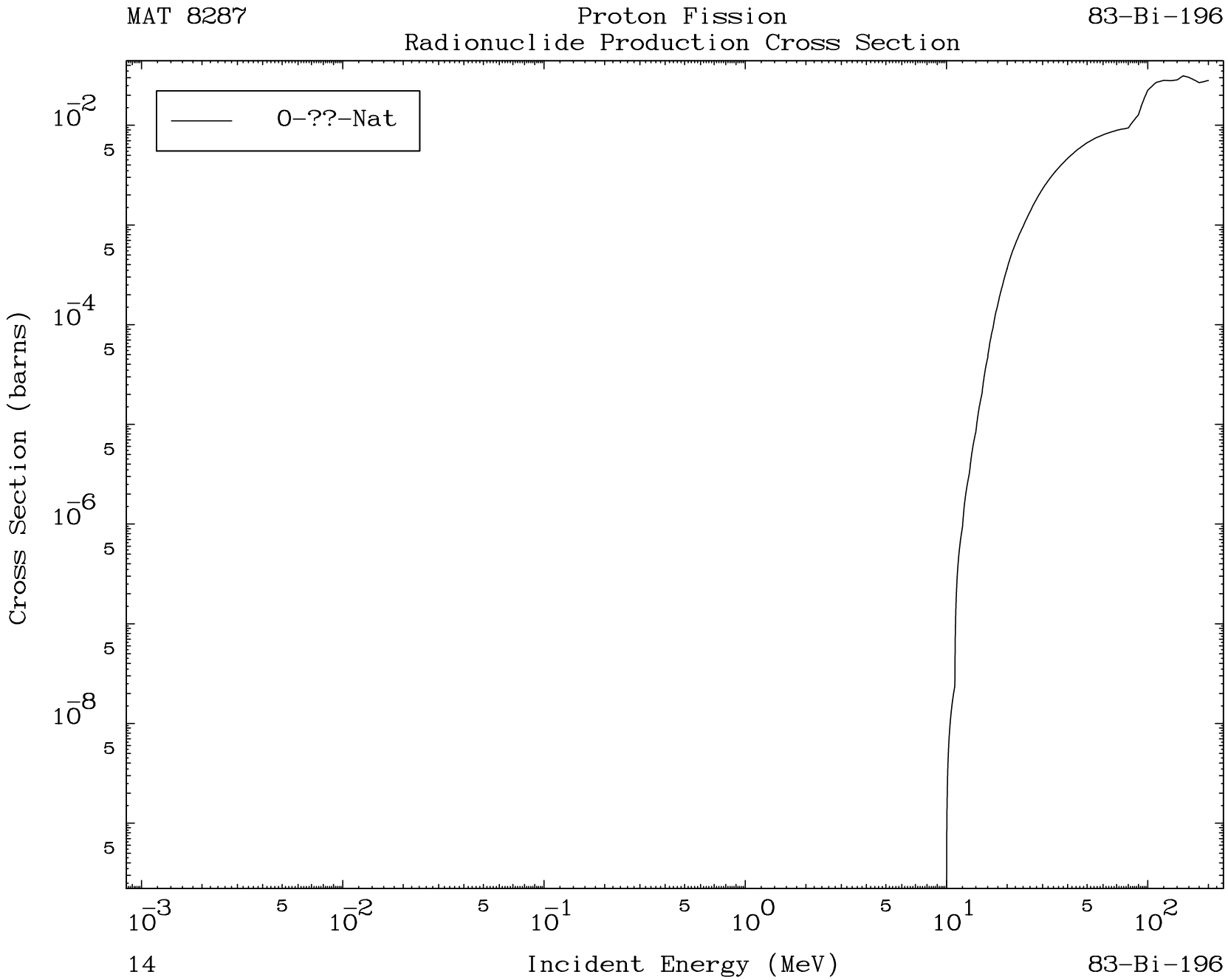

MAT 8287
(p,t) Levels
83-Bi-196
0 Kelvin Cross Sections
(p,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
101
2
3
4
5
6
7
8
9
102
2
Incident Energy (MeV)
9
83-Bi-196

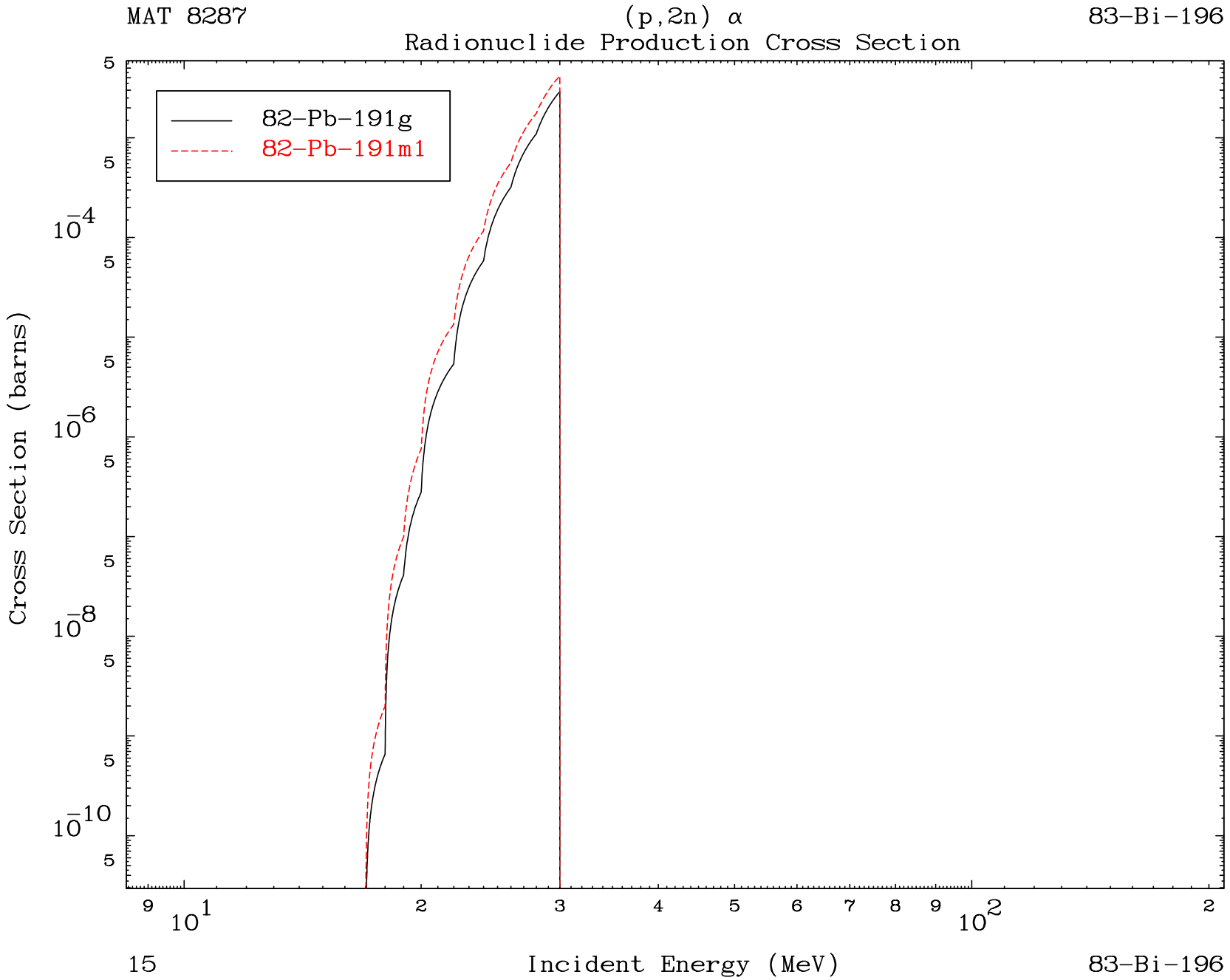

MAT 8287
(p,He3) Levels
83-Bi-196
0 Kelvin Cross Sections
(p,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
4
6
8
10^1
10^2
10
Incident Energy (MeV)
83-Bi-196

