

Program Complot
(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

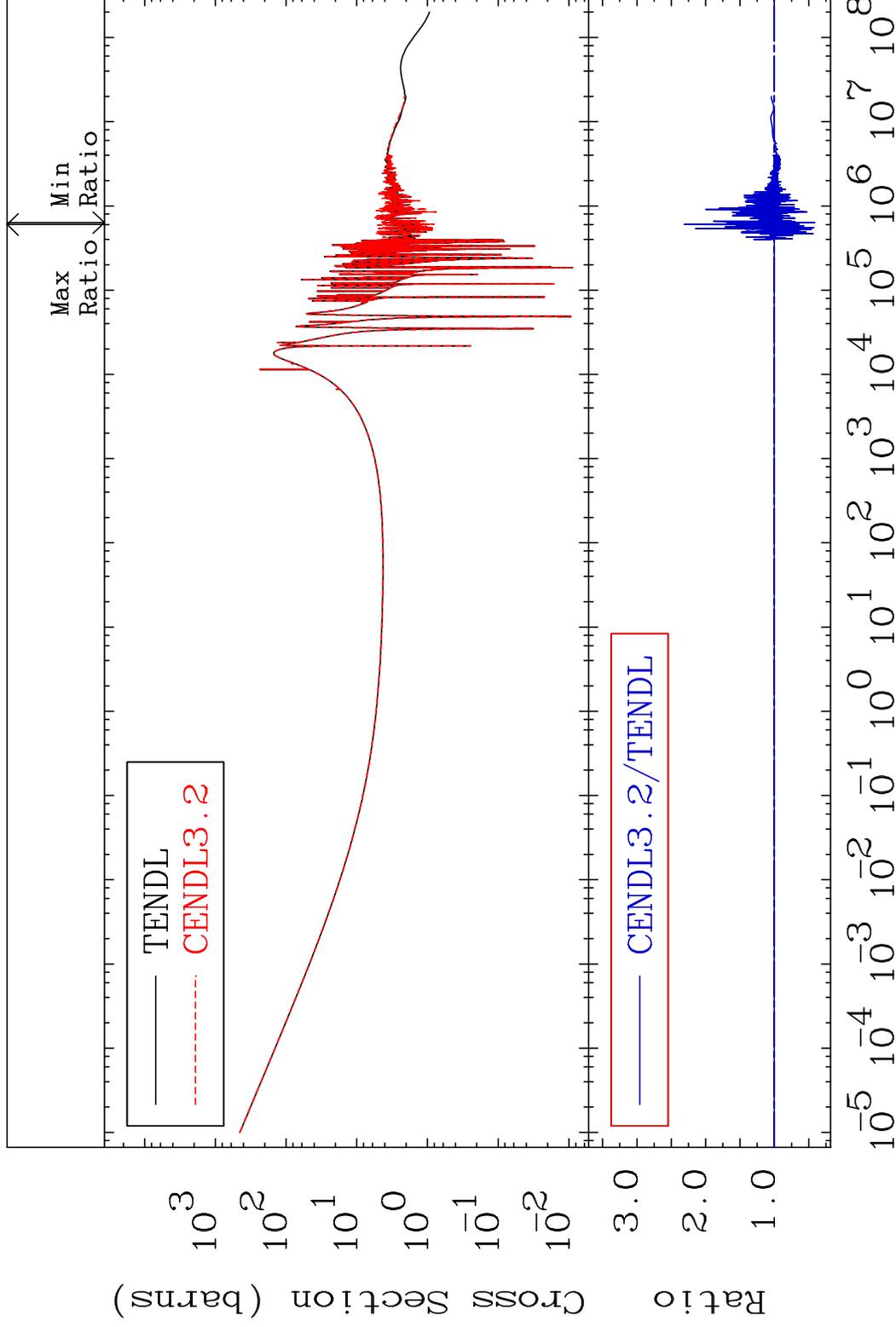
MAT 2231

Total

22-Ti-48

Cross Section

-58.70 To 131.3 %



1

Incident Energy (eV)

22-Ti-48

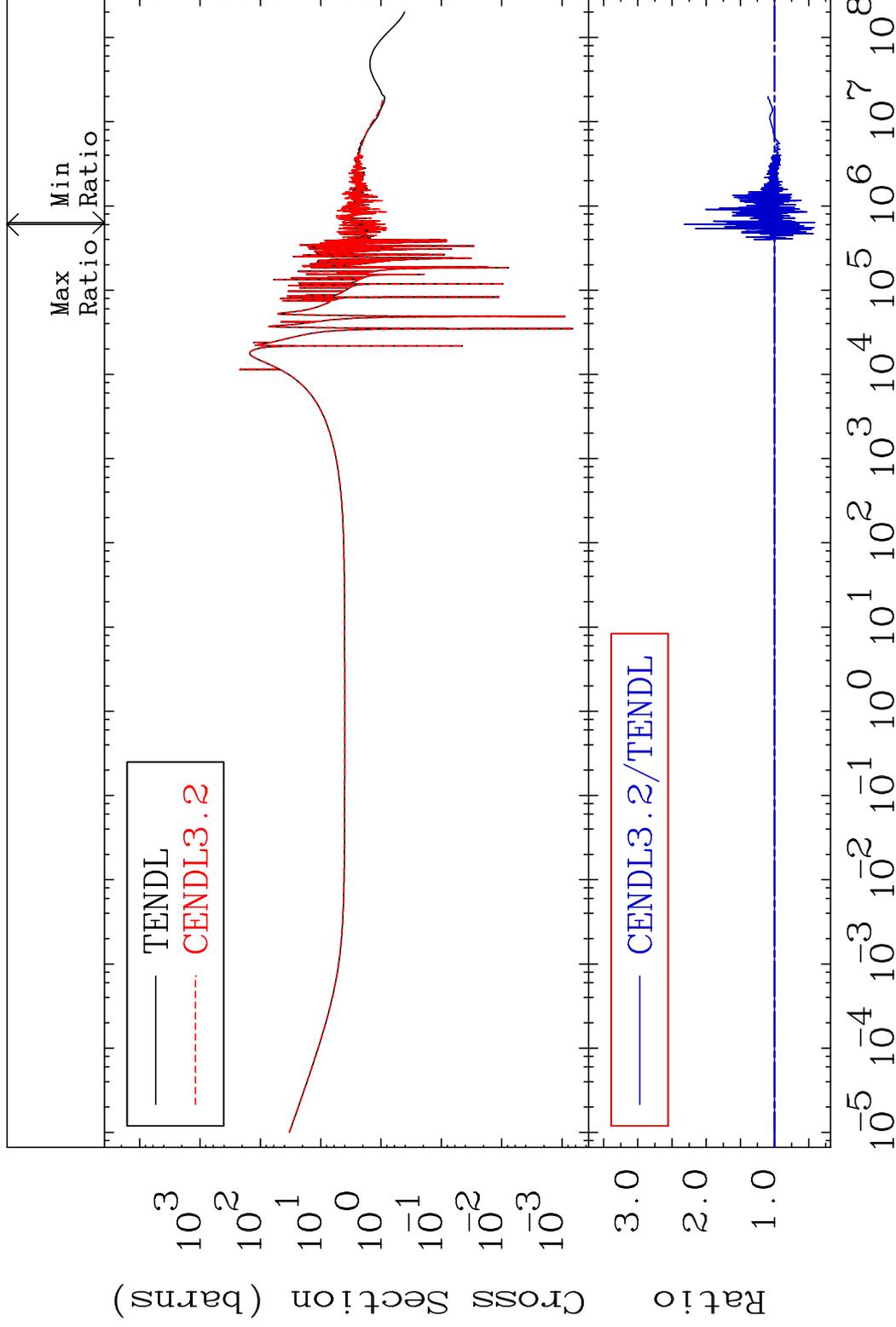
MAT 2231

Elastic

22-Ti-48

Cross Section

-58.77 To 132.3 %

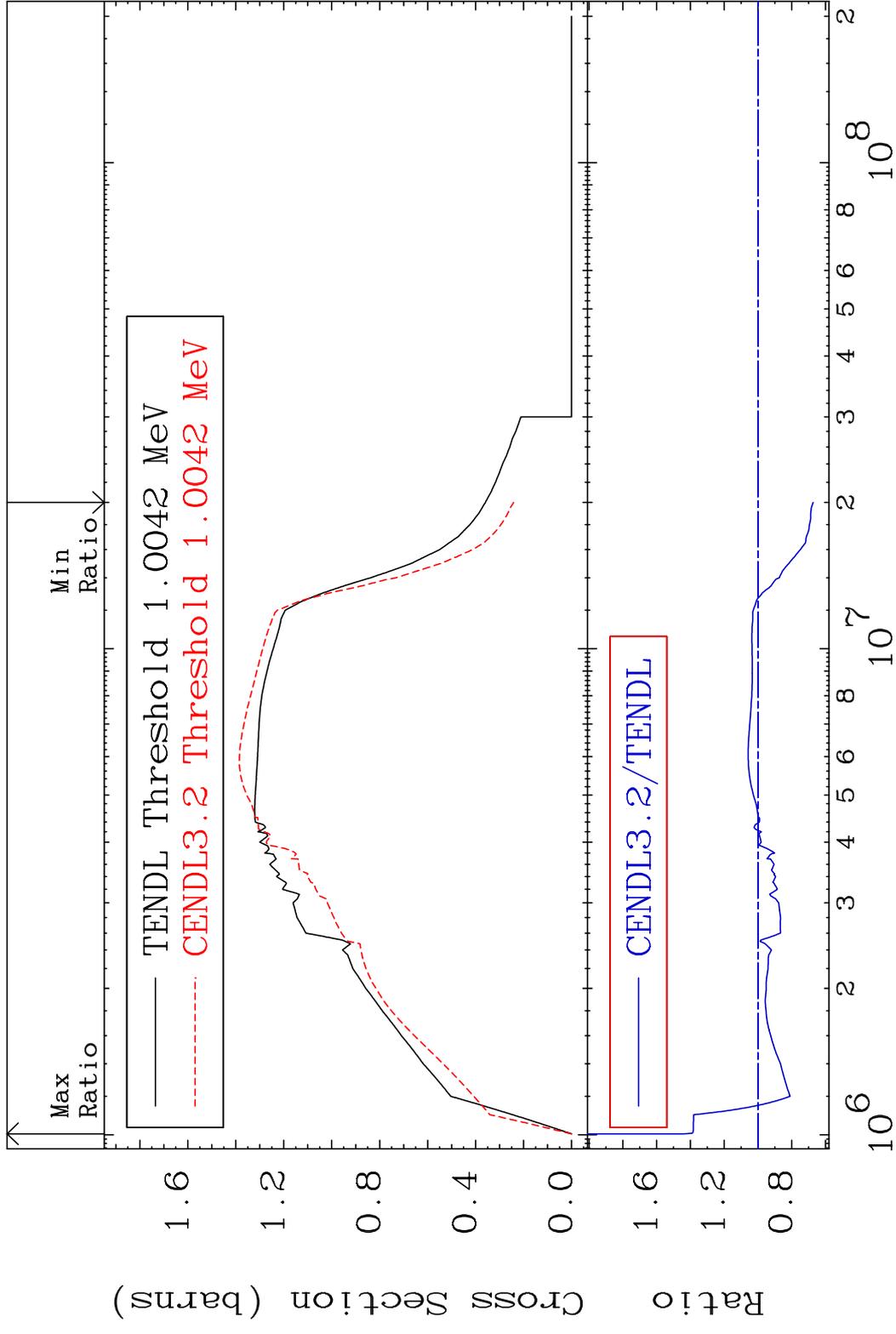


2

Incident Energy (eV)