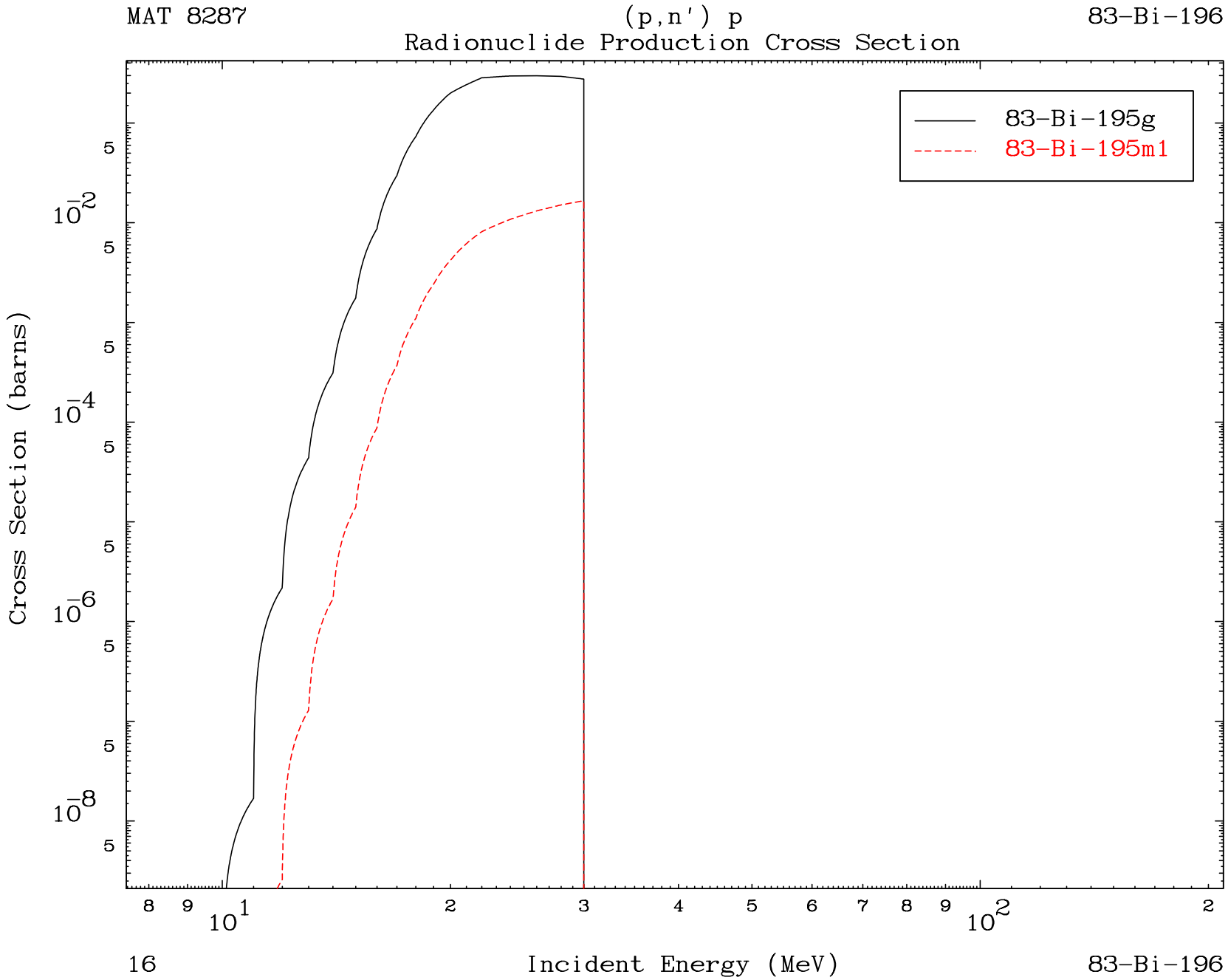

MAT 8287
(p,α) Levels
83-Bi-196
0 Kelvin Cross Sections
(p,α)
Cross Section (barns)
Incident Energy (MeV)
11
83-Bi-196

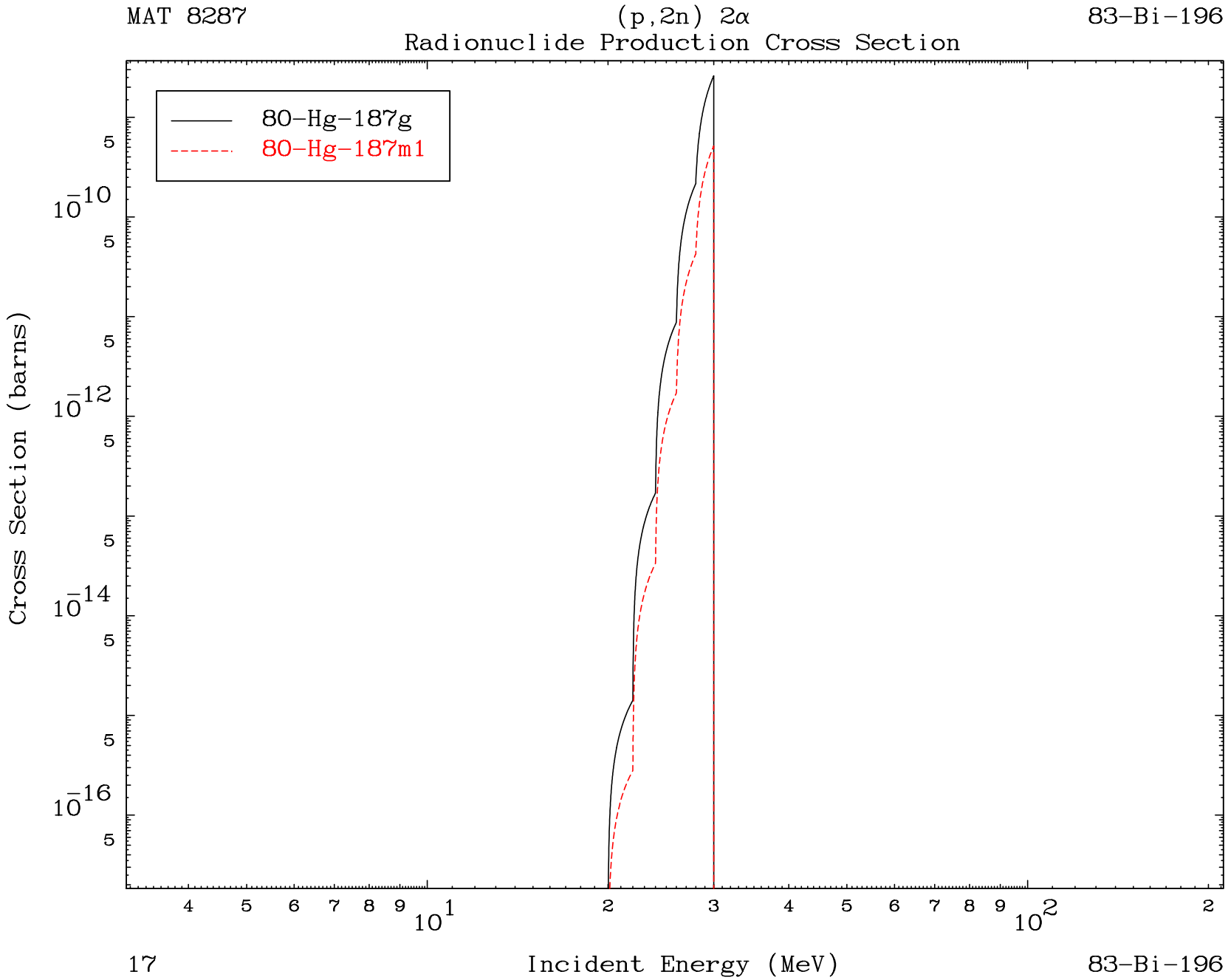

MAT 8287
(p,2n) d
83-Bi-196
Radionuclide Production Cross Section
83-Bi-193g
83-Bi-193m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
3
4
6
7
8
9
10^2
2
12
Incident Energy (MeV)
83-Bi-196

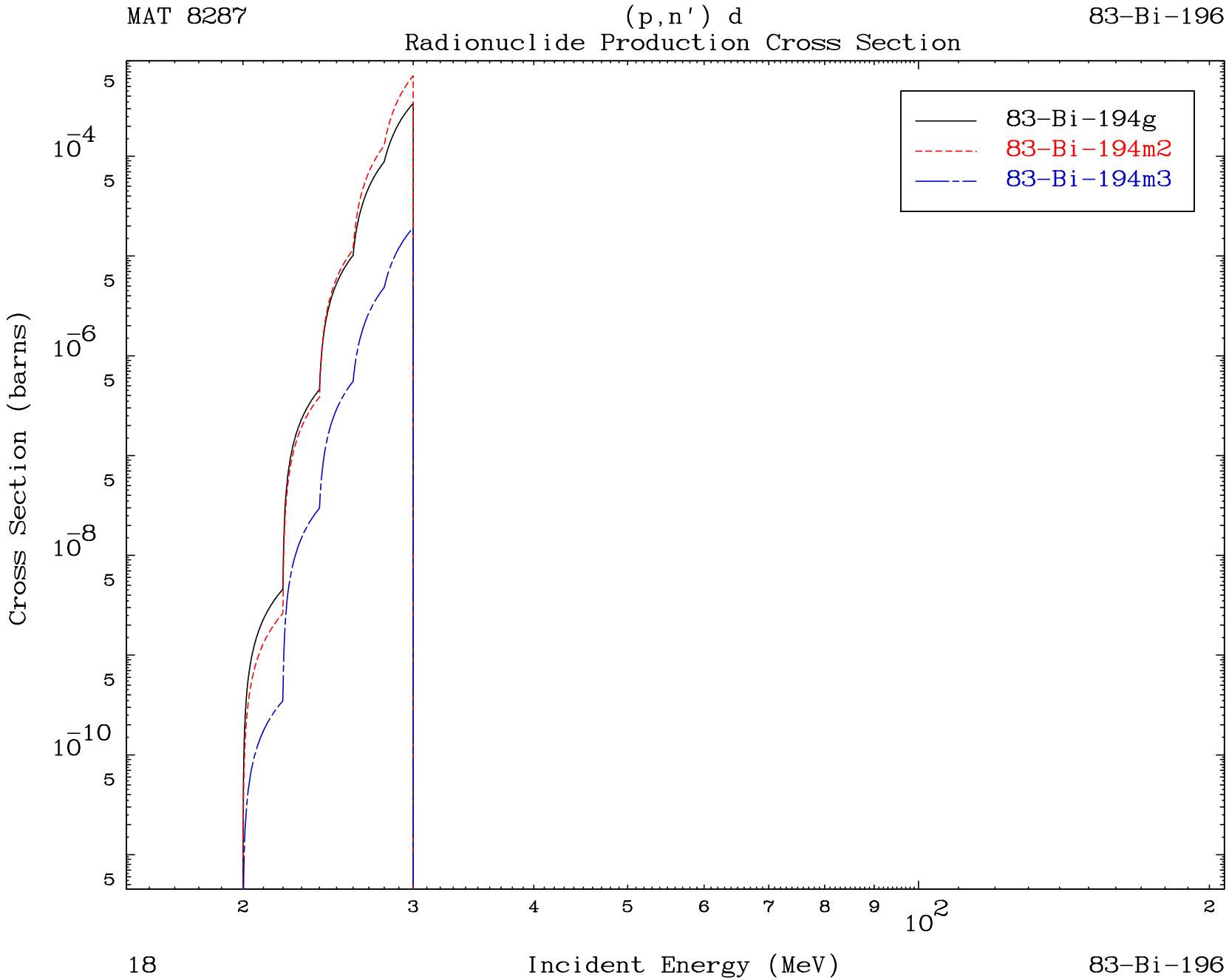

MAT 8287
(p,2n)
83-Bi-196
Radionuclide Production Cross Section
84-Po-195g
84-Po-195m2
Cross Section (barns)
Incident Energy (MeV)
13
83-Bi-196

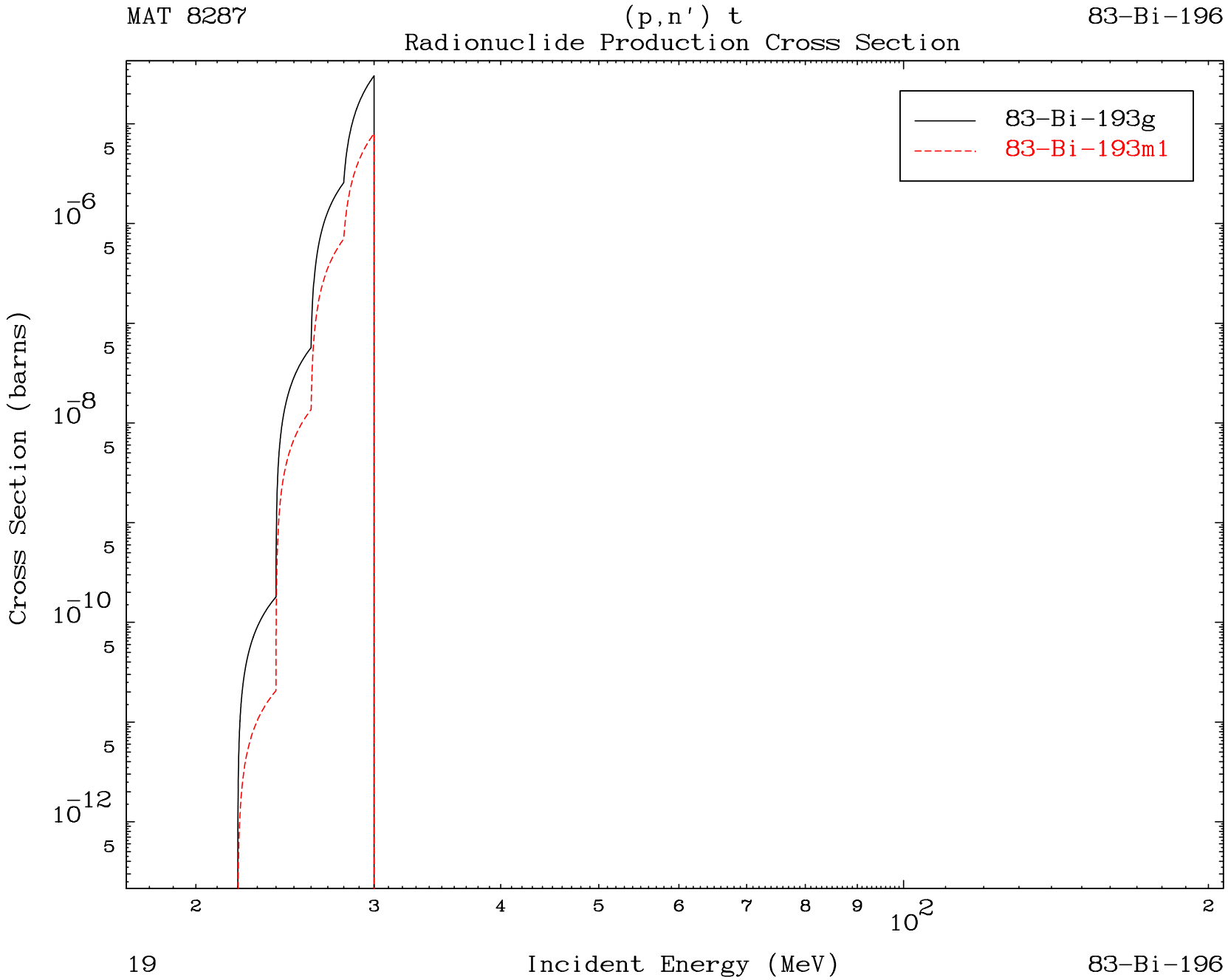

MAT 8287
Proton Fission
83-Bi-196
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
14
83-Bi-196

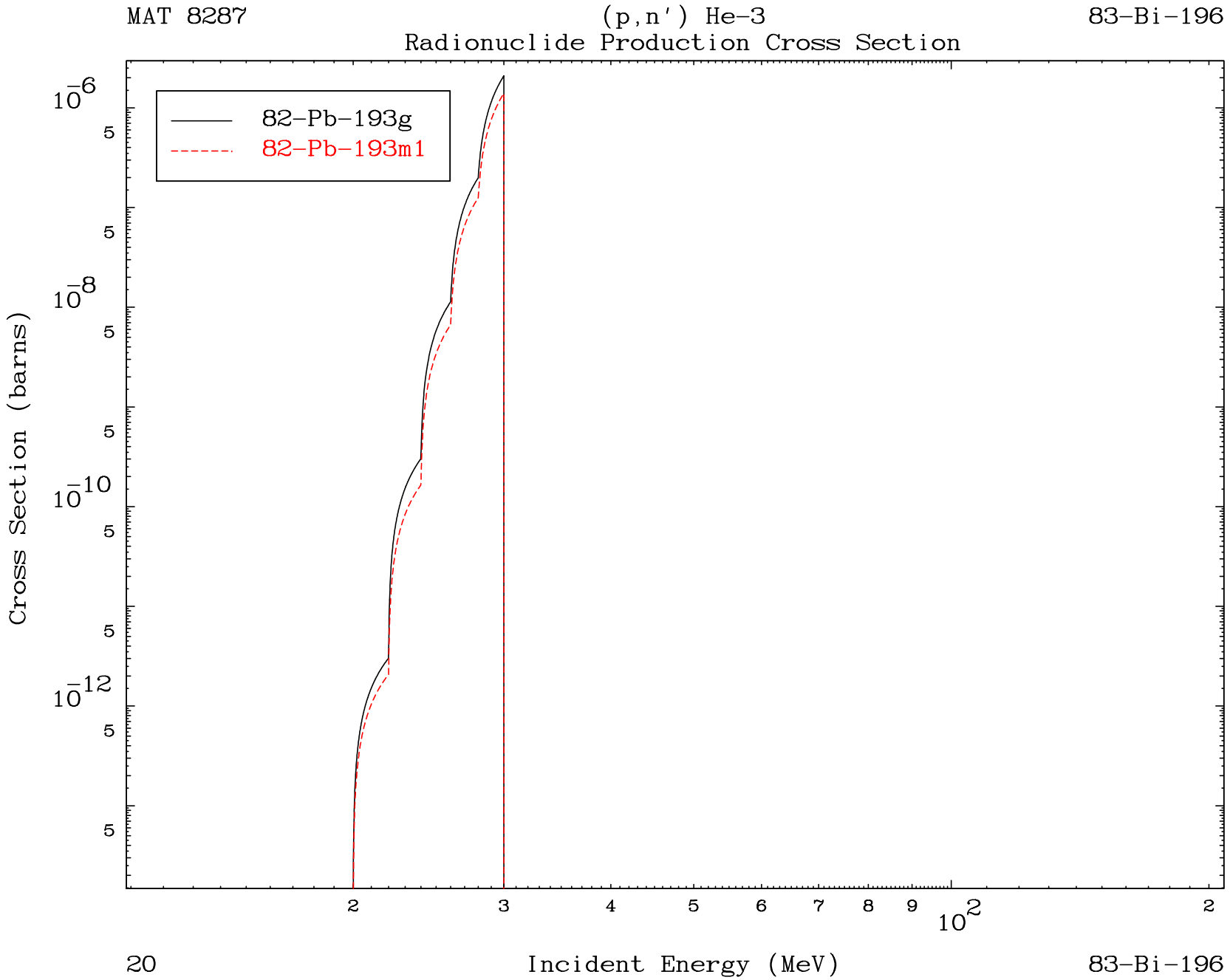

MAT 8287
(p,2n) α
83-Bi-196
Radionuclide Production Cross Section
82-Pb-191g
82-Pb-191m1
Cross Section (barns)
Incident Energy (MeV)
15
83-Bi-196

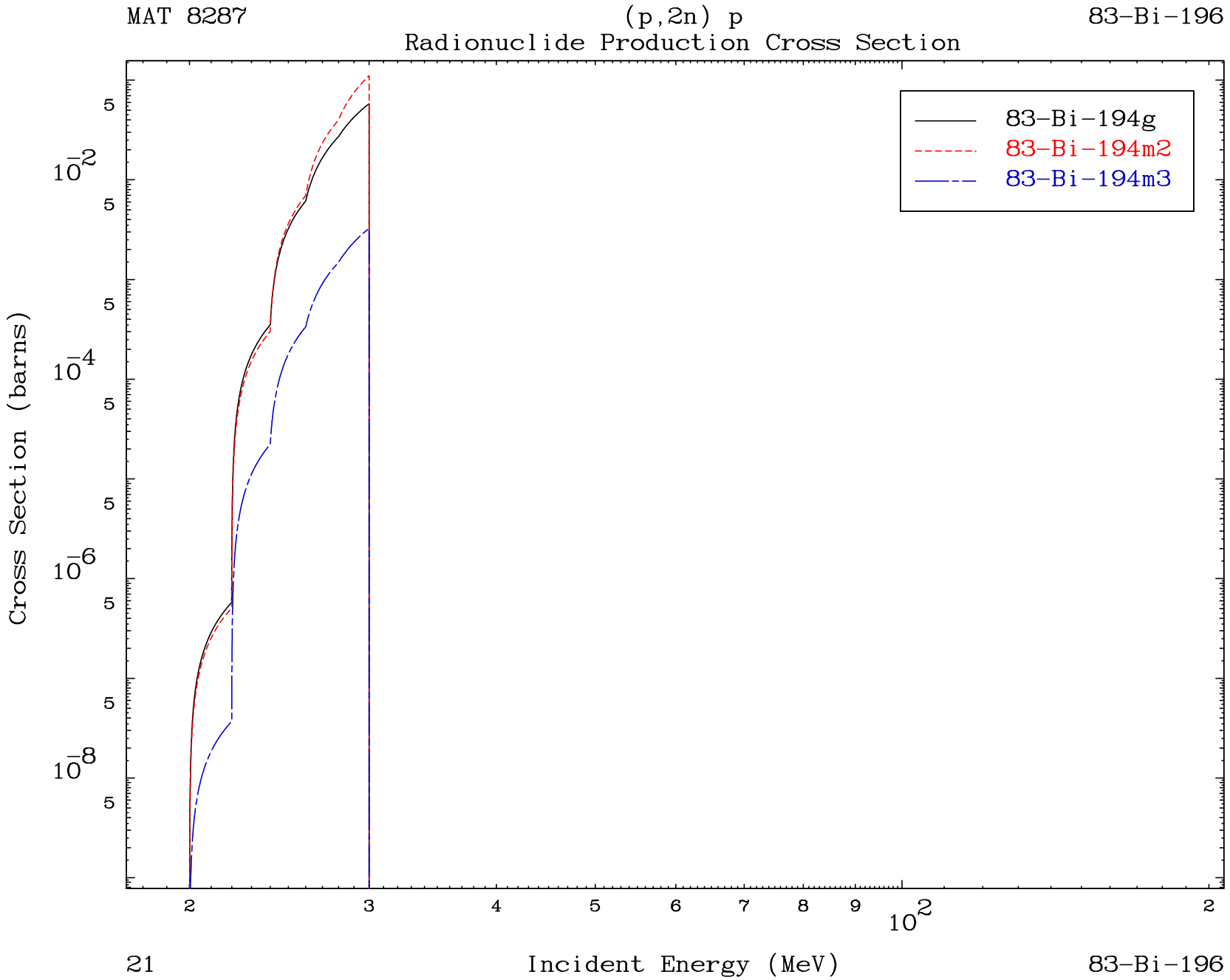

MAT 8287
(p,n') p
83-Bi-196
Radionuclide Production Cross Section
83-Bi-195g
83-Bi-195m1
Cross Section (barns)
Incident Energy (MeV)
16
83-Bi-196