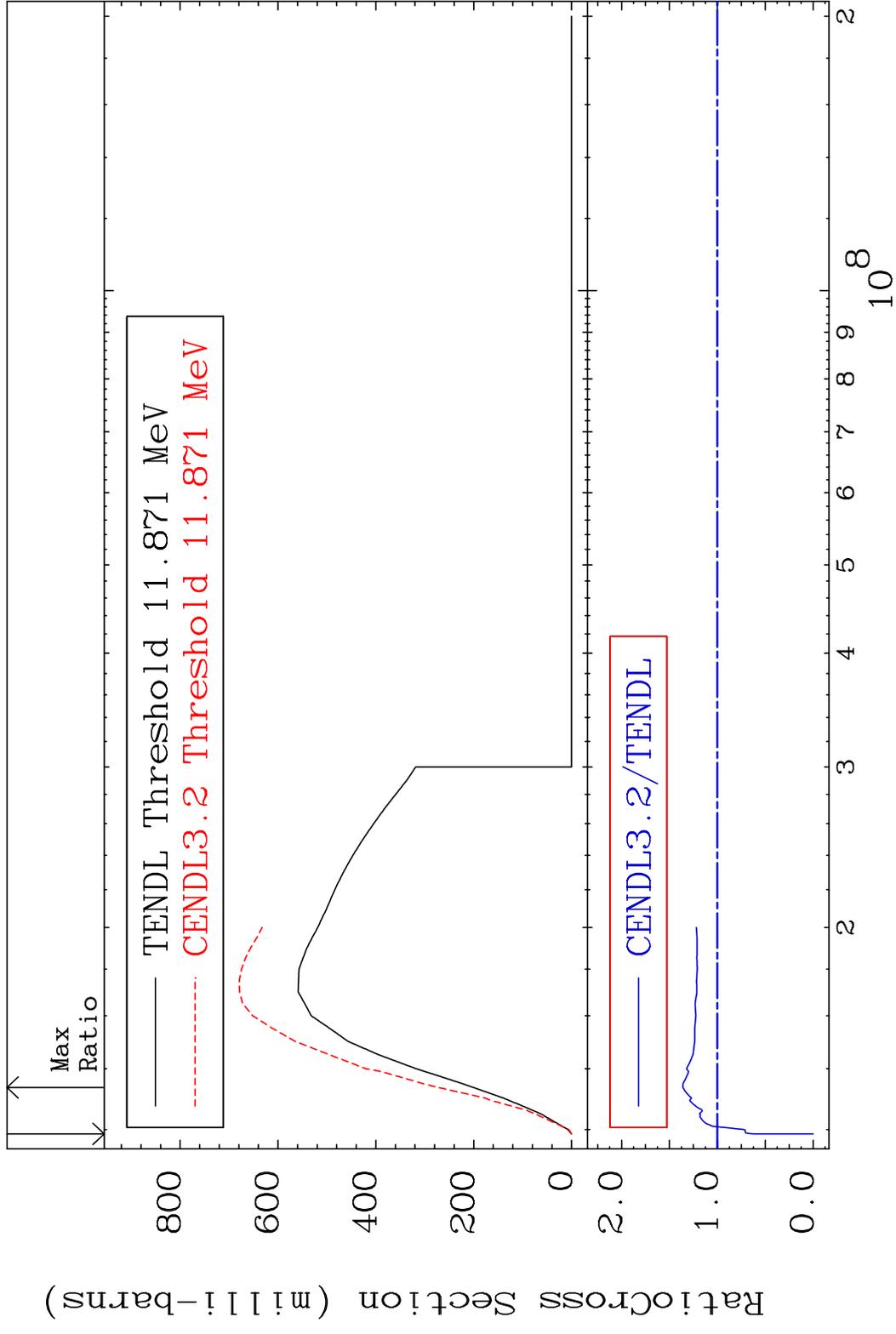
22-Ti-48

MAT 2231 Inelastic 22-Ti-48
 Cross Section -32.71 To 44.45 %



3 Incident Energy (eV) 22-Ti-48

MAT 2231 (n,2n) 22-Ti-48
 Cross Section -100.0 To 36.06 %



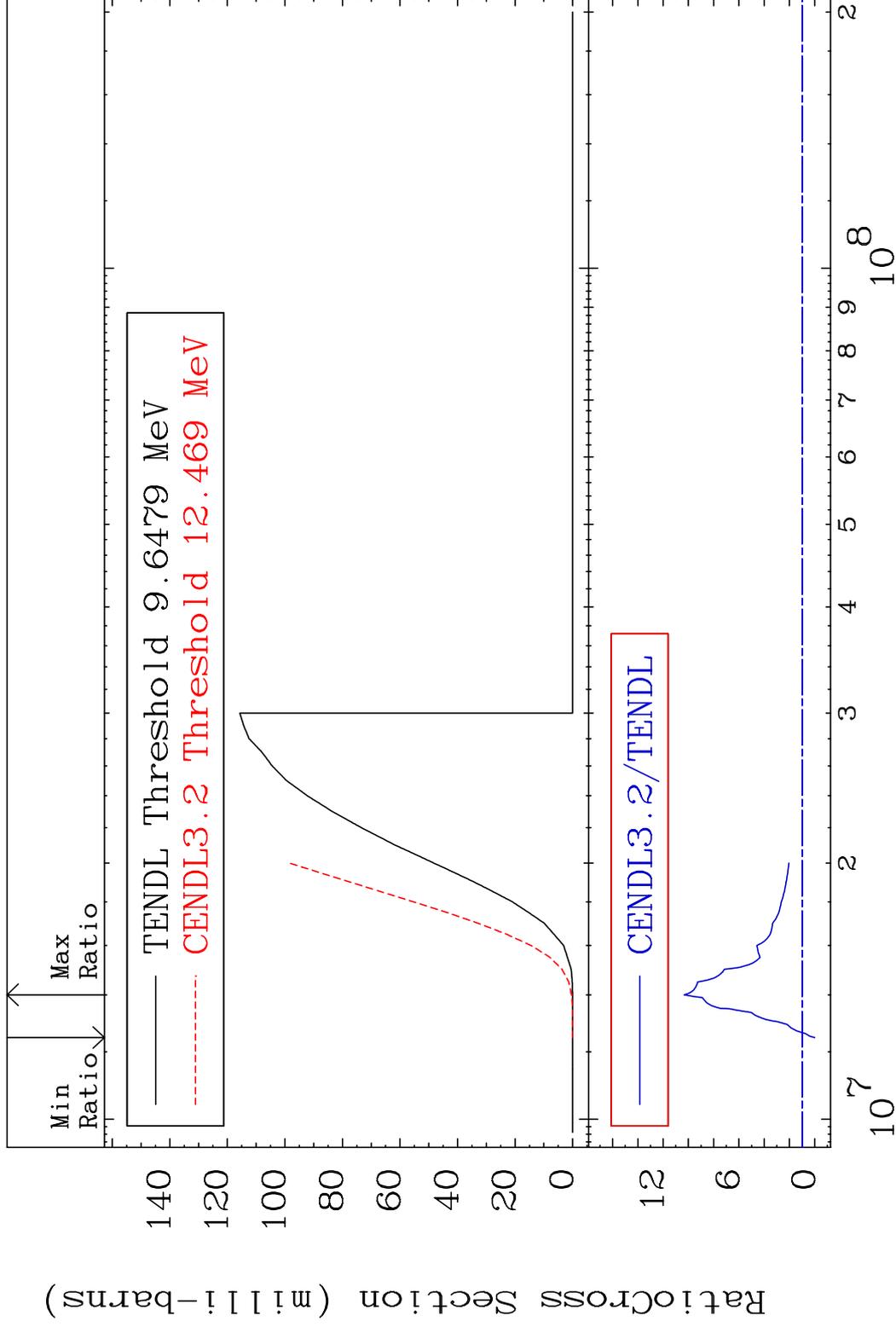
4 Incident Energy (eV) 22-Ti-48

MAT 2231

(n, n') α

²²Ti-48

Cross Section -100.0 To 933.7 %



5

Incident Energy (eV)

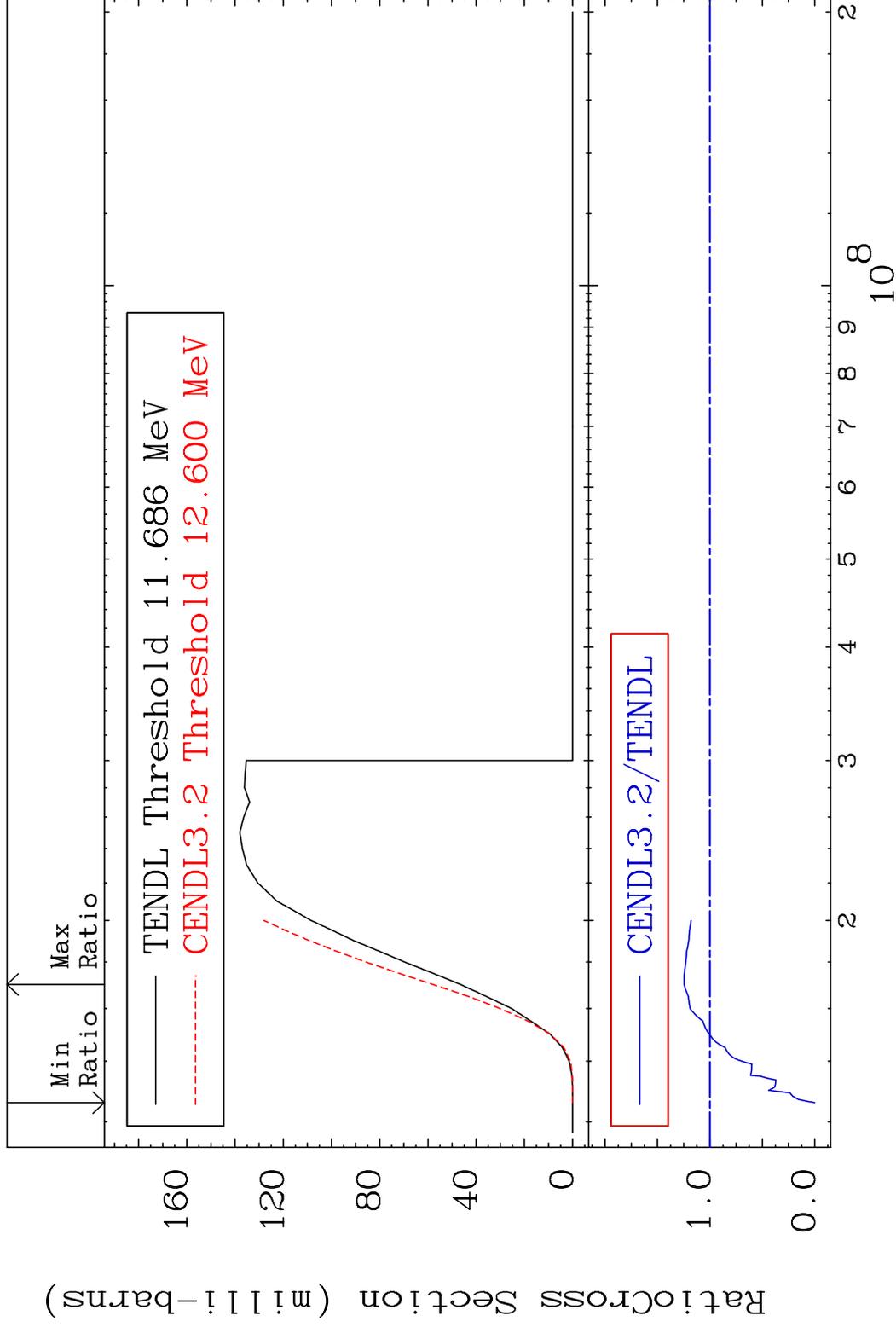
²²Ti-48

MAT 2231

(n, n') p

²²Ti-48

Cross Section -100.0 To 24.60 %

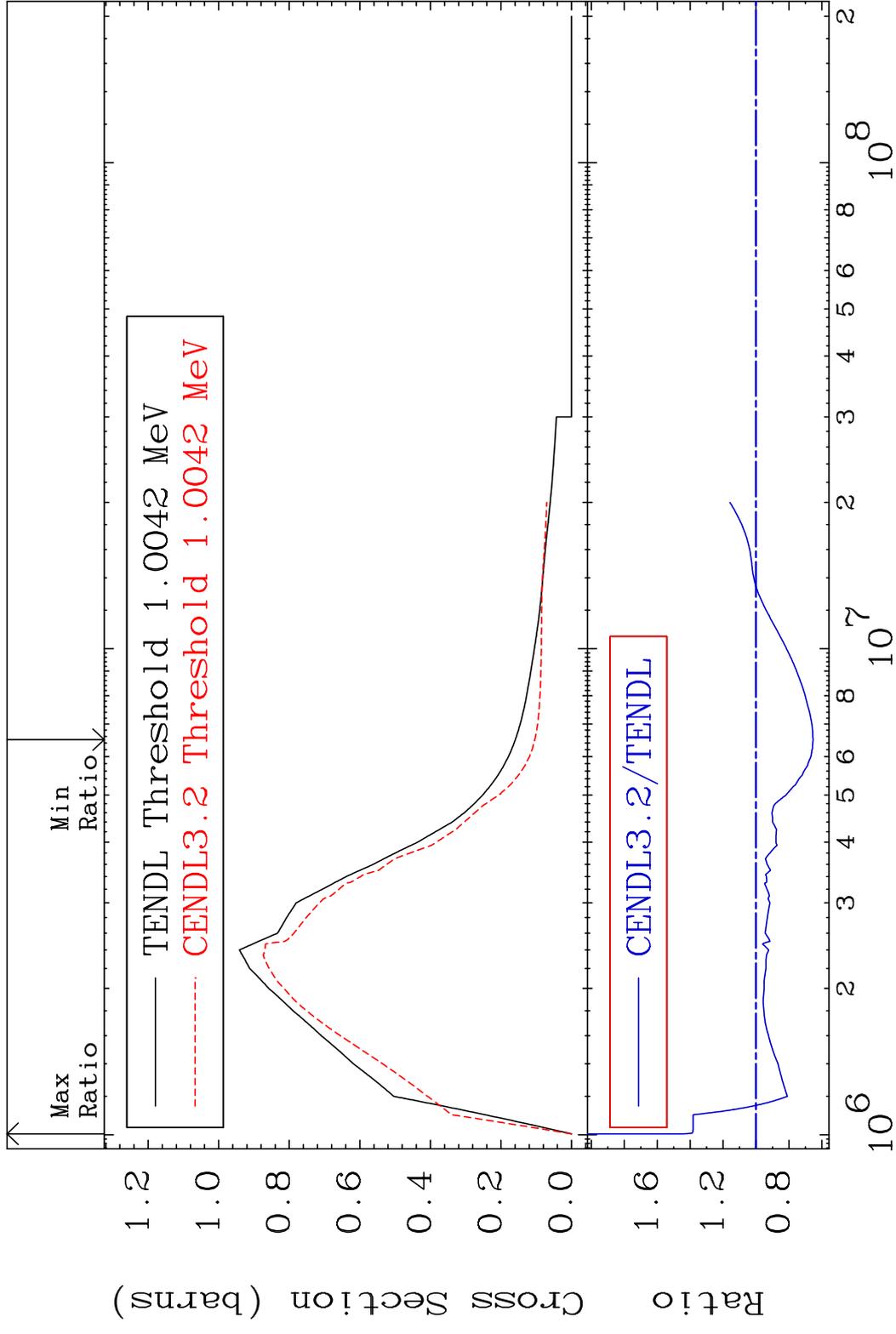


6

Incident Energy (eV)

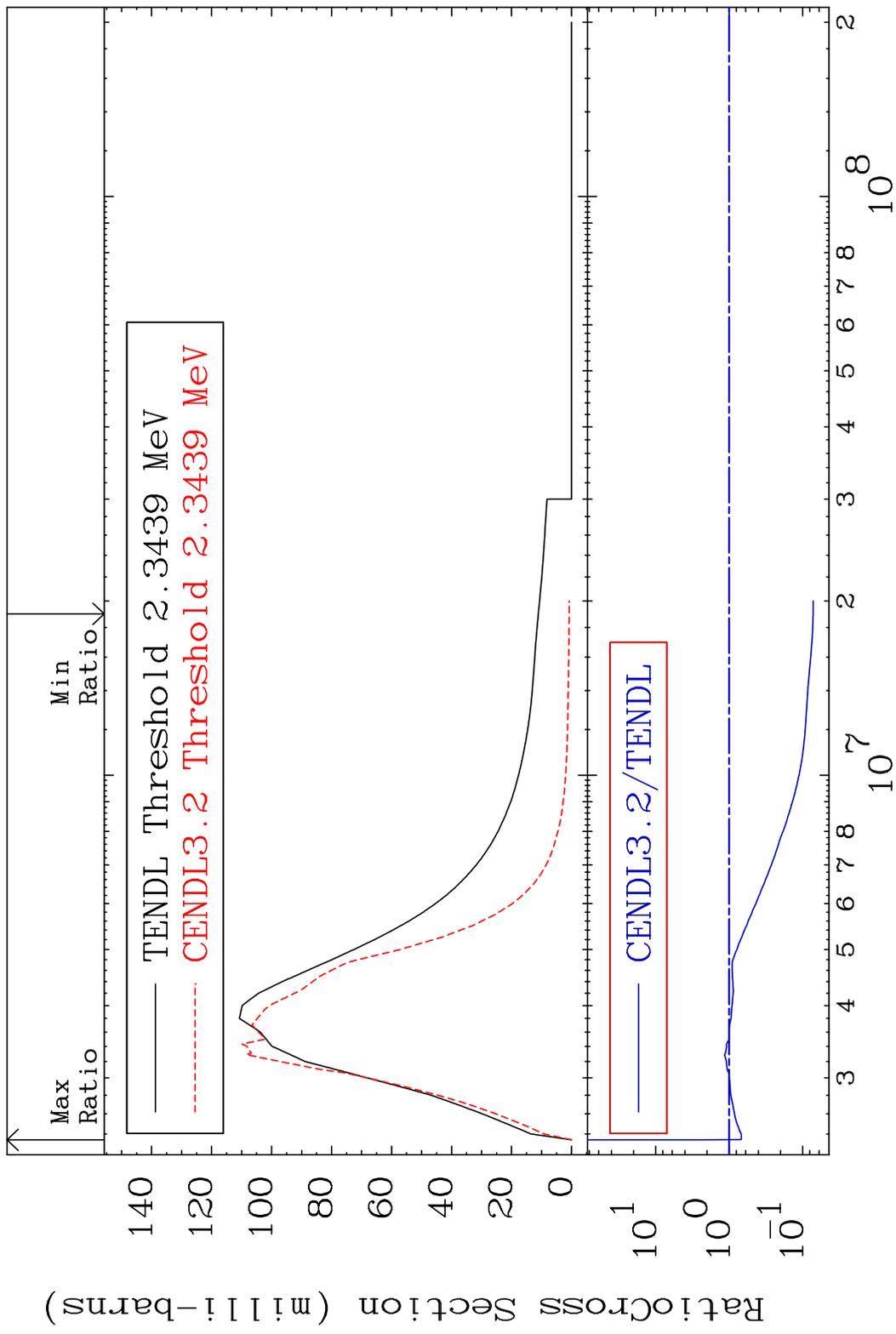
²²Ti-48

MAT 2231 MT= 51 (n,n') Level 22-Ti-48
 Cross Section -34.71 To 44.45 %

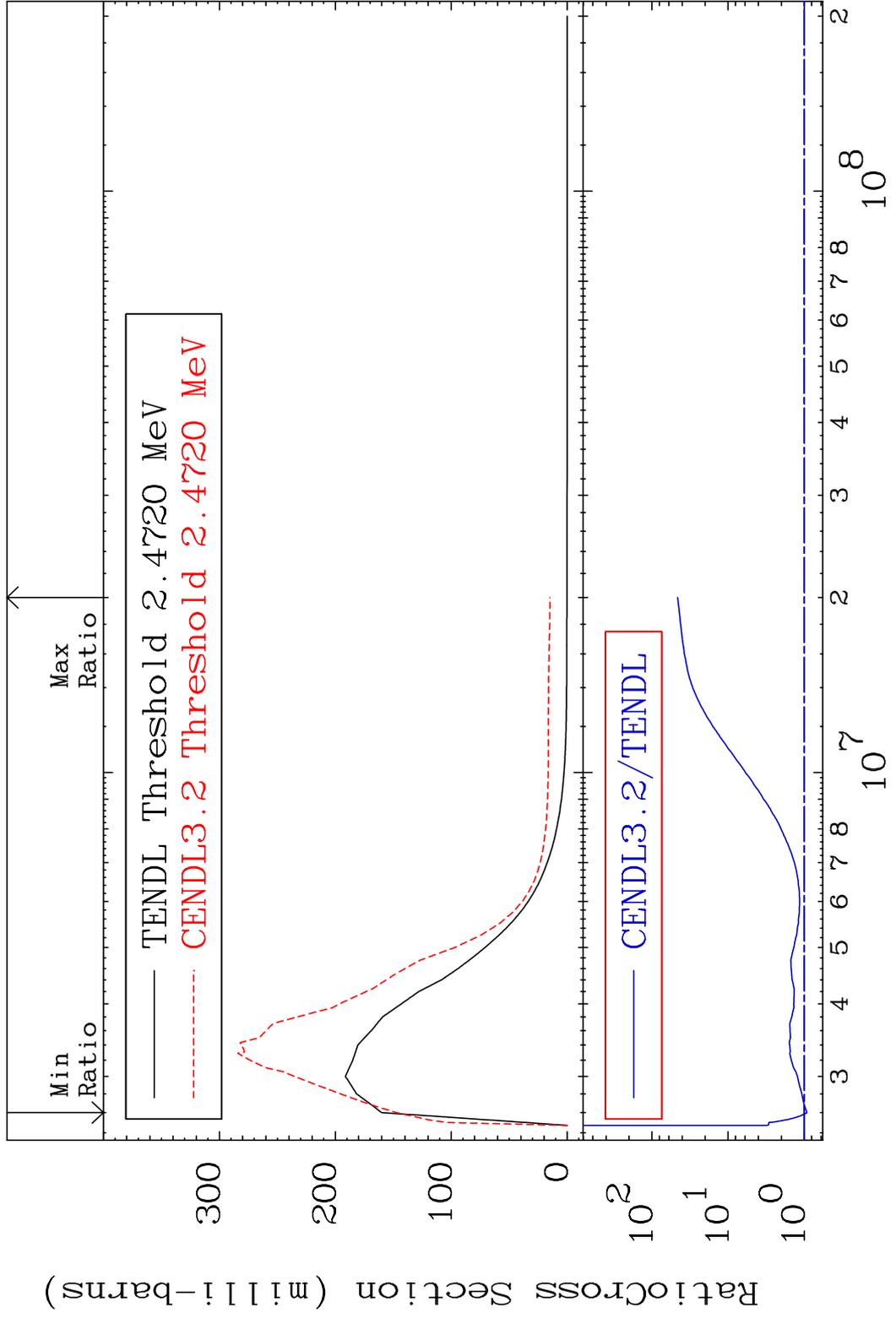


7 Incident Energy (eV) 22-Ti-48

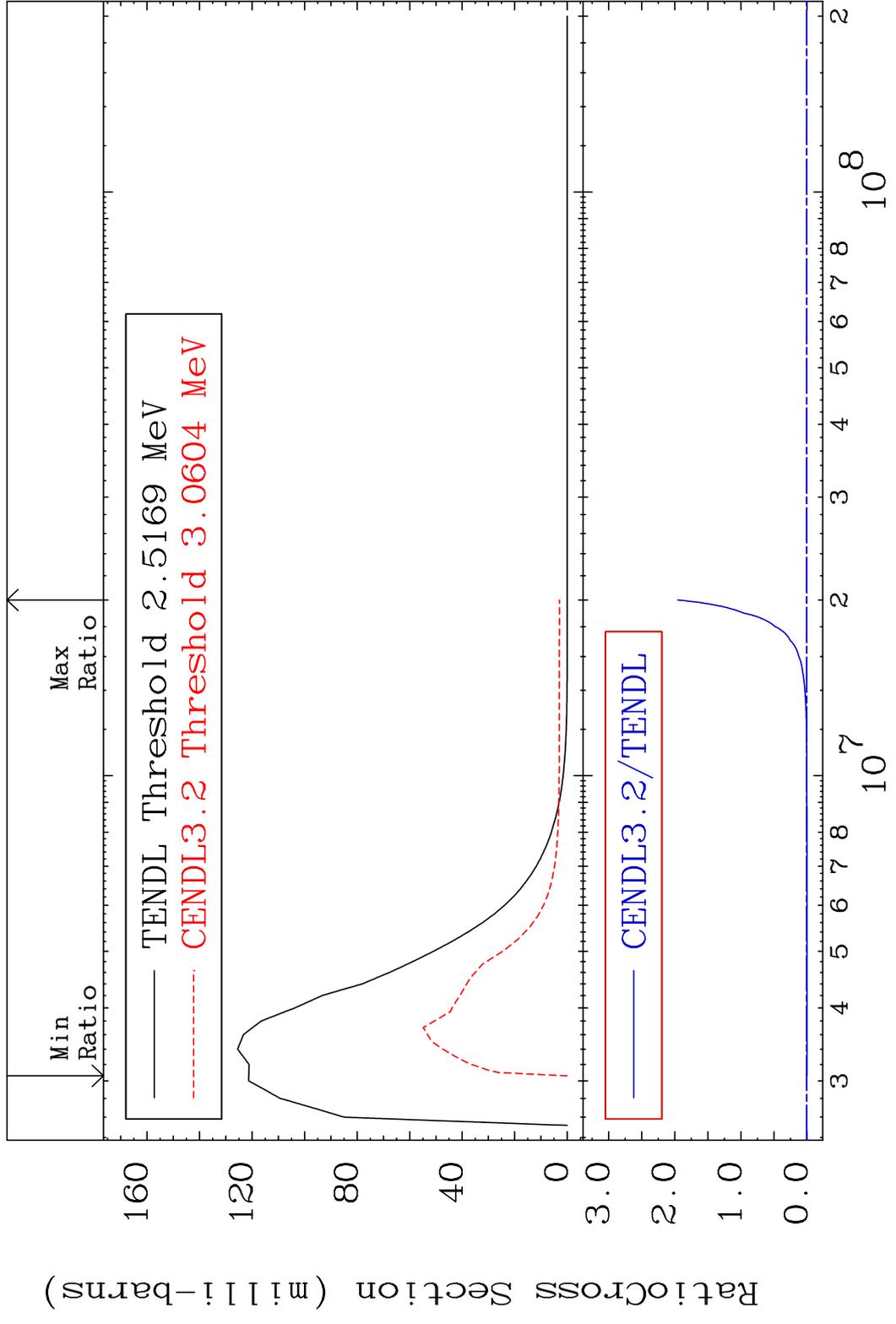
MAT 2231 MT= 52 (n,n') Level 22-Ti-48
 Cross Section -92.78 To 327.9 %



MAT 2231 MT= 53 (n, n') Level 22-Ti-48
 Cross Section -7.926 To 4494. %



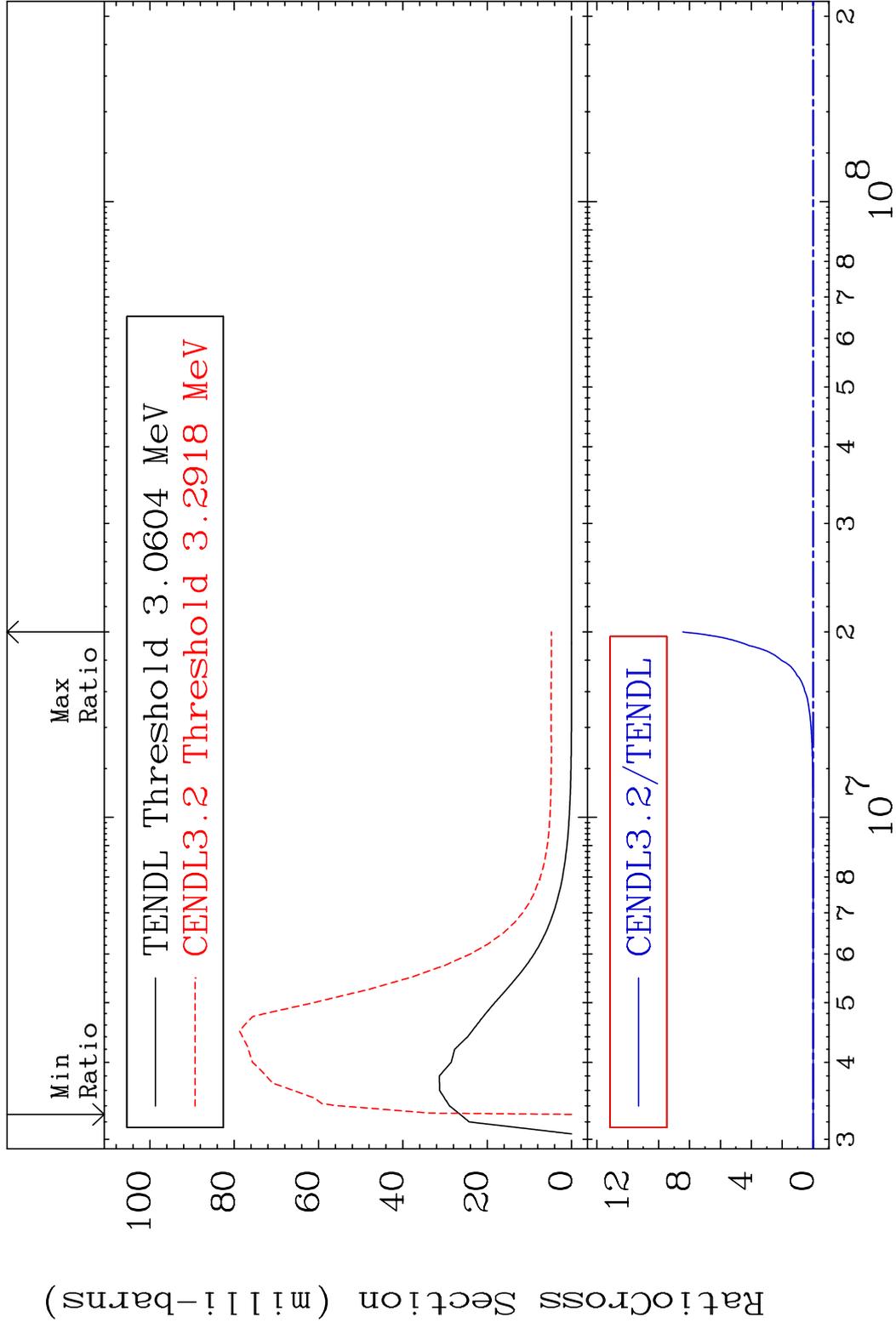
MAT 2231 MT= 54 (n, n') Level 22-Ti-48
 Cross Section -100.0 To 9999. %