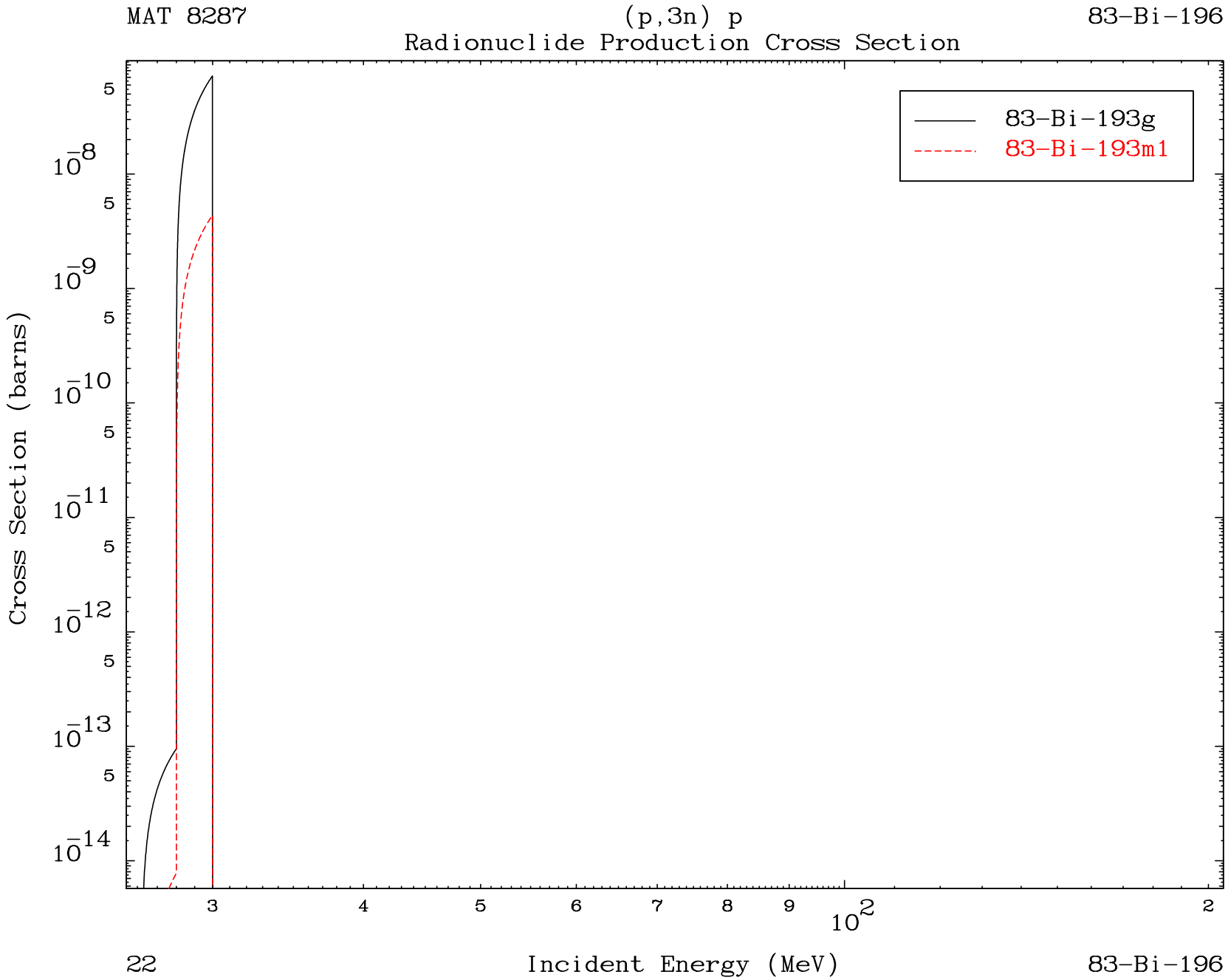

MAT 8287
(p,2n) 2α
83-Bi-196
Radionuclide Production Cross Section
80-Hg-187g
80-Hg-187m1
Cross Section (barns)
10-10
10-12
10-14
10-16
5
4 5 6 7 8 9 10 1
2 3 4 5 6 7 8 9 10 2
2
17
Incident Energy (MeV)
83-Bi-196

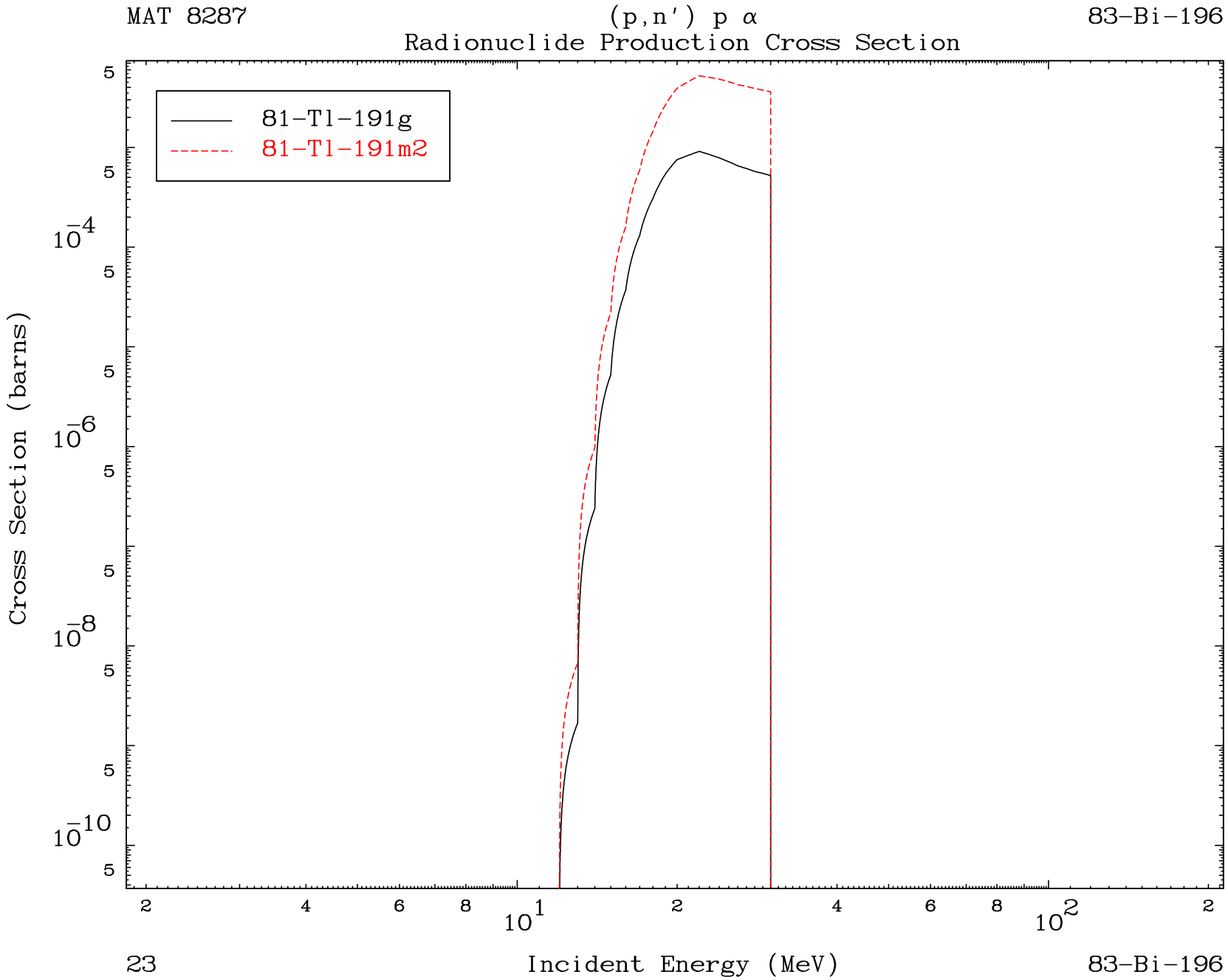

MAT 8287
(p,n') d
83-Bi-196
Radionuclide Production Cross Section
83-Bi-194g
83-Bi-194m2
83-Bi-194m3
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
6
7
8
9
10^2
Incident Energy (MeV)
18
83-Bi-196