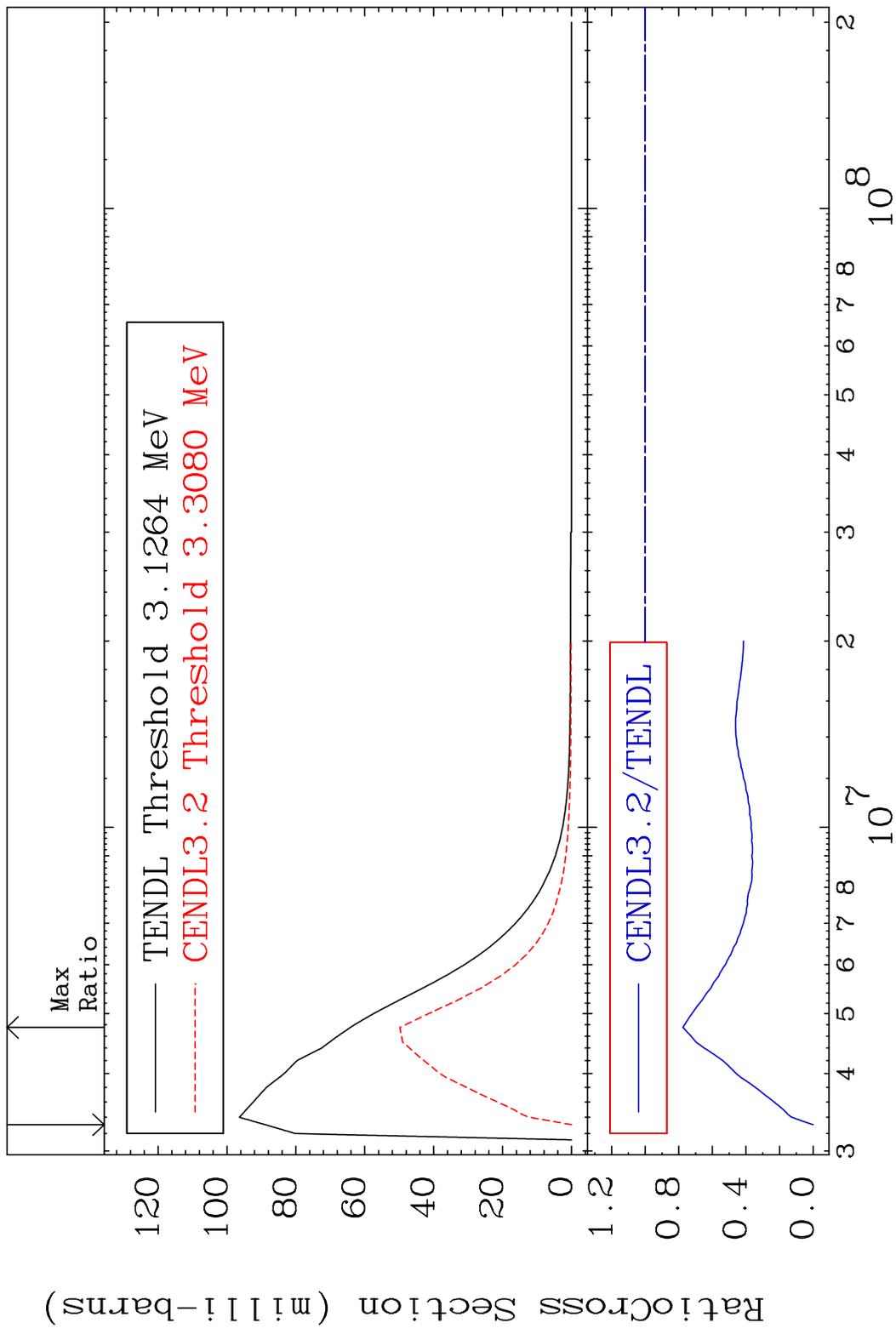
10

Incident Energy (eV) 22-Ti-48

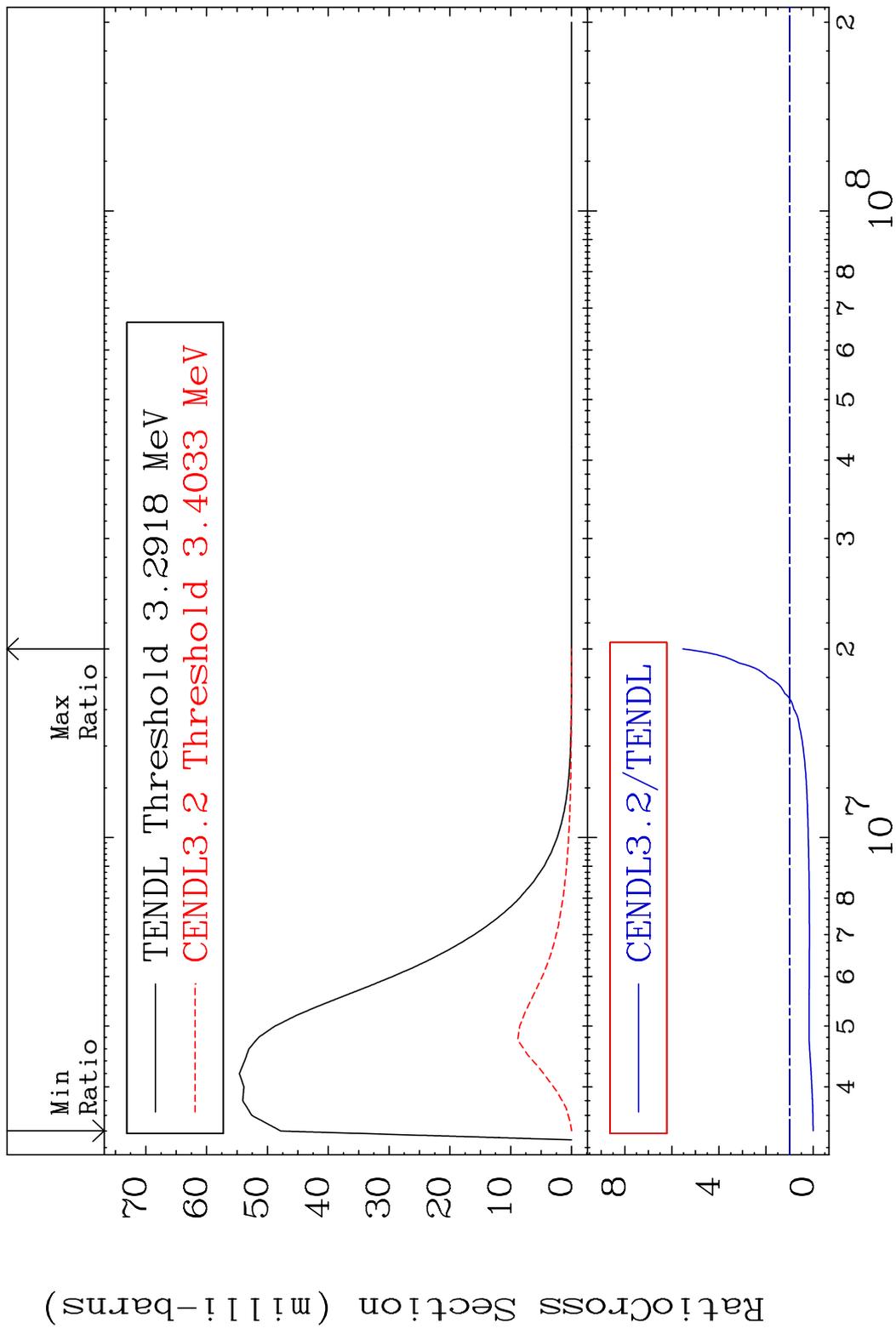
MAT 2231 MT= 55 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 9999. %



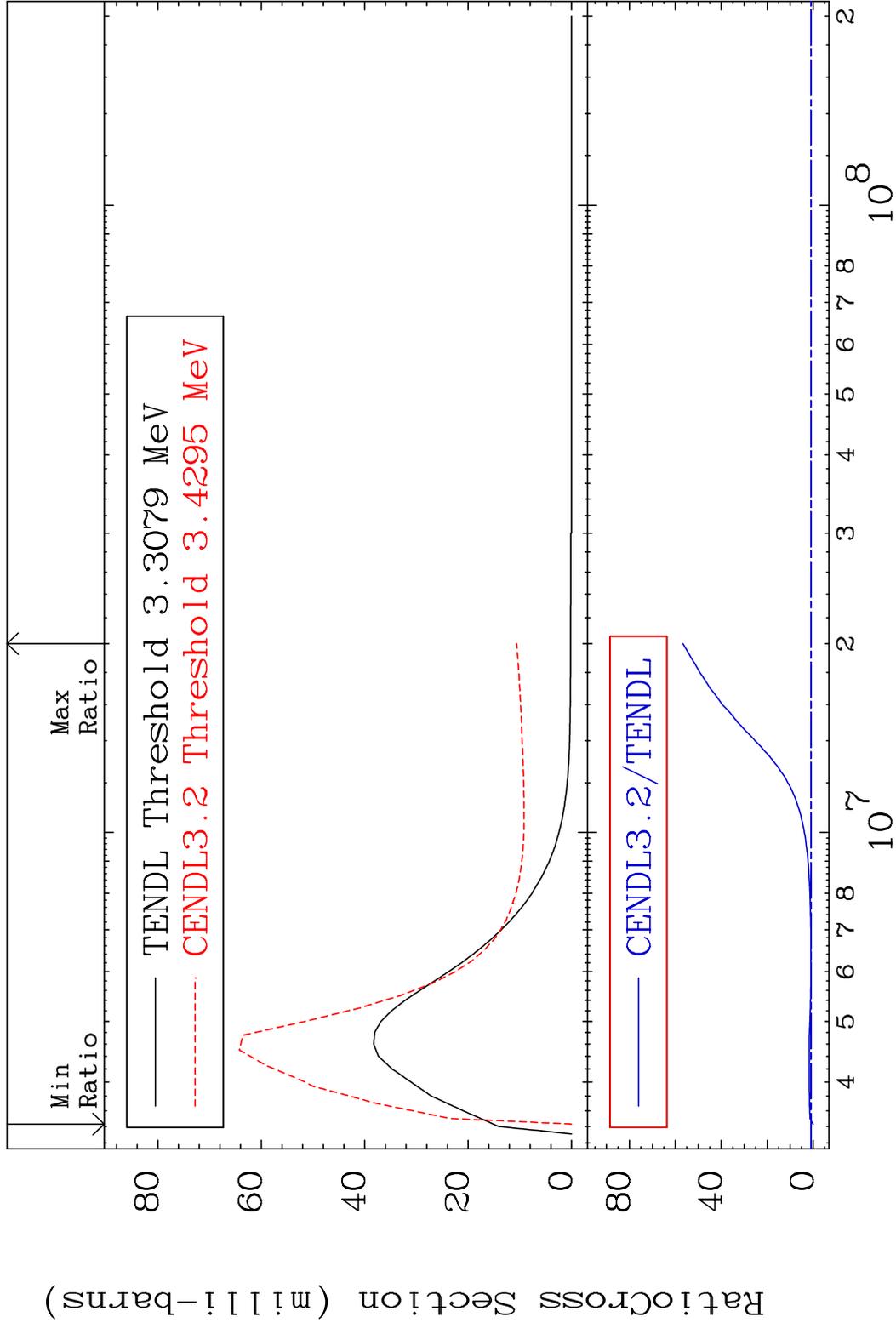
MAT 2231 MT= 56 (n,n') Level 22-Ti-48
 Cross Section -100.0 To -22.40%



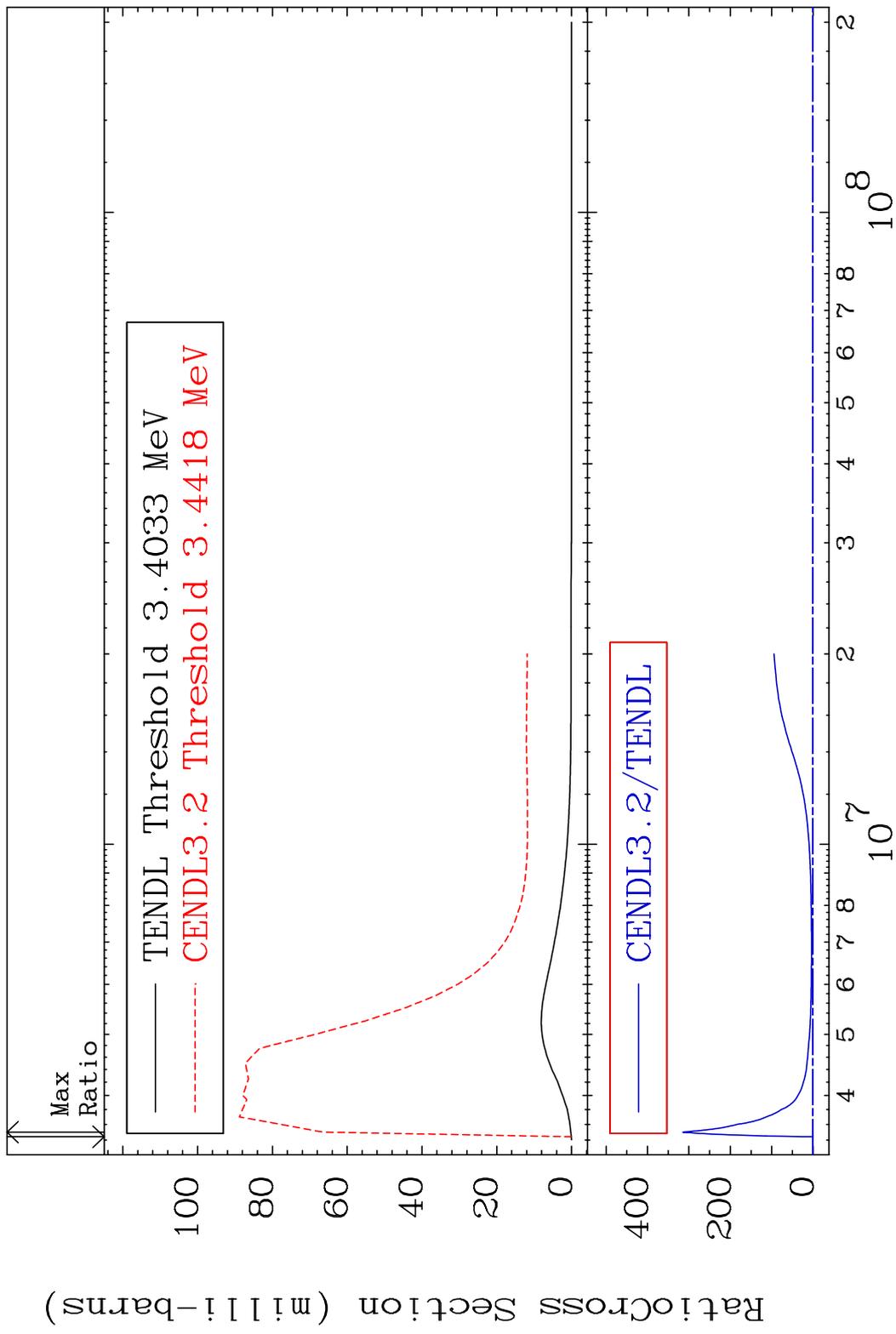
MAT 2231 MT= 57 (n, n') Level 22-Ti-48
 Cross Section -100.0 To 453.5 %