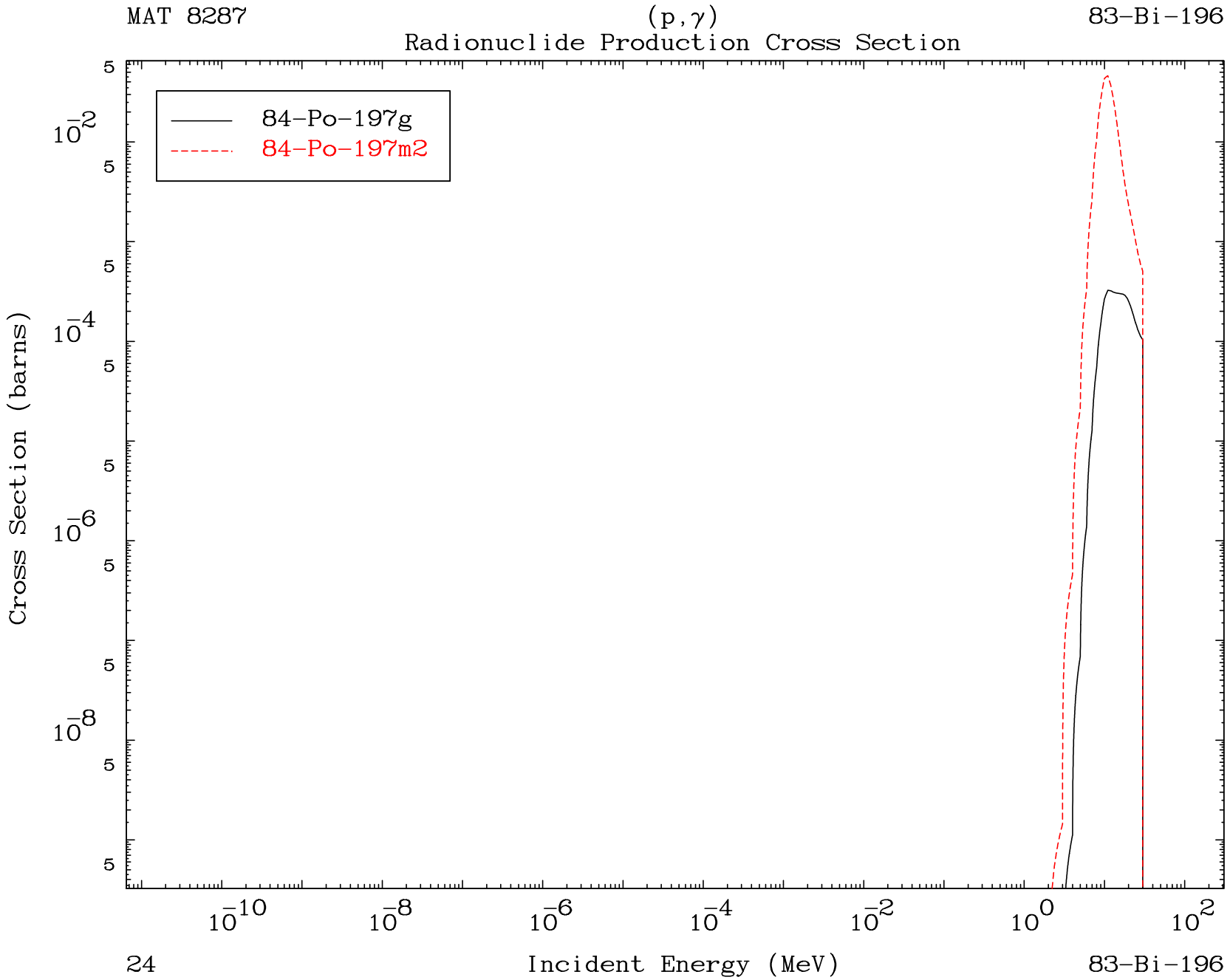

MAT 8287
(p,n') t
83-Bi-196
Radionuclide Production Cross Section
83-Bi-193g
83-Bi-193m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
6
7
8
9
10 2
Incident Energy (MeV)
19
83-Bi-196

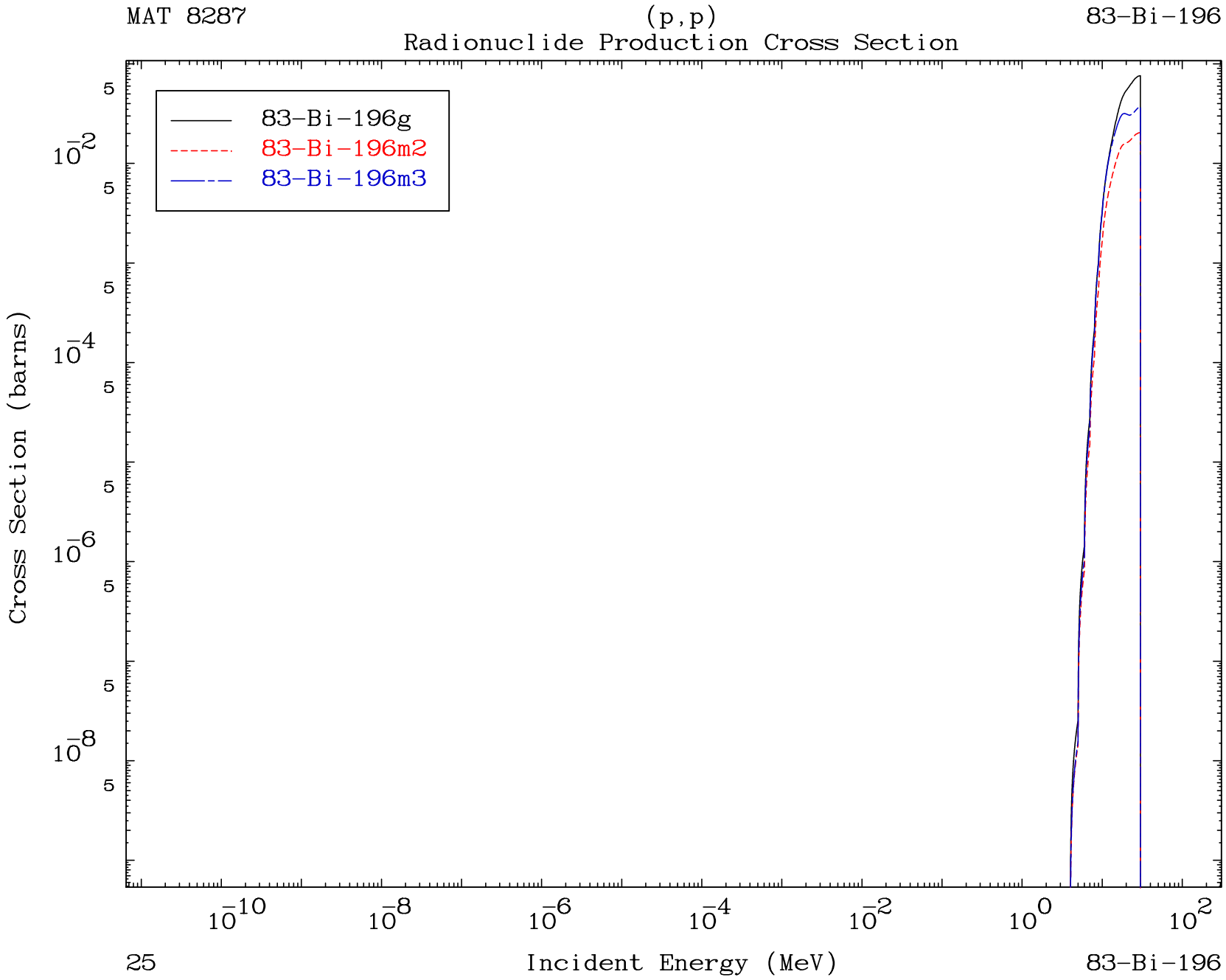

MAT 8287
(p,n') He-3
83-Bi-196
Radionuclide Production Cross Section
82-Pb-193g
82-Pb-193m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
20
Incident Energy (MeV)
83-Bi-196

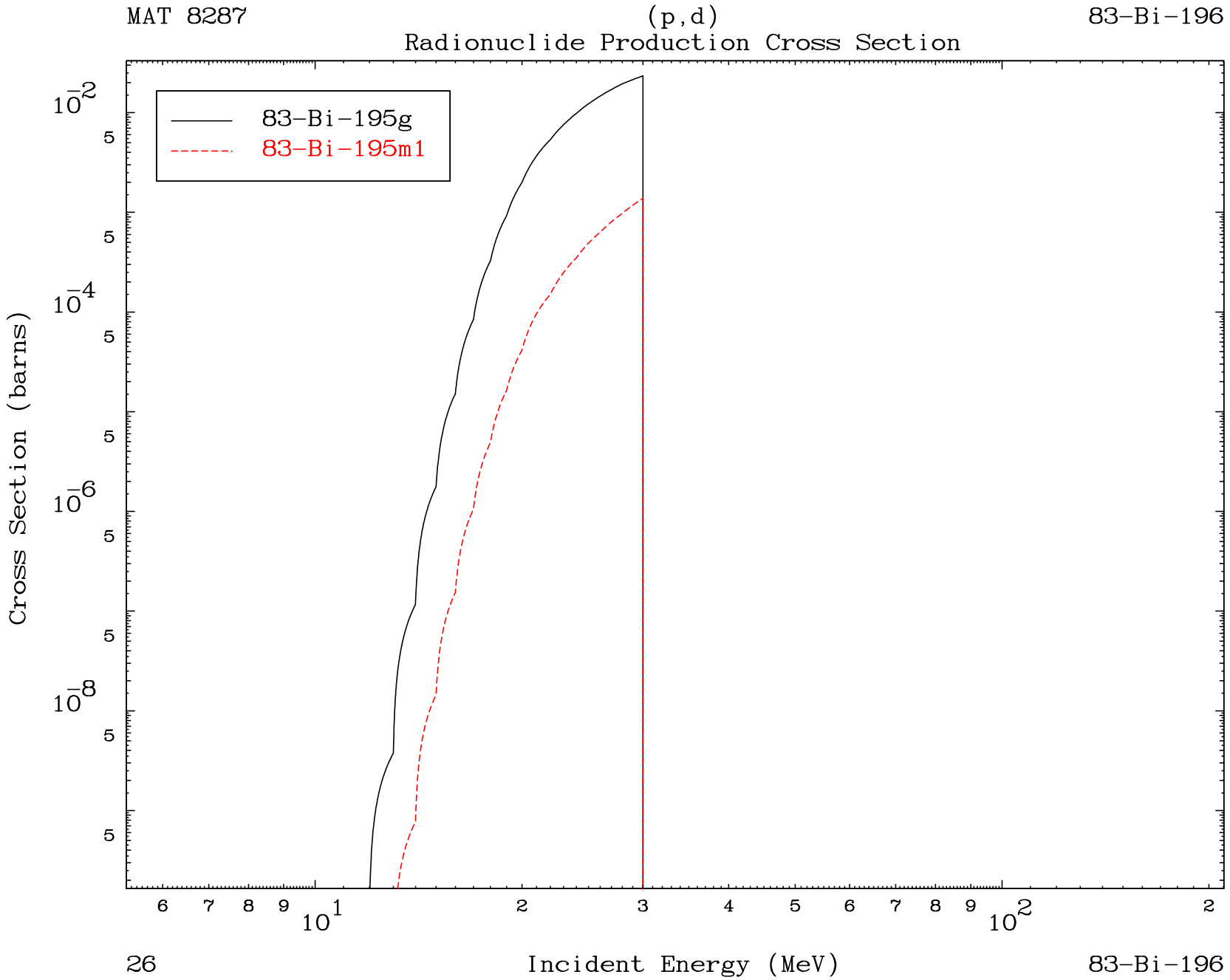

MAT 8287
(p,2n) p
83-Bi-196
Radionuclide Production Cross Section
83-Bi-194g
83-Bi-194m2
83-Bi-194m3
Cross Section (barns)
10-2
10-4
10-6
10-8
2
3
4
5
6
7
8
9
10 2
2
21
Incident Energy (MeV)
83-Bi-196