MAT 2231 MT= 58 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 5575. %

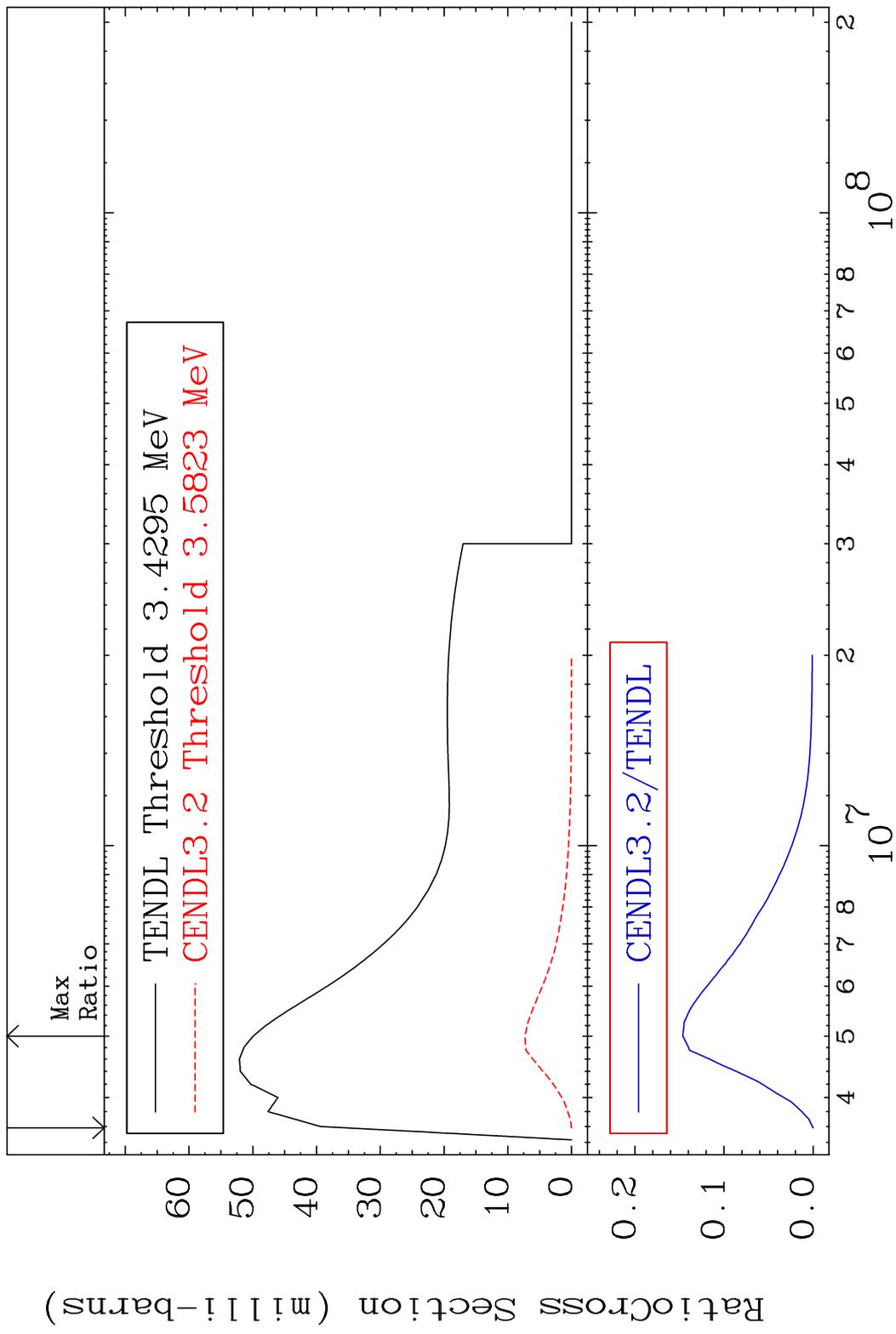


MAT 2231 MT= 59 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 9999. %

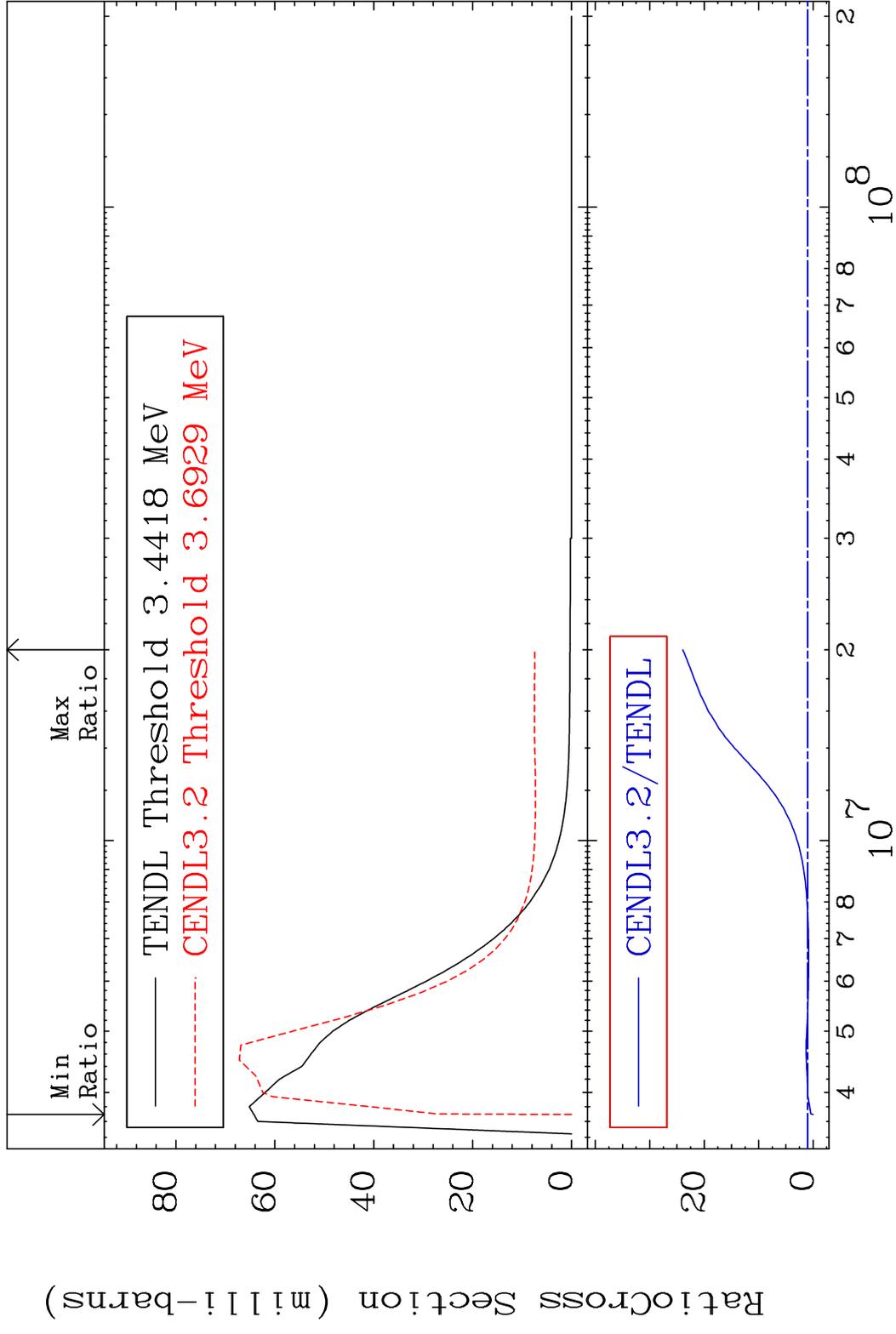


15 Incident Energy (eV) 22-Ti-48

MAT 2231 MT= 60 (n,n') Level 22-Ti-48
 Cross Section -100.0 To -85.37%

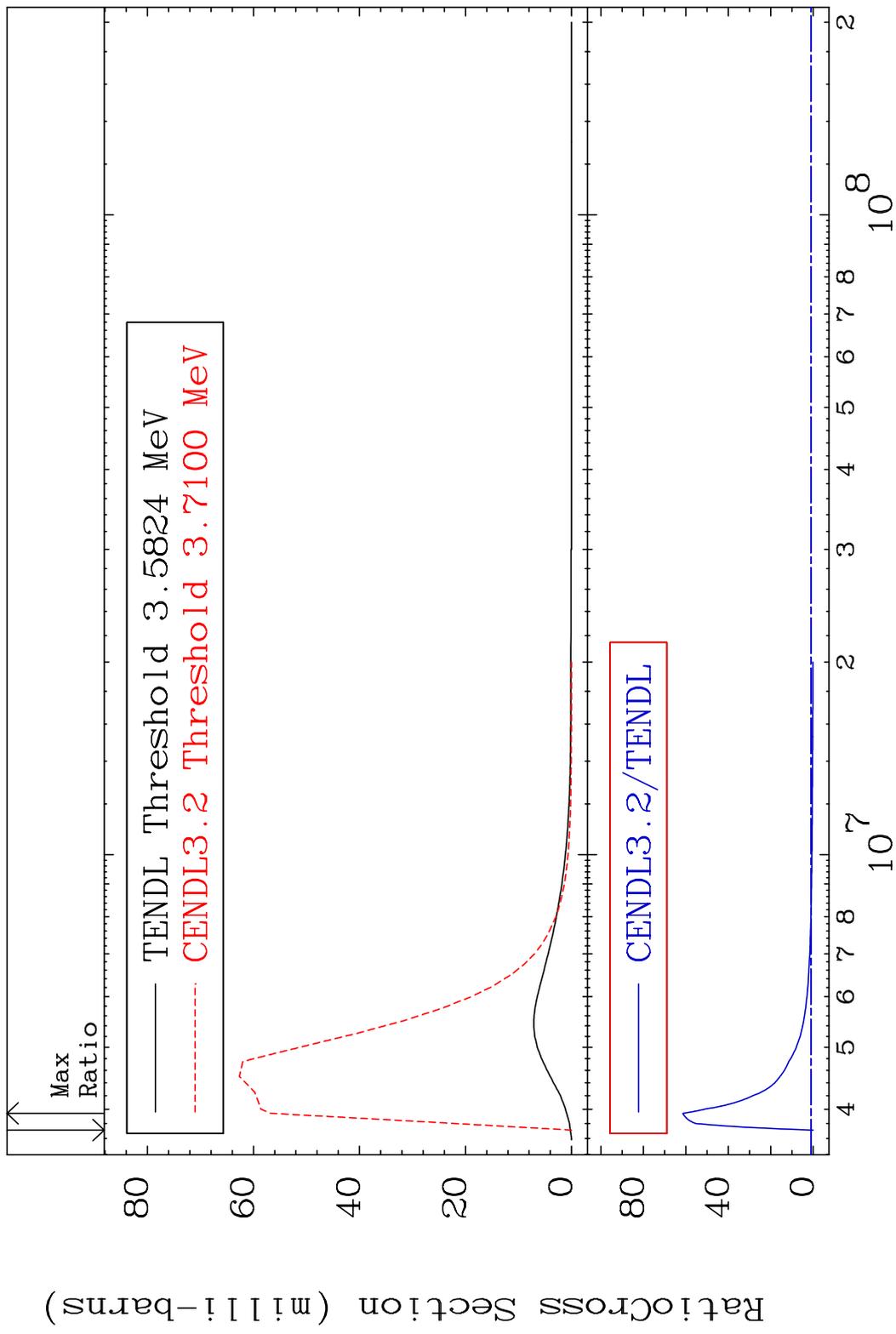


MAT 2231 MT= 61 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 2293. %

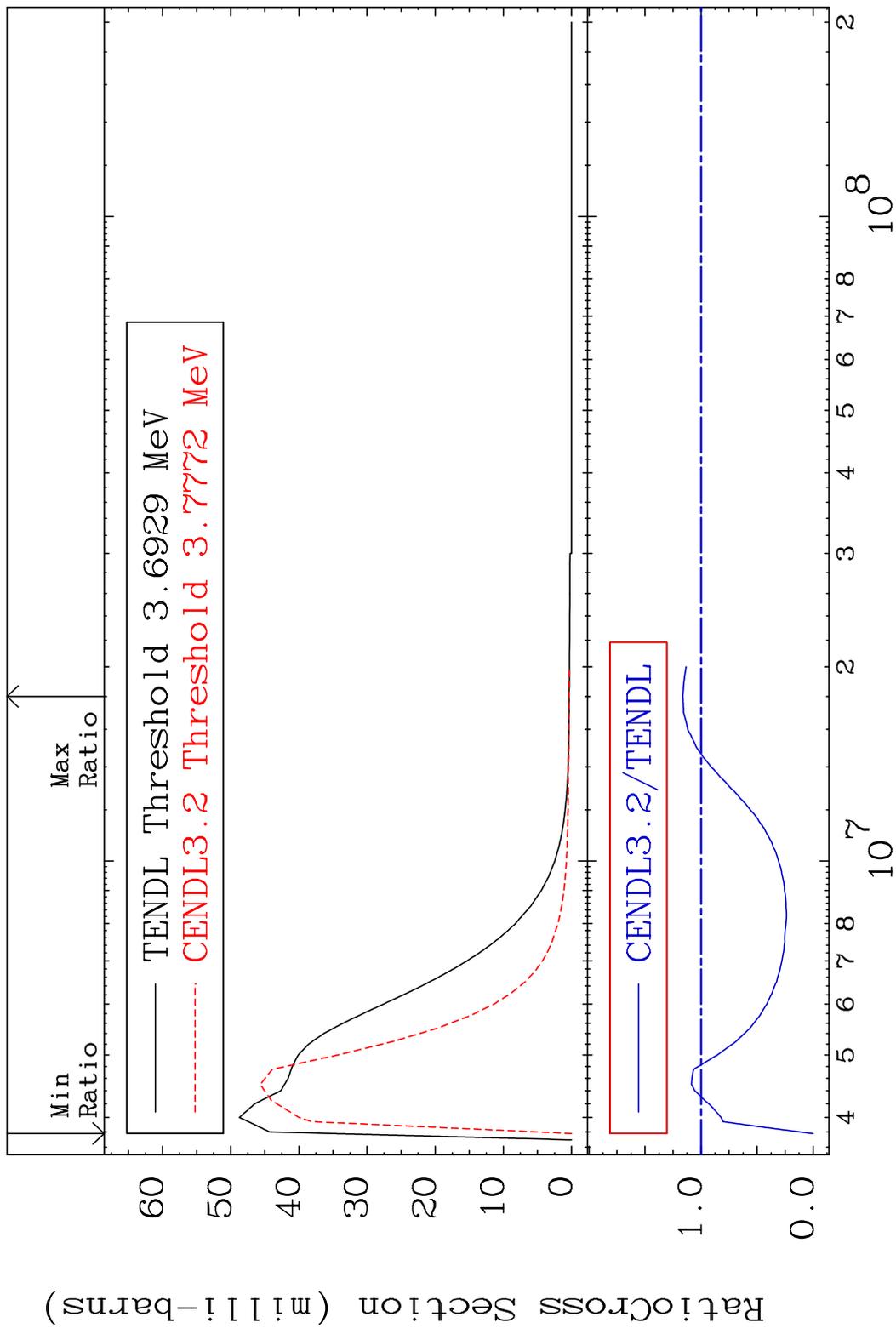


17 Incident Energy (eV) 22-Ti-48

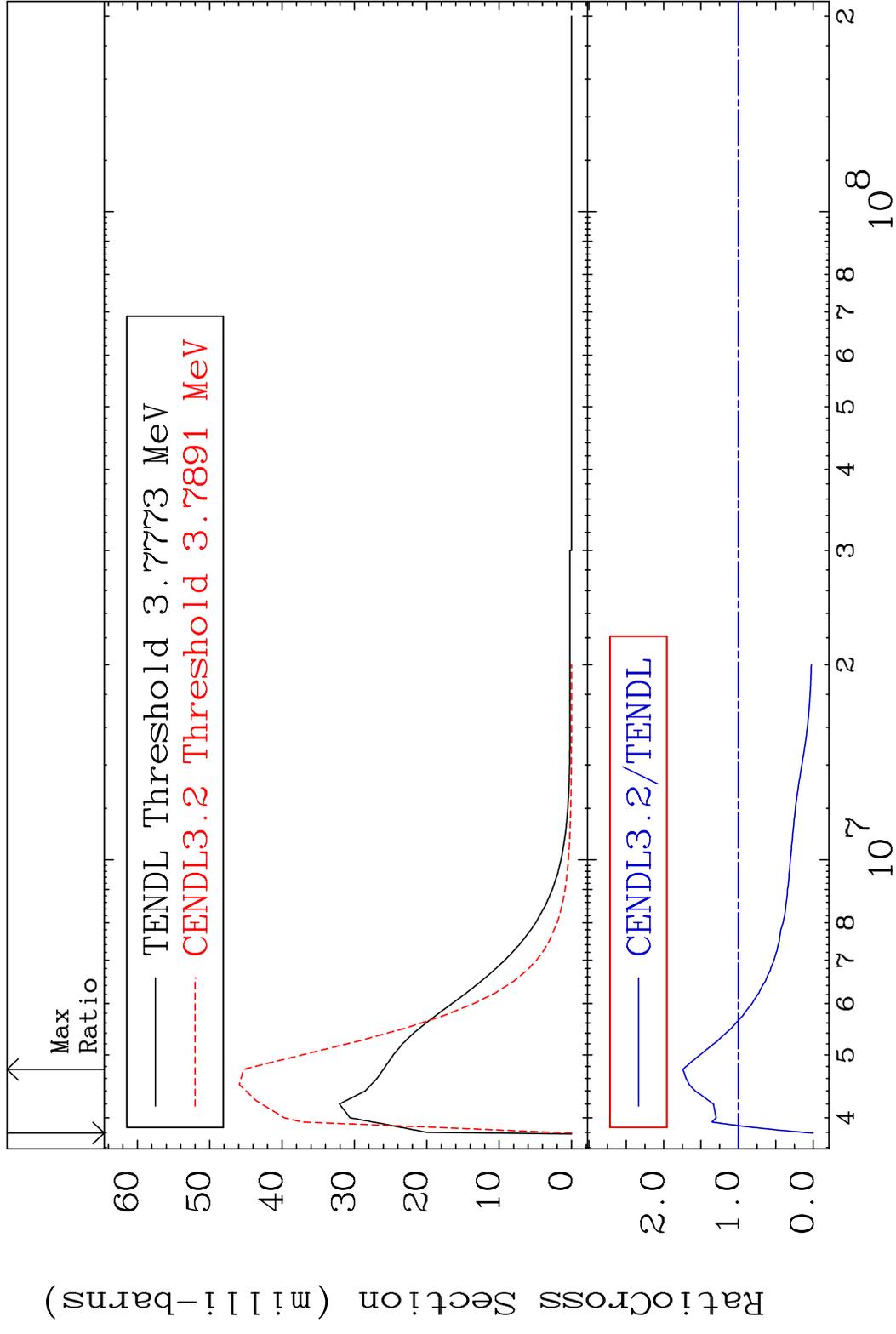
MAT 2231 MT= 62 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 6040. %



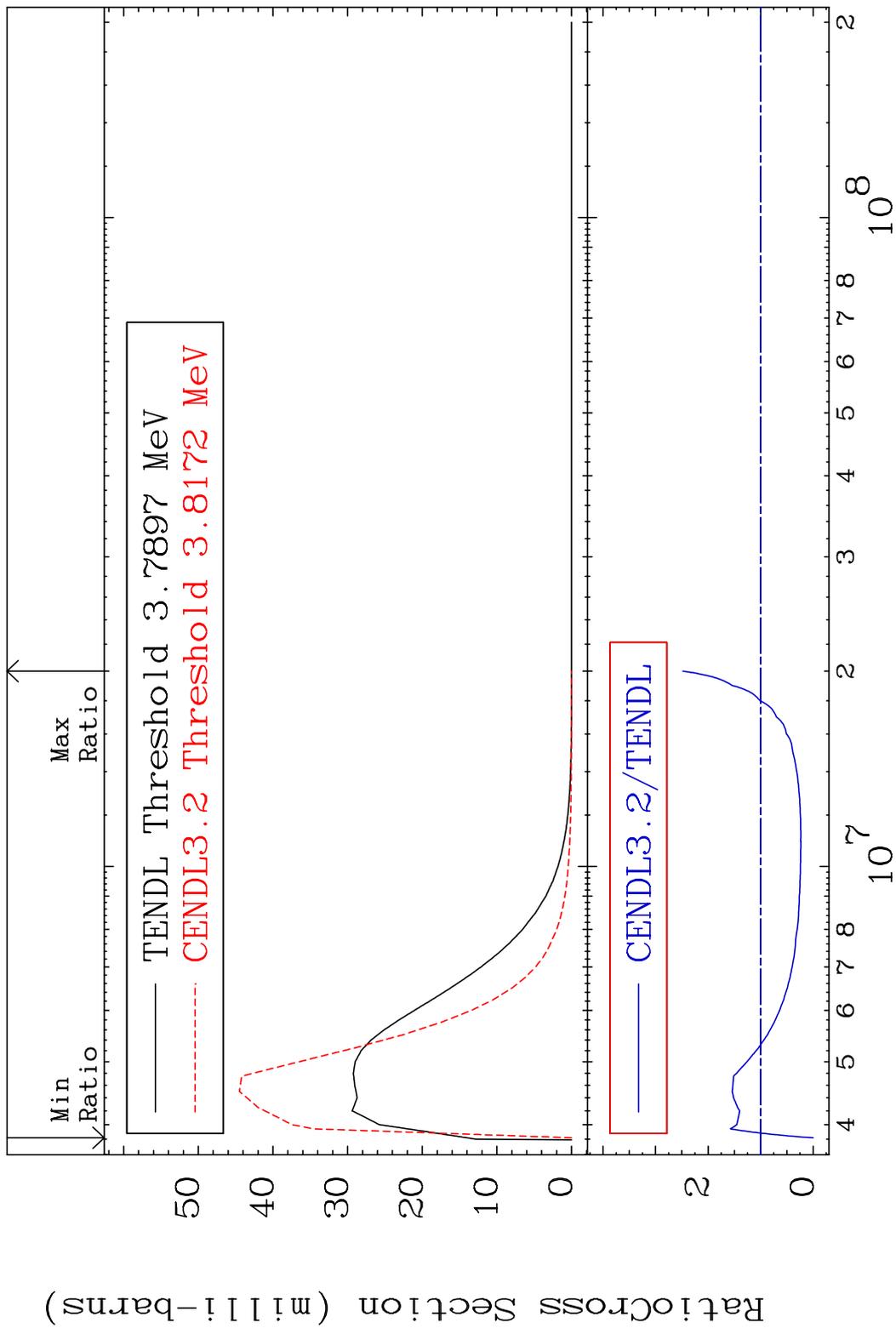
MAT 2231 MT= 63 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 16.26 %



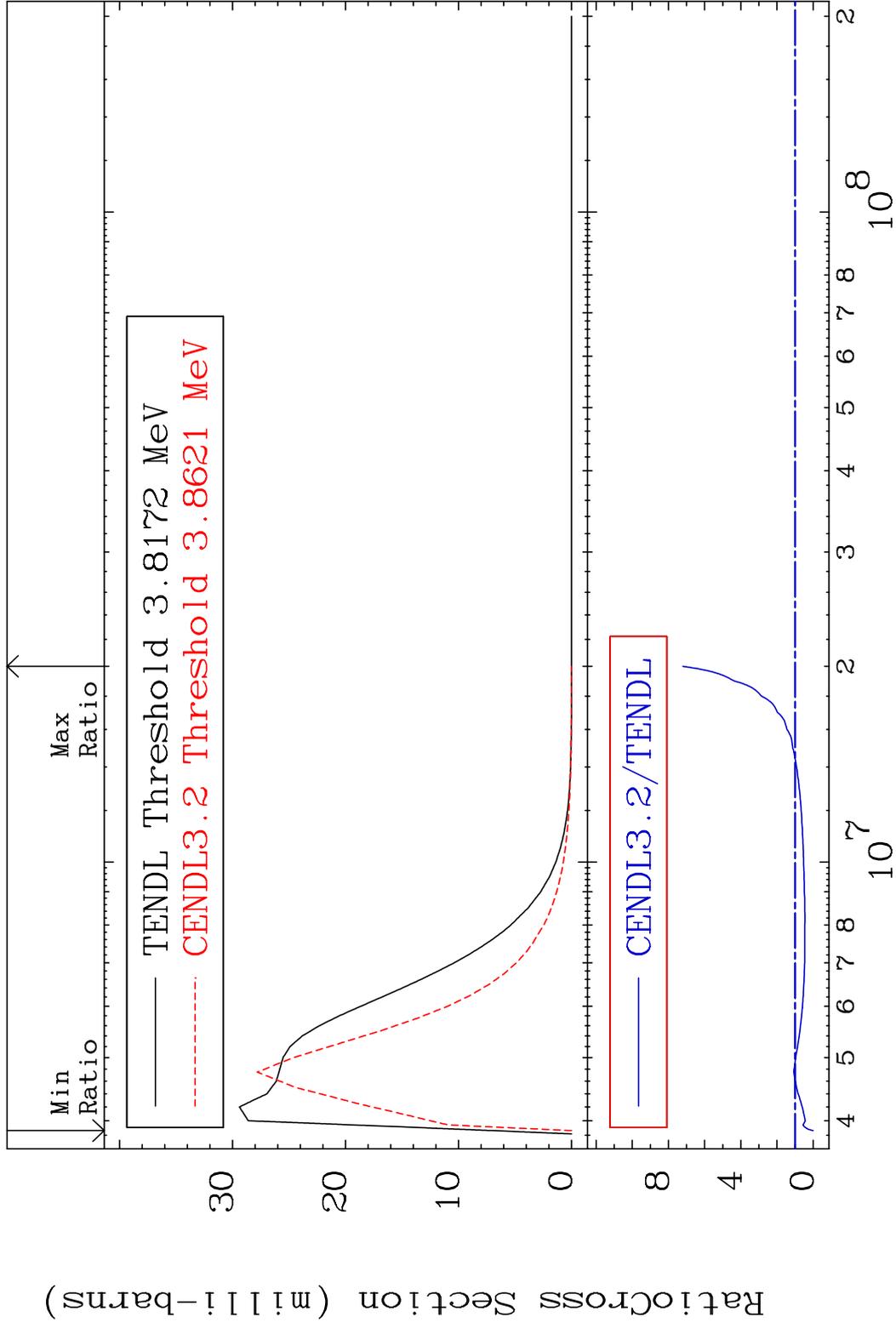
MAT 2231 MT= 64 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 74.30 %



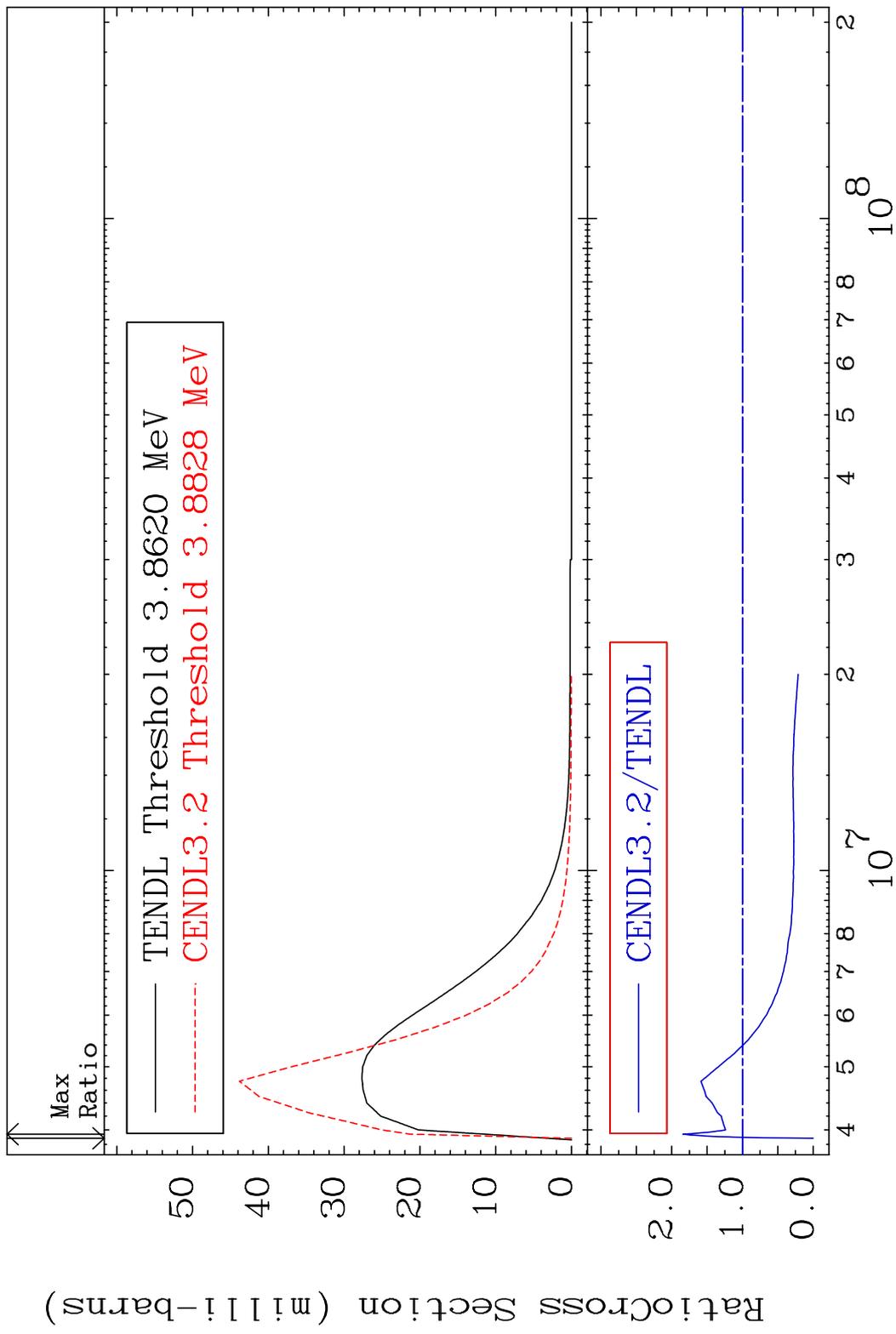
MAT 2231 MT= 65 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 148.1 %



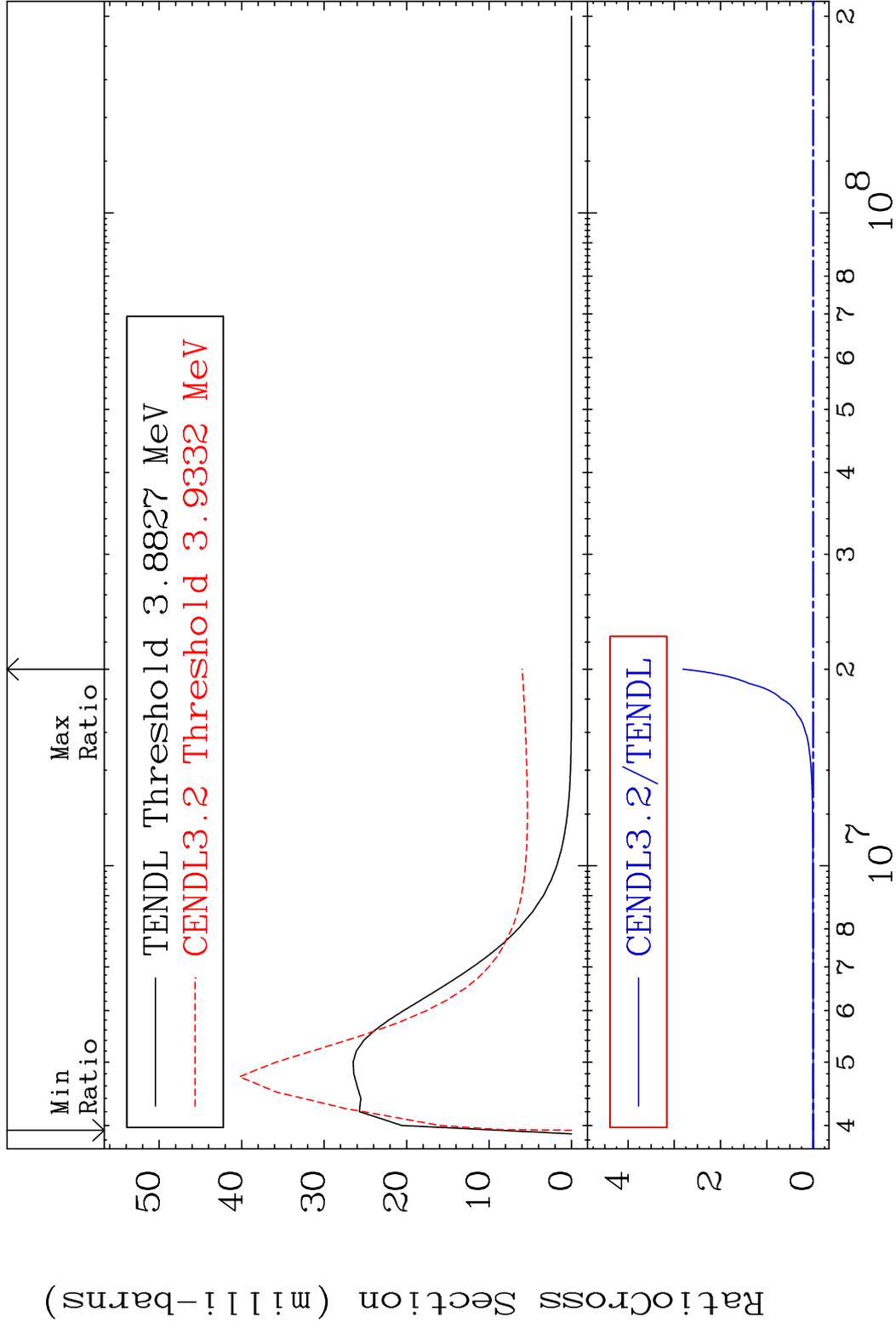
MAT 2231 MT= 66 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 620.4 %



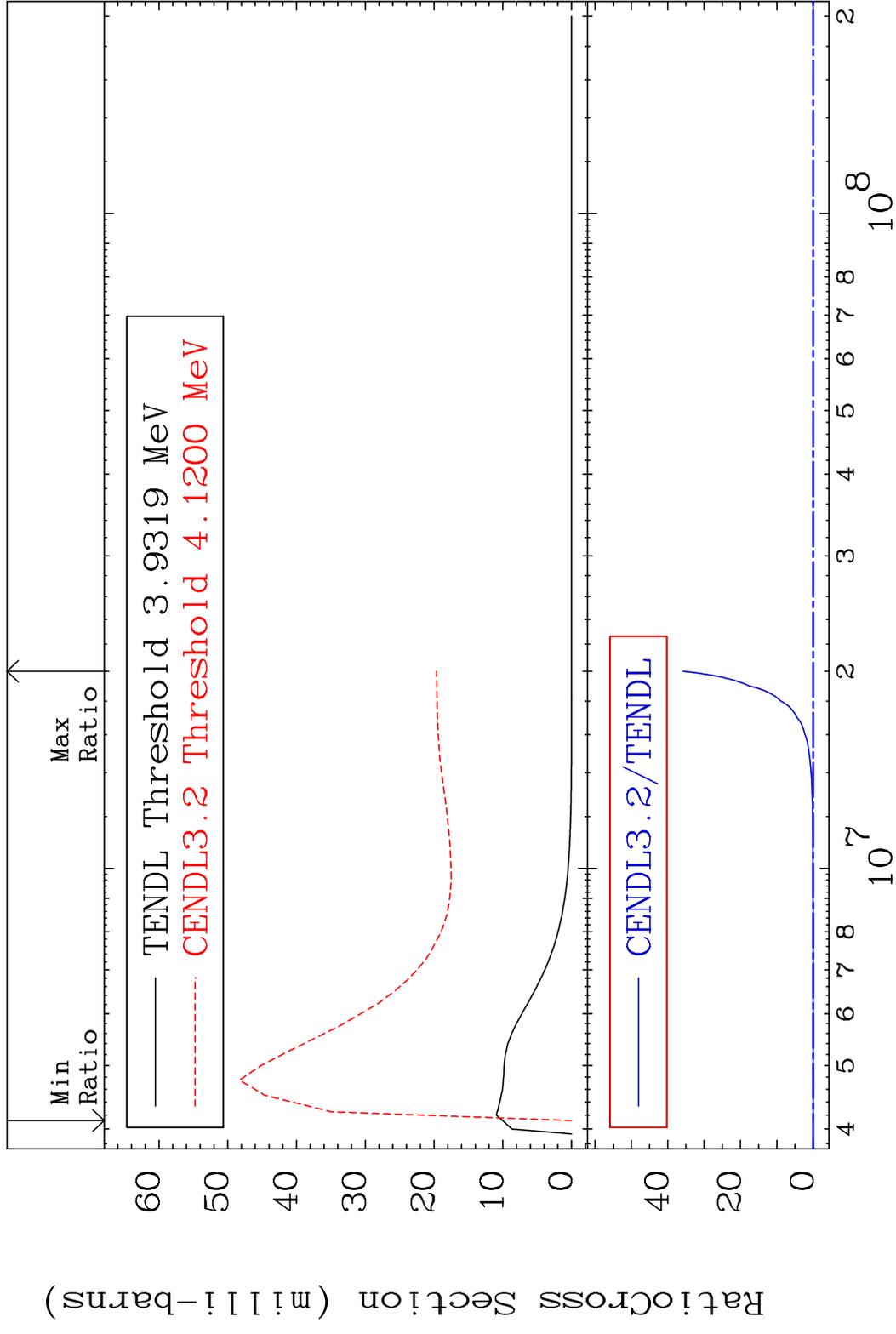
MAT 2231 MT= 67 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 84.28 %