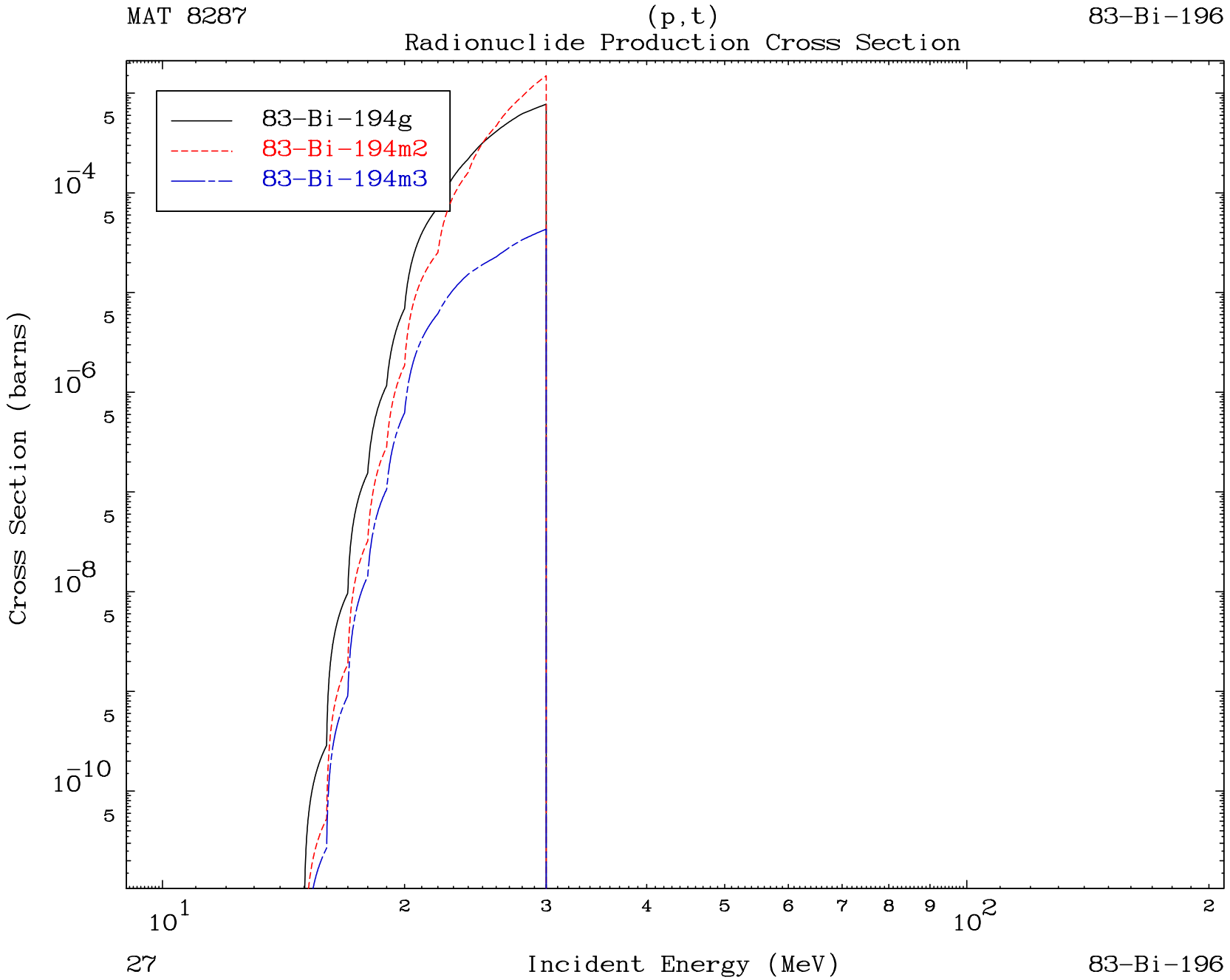

MAT 8287
(p,3n) p
83-Bi-196
Radionuclide Production Cross Section
83-Bi-193g
83-Bi-193m1
Cross Section (barns)
Incident Energy (MeV)
22
83-Bi-196

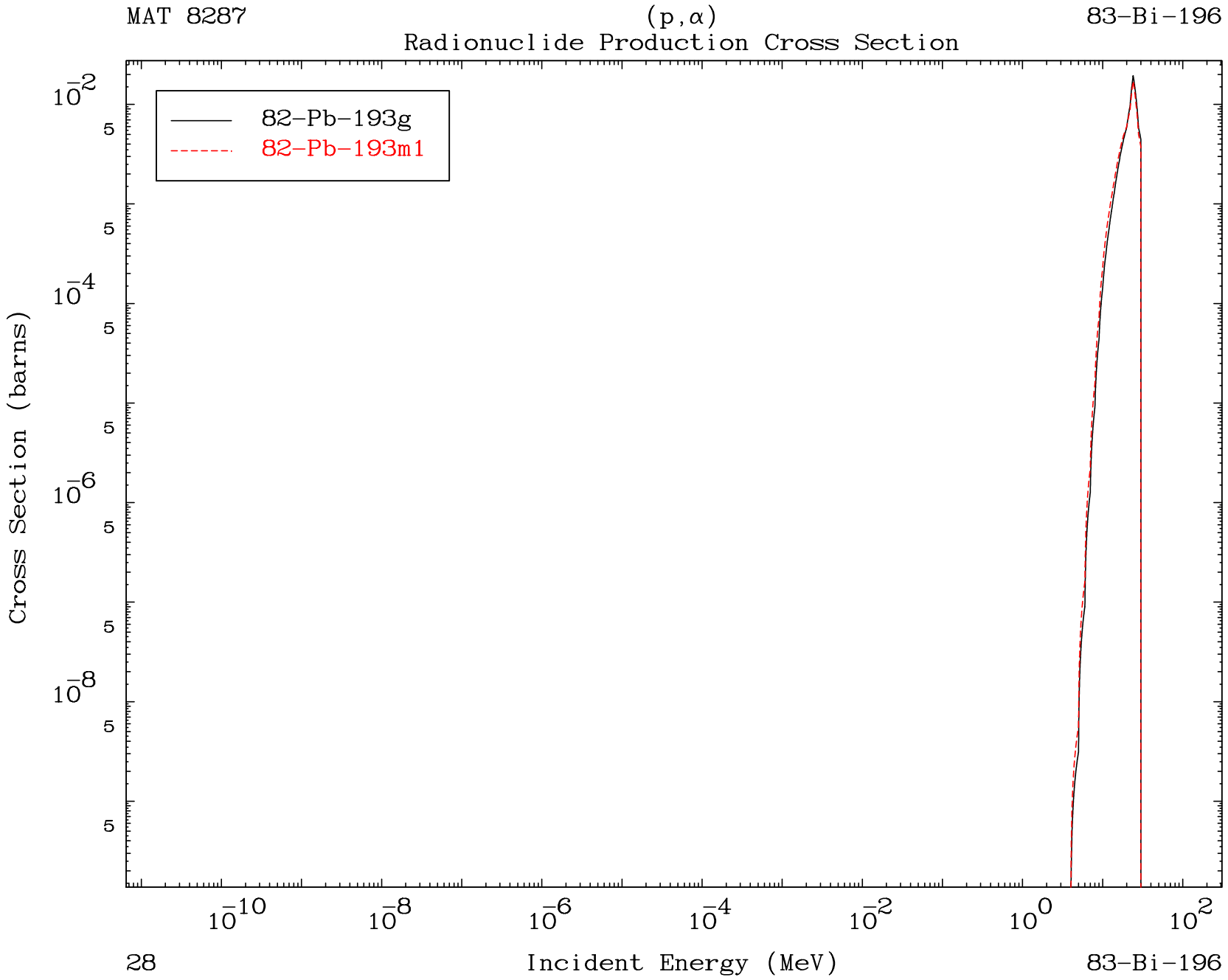

MAT 8287
(p,n') p α
83-Bi-196
Radionuclide Production Cross Section
81-Tl-191g
81-Tl-191m2
Cross Section (barns)
10-4
10-6
10-8
10-10
10 1
10 2
Incident Energy (MeV)
23
83-Bi-196