MAT 2231 MT= 68 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 9999. %

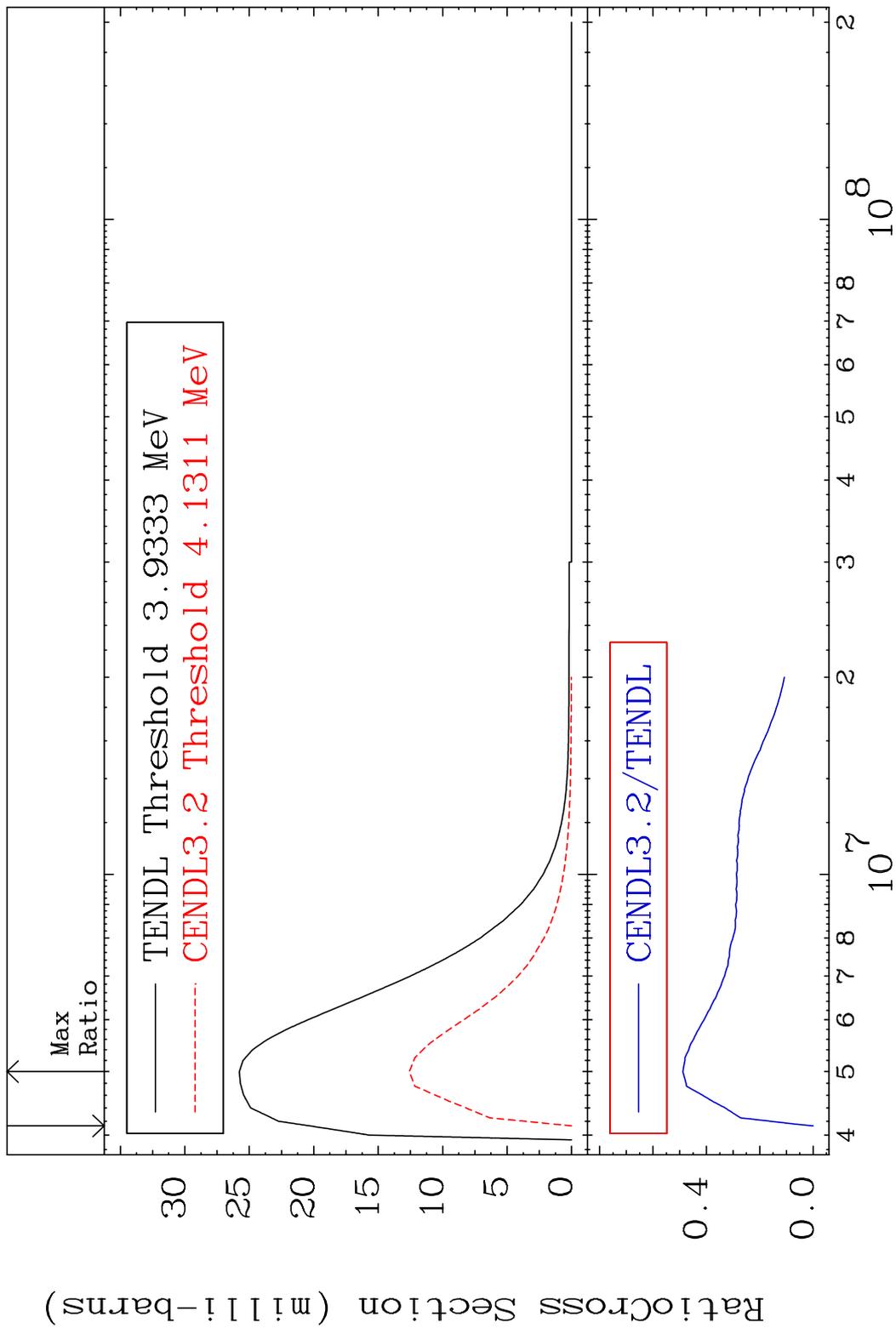


MAT 2231 MT= 69 (n, n') Level 22-Ti-48
 Cross Section -100.0 To 9999. %

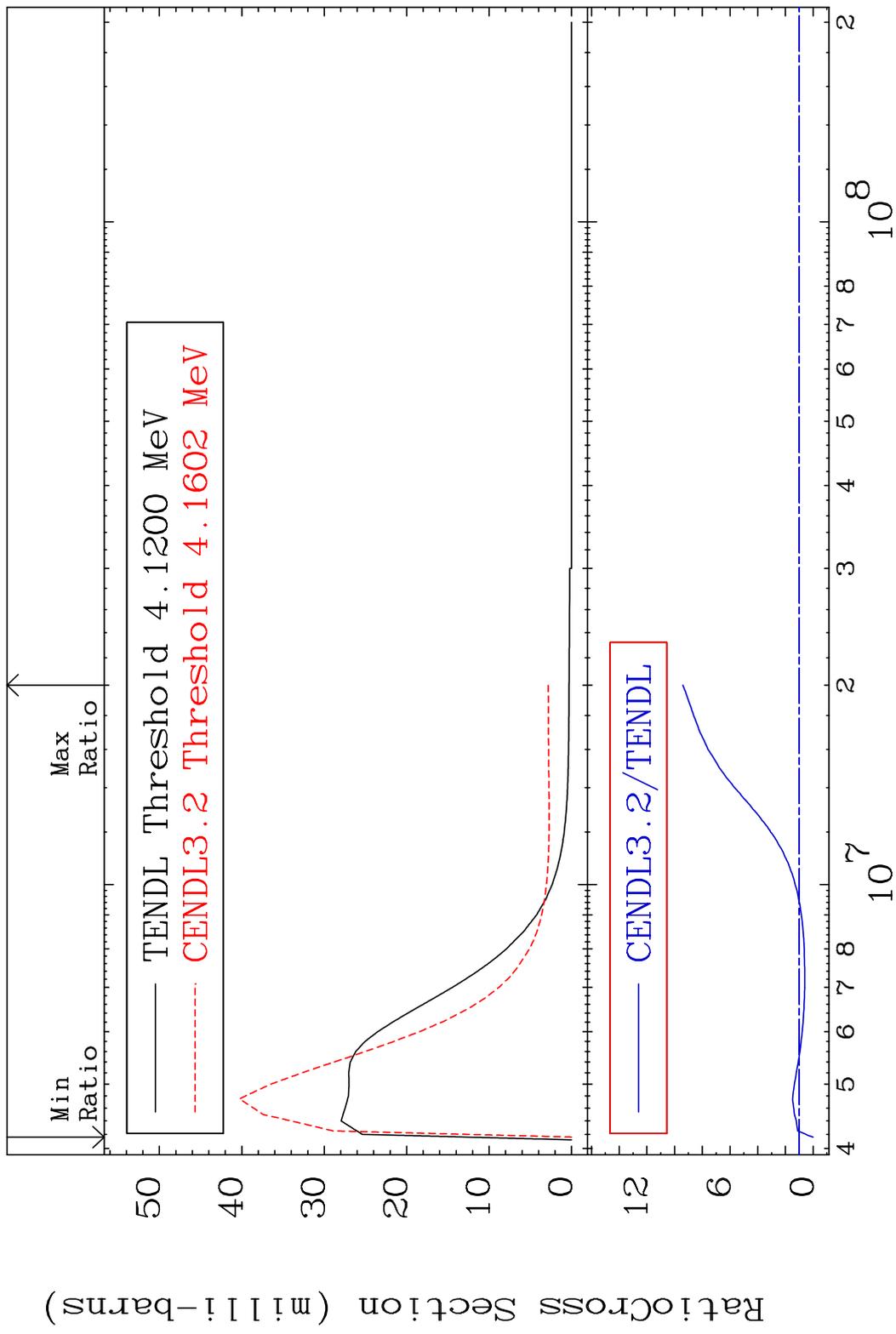


25 Incident Energy (eV) 22-Ti-48

MAT 2231 MT= 70 (n,n') Level 22-Ti-48
 Cross Section -100.0 To -51.17%

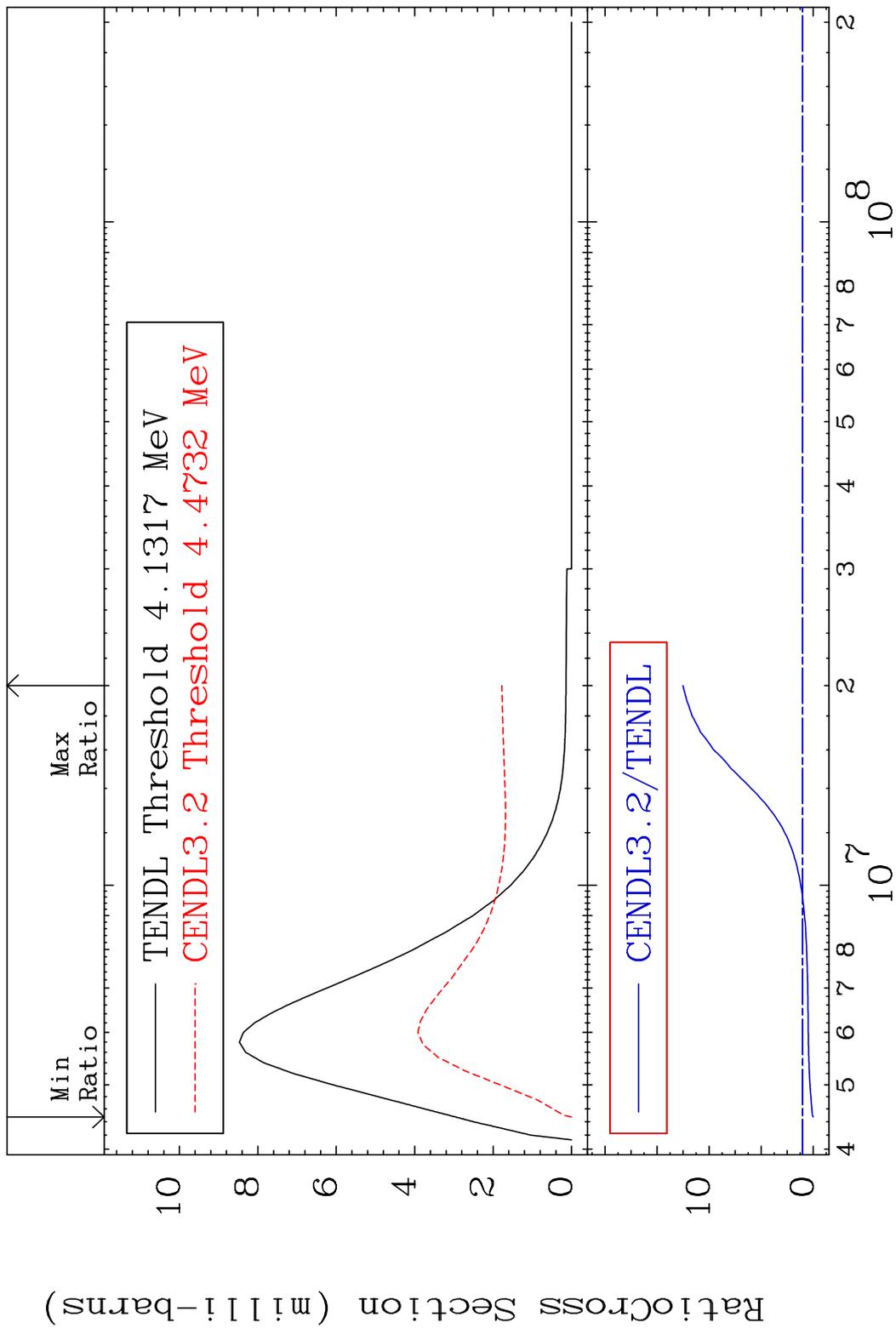


MAT 2231 MT= 71 (n,n') Level 22-Ti-48
 Cross Section -100.0 To 840.6 %

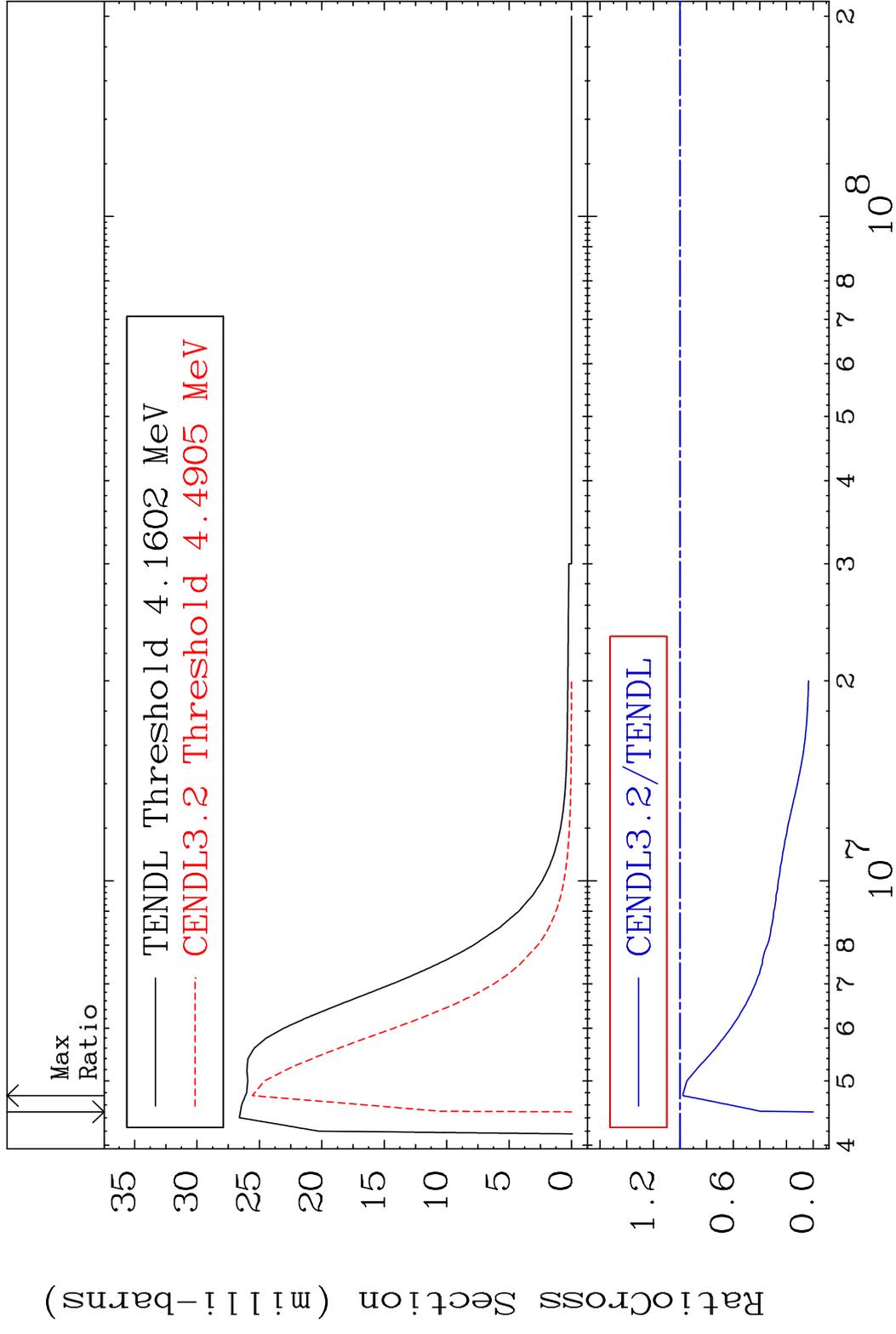


27 Incident Energy (eV) 22-Ti-48

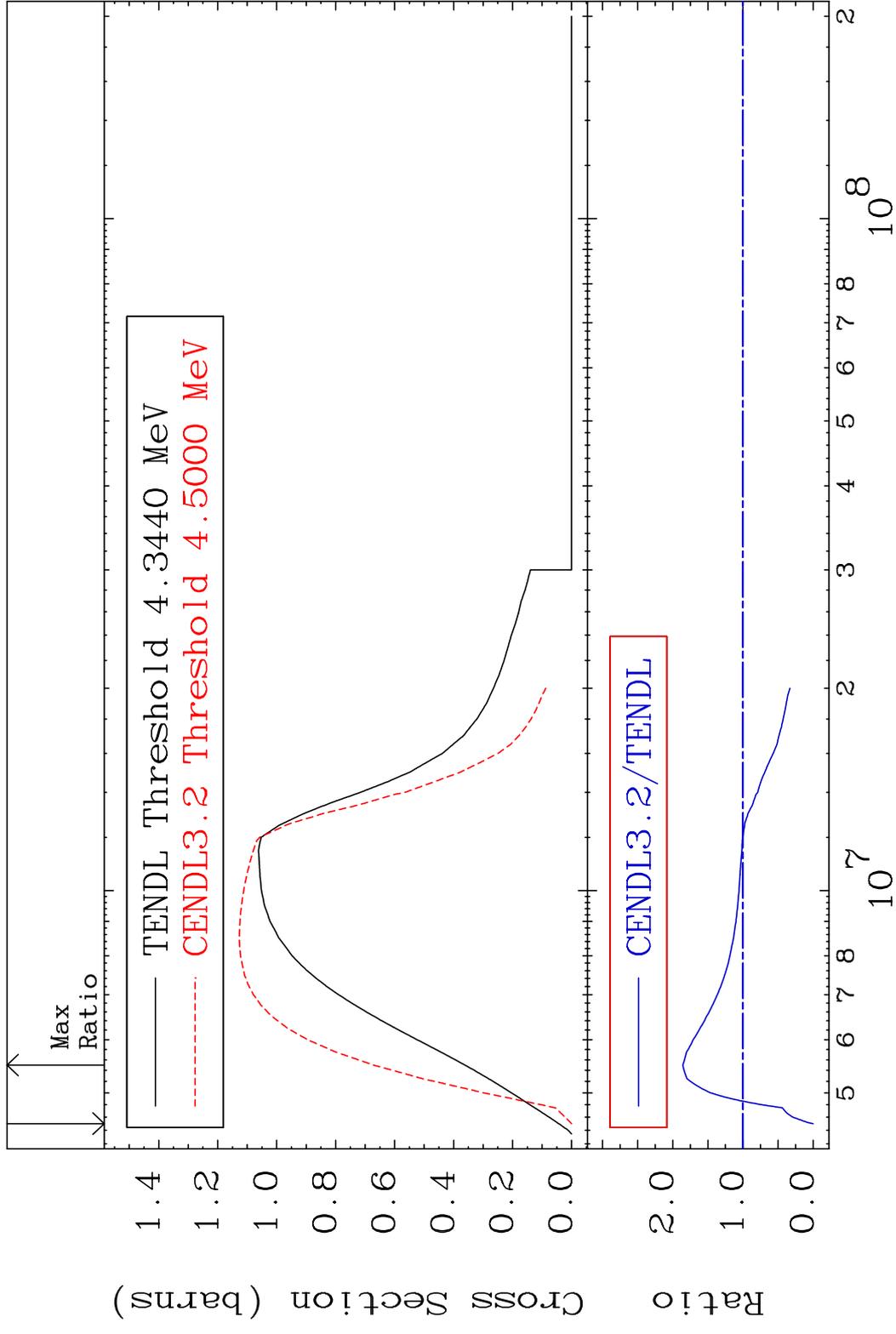