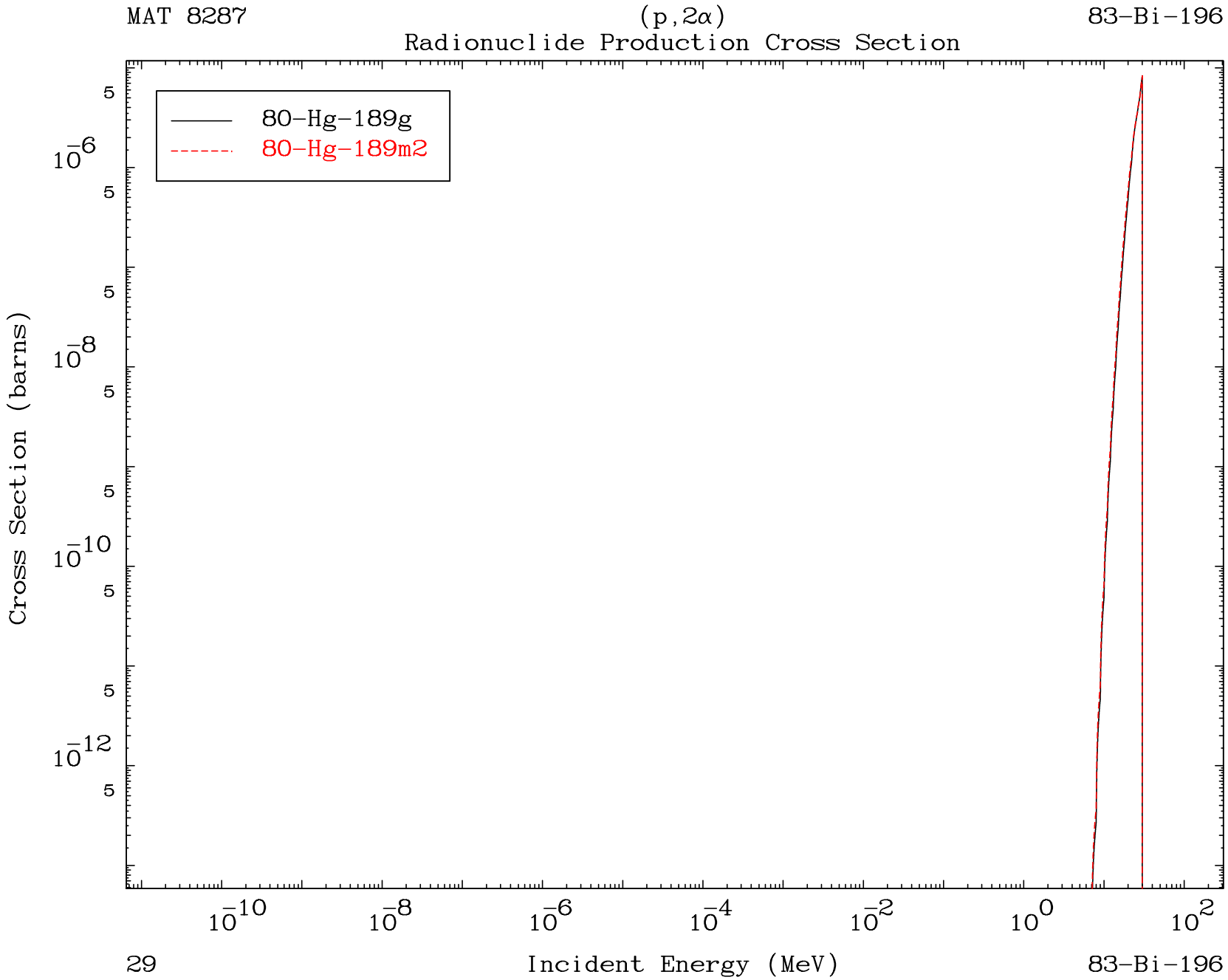

MAT 8287
(p,γ)
83-Bi-196
Radionuclide Production Cross Section
84-Po-197g
84-Po-197m2
Cross Section (barns)
Incident Energy (MeV)
24
83-Bi-196

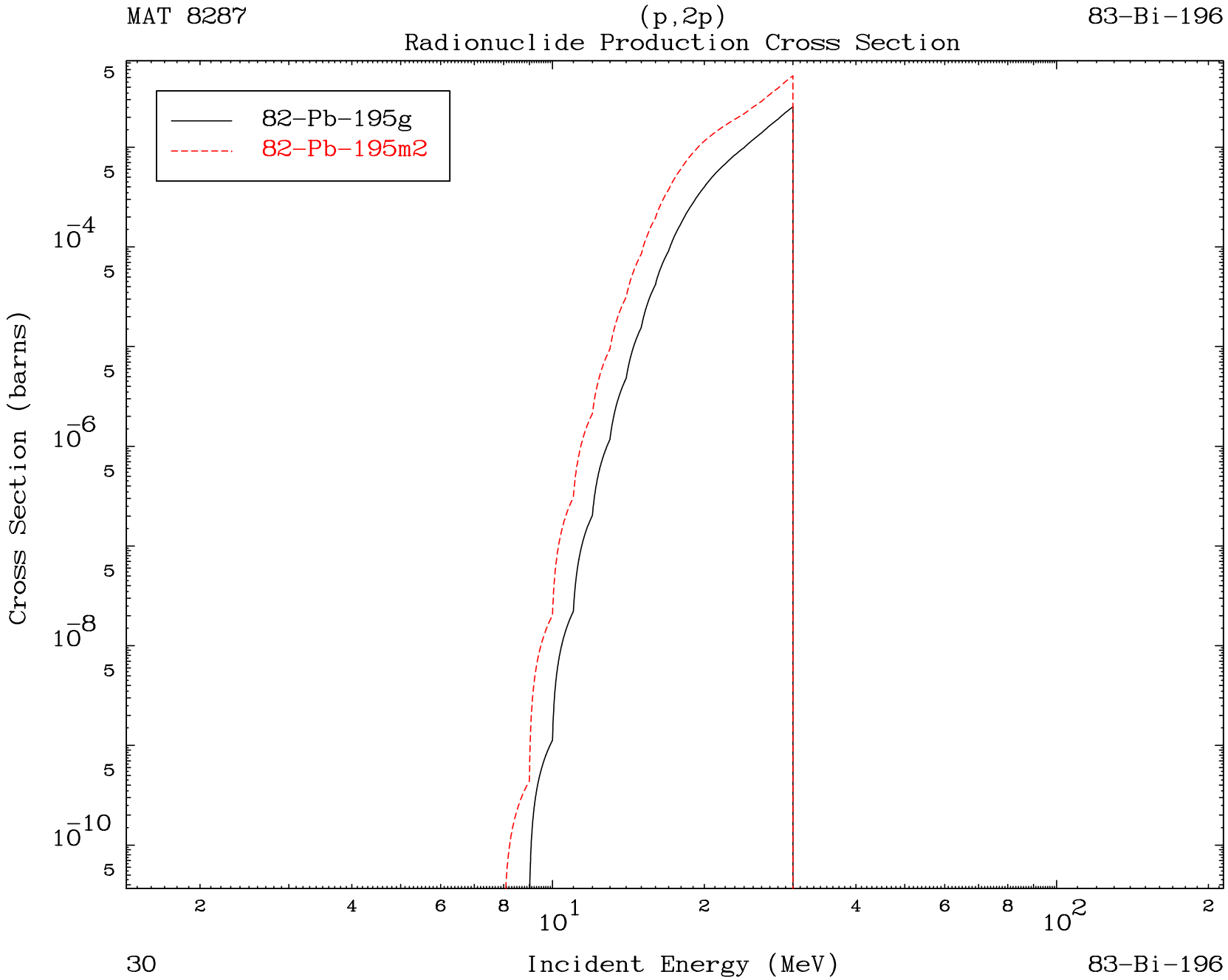

MAT 8287
(p,p)
83-Bi-196
Radionuclide Production Cross Section
83-Bi-196g
83-Bi-196m2
83-Bi-196m3
Cross Section (barns)
Incident Energy (MeV)
25
83-Bi-196

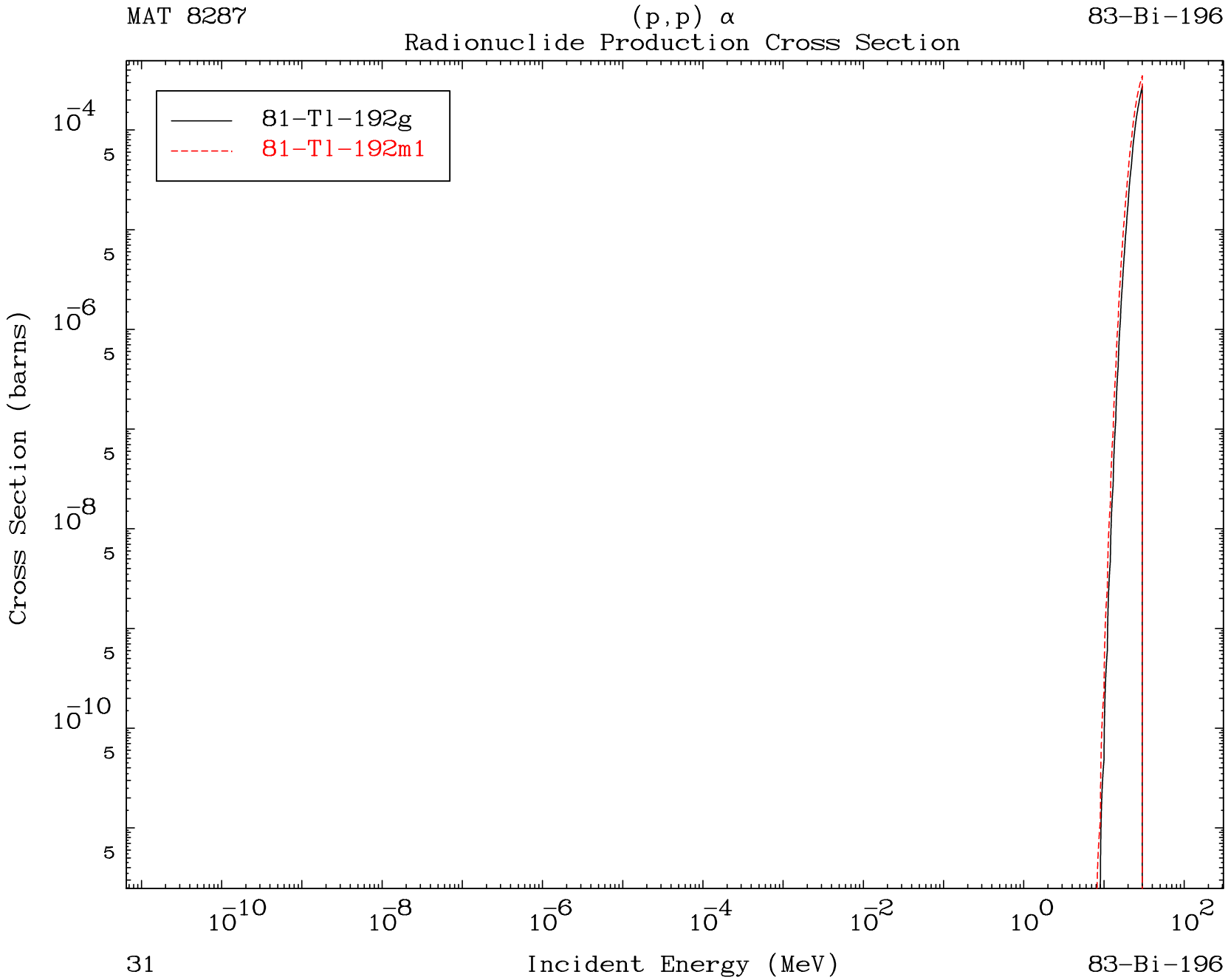

MAT 8287
(p,d)
83-Bi-196
Radionuclide Production Cross Section
83-Bi-195g
83-Bi-195m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6 7 8 9 10 1
2 3 4 5 6 7 8 9 10 2
2
26
Incident Energy (MeV)
83-Bi-196

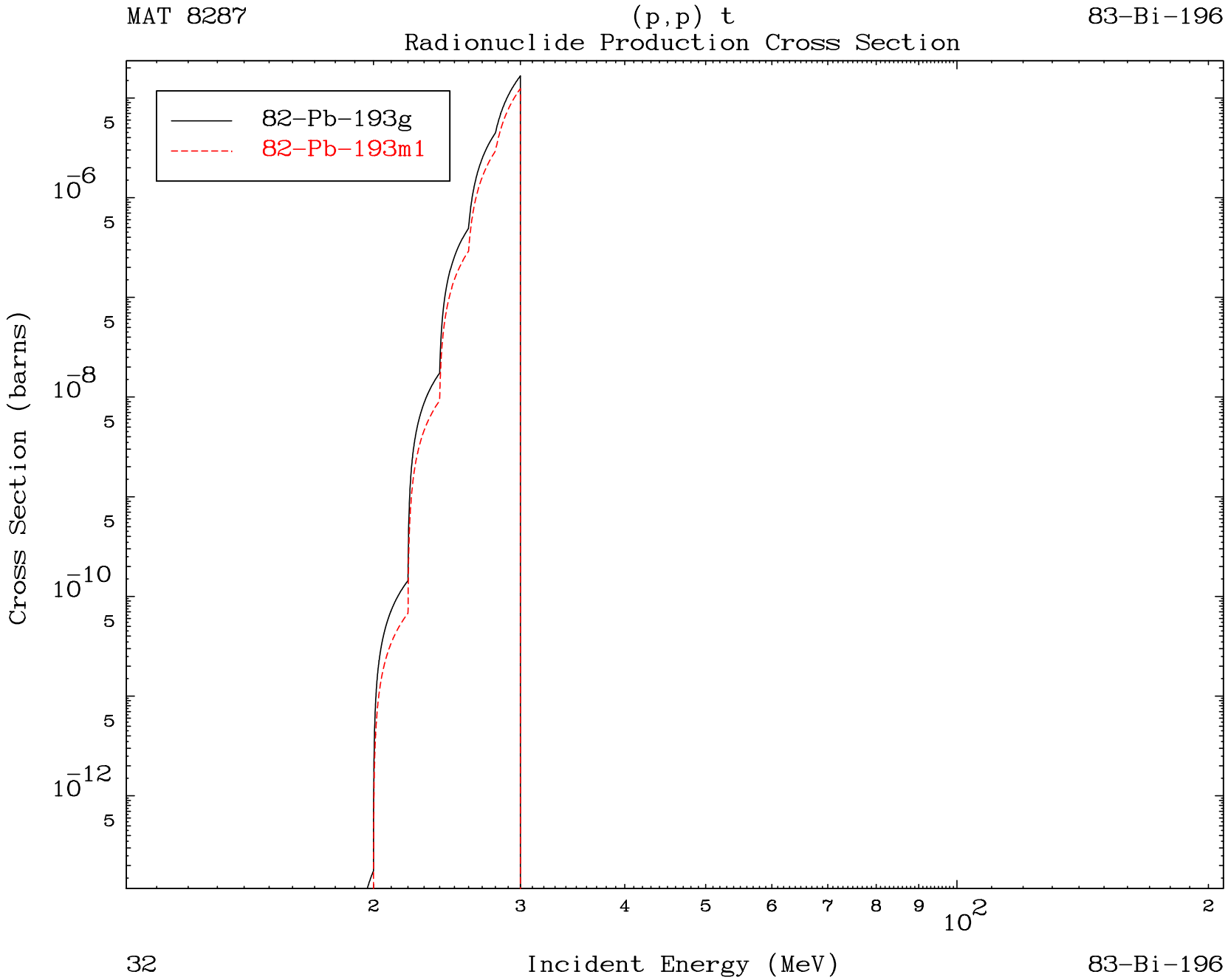

MAT 8287
(p,t)
83-Bi-196
Radionuclide Production Cross Section
83-Bi-194g
83-Bi-194m2
83-Bi-194m3
Cross Section (barns)
10-4
10-6
10-8
10-10
10 1
2
3
4
5
6
7
8
9
10 2
2
27
Incident Energy (MeV)
83-Bi-196

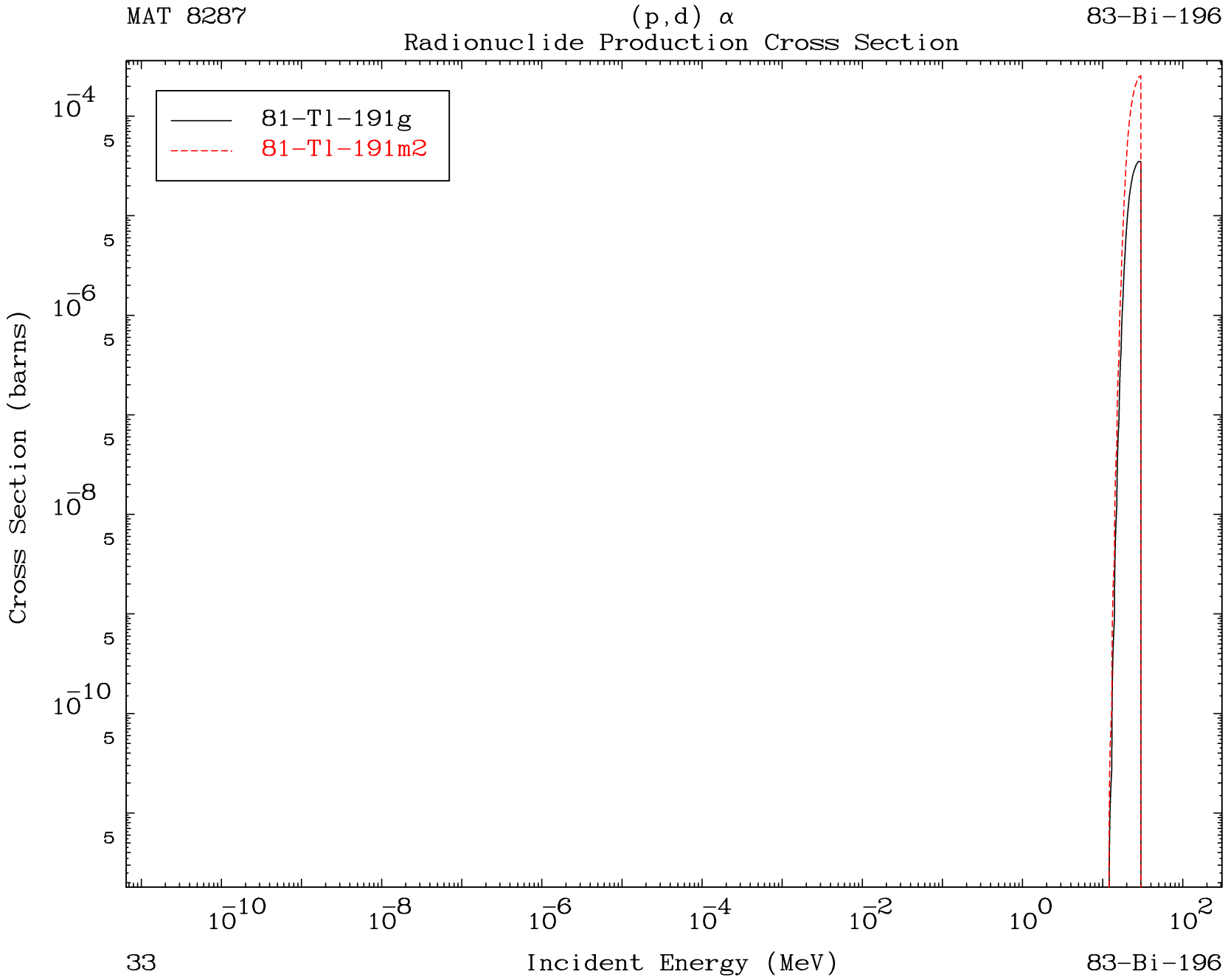

MAT 8287
(p,α)
83-Bi-196
Radionuclide Production Cross Section
82-Pb-193g
82-Pb-193m1
Cross Section (barns)
Incident Energy (MeV)
28
83-Bi-196


MAT 8287
(p,2α)
83-Bi-196
Radionuclide Production Cross Section
80-Hg-189g
80-Hg-189m2
Cross Section (barns)
Incident Energy (MeV)
29
83-Bi-196


MAT 8287
(p,2p)
83-Bi-196
Radionuclide Production Cross Section
82-Pb-195g
82-Pb-195m2
Cross Section (barns)
Incident Energy (MeV)
30
83-Bi-196


MAT 8287
(p,p) α
83-Bi-196
Radionuclide Production Cross Section
81-Tl-192g
81-Tl-192m1
Cross Section (barns)
Incident Energy (MeV)
31
83-Bi-196


MAT 8287
(p,p) t
83-Bi-196
Radionuclide Production Cross Section
82-Pb-193g
82-Pb-193m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
32
Incident Energy (MeV)
83-Bi-196


MAT 8287
(p,d) α
83-Bi-196
Radionuclide Production Cross Section
81-Tl-191g
81-Tl-191m2
Cross Section (barns)
Incident Energy (MeV)
33
83-Bi-196