MAT 2231 MT= 72 (n, n') Level 22-Ti-48
 Cross Section -100.0 To 1153. %



MAT 2231 MT= 73 (n, n') Level 22-Ti-48
 Cross Section -100.0 To -2.143%



MAT 2231 (n,n') Continuum ²²Ti-48
 Cross Section -100.0 To 85.67 %



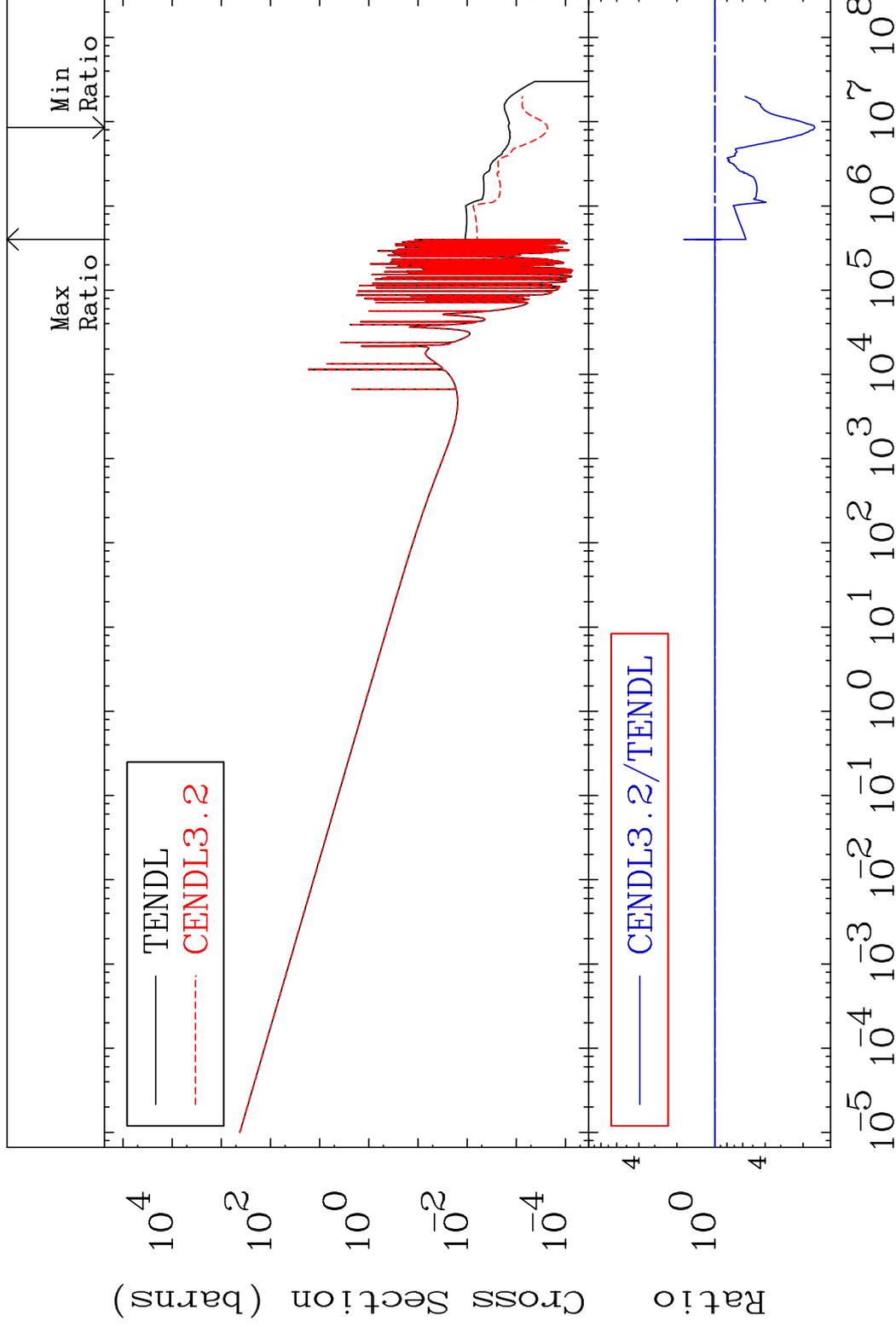
MAT 2231

(n, γ)

22-Ti-48

Cross Section

-83.84 To 75.03 %



31

Incident Energy (eV)

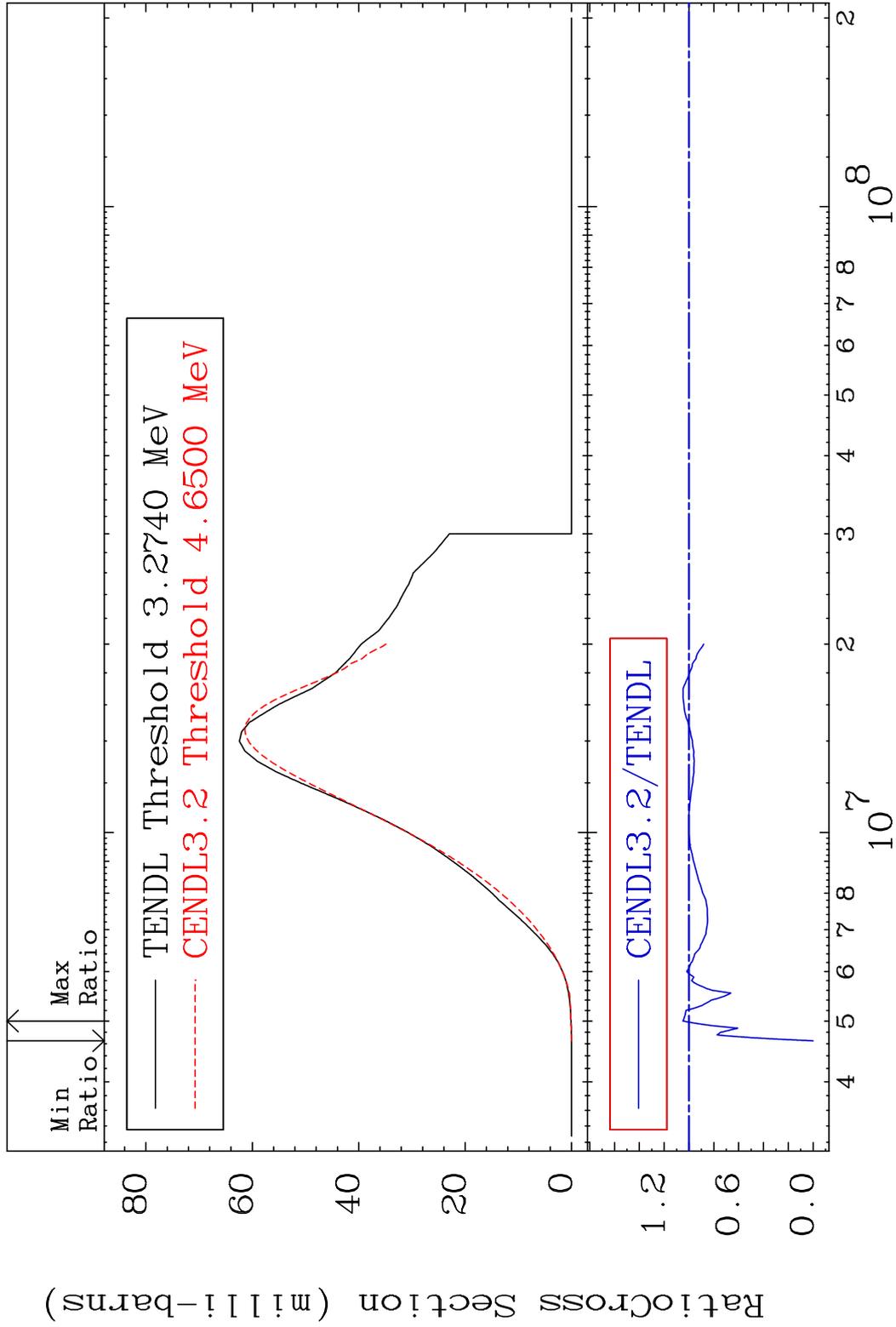
22-Ti-48

MAT 2231

(n, p)

²²Ti-48

Cross Section -100.0 To 4.980 %



32

Incident Energy (eV)

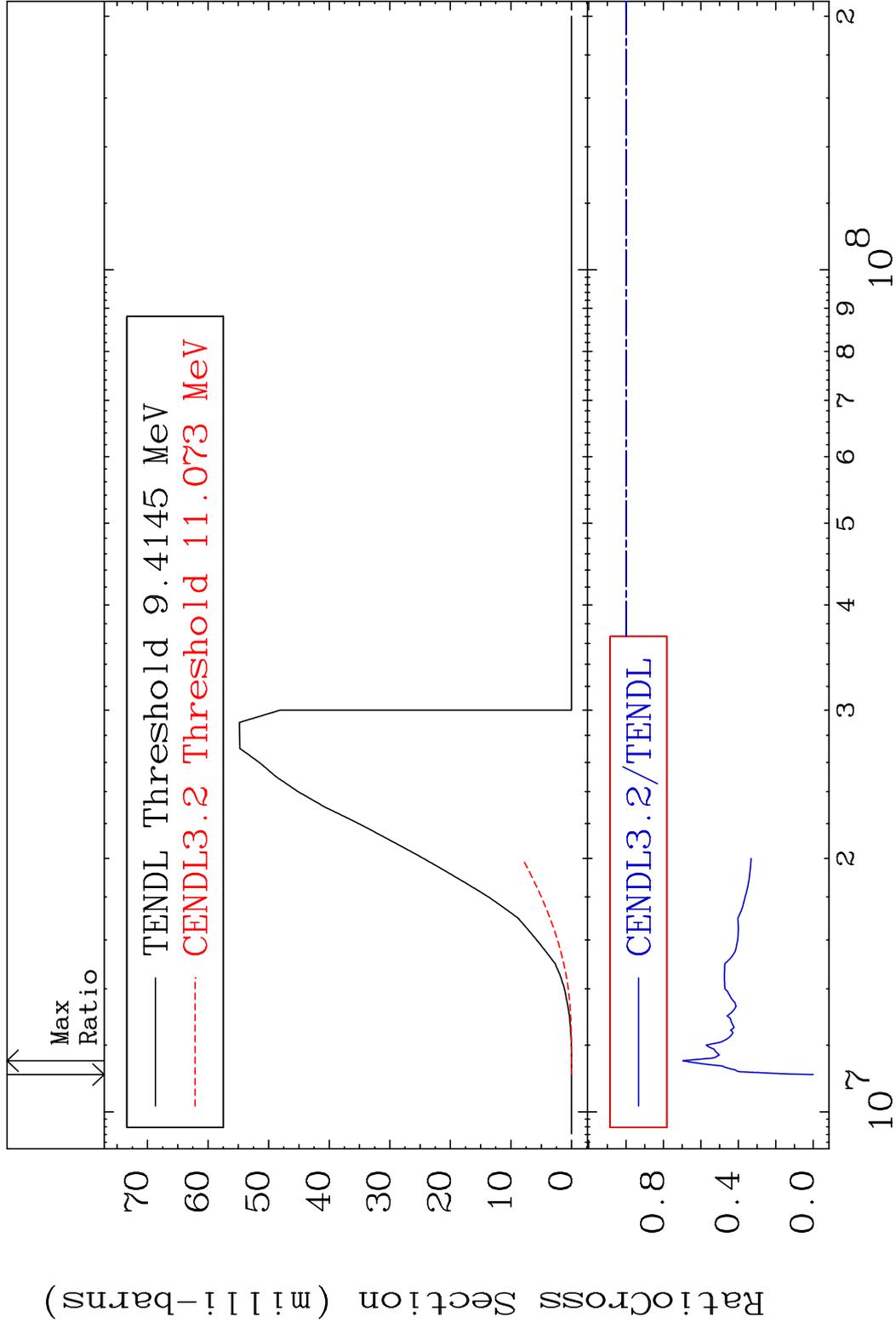
²²Ti-48

MAT 2231

(n, d)

²²Ti-48

Cross Section -100.0 To -30.34%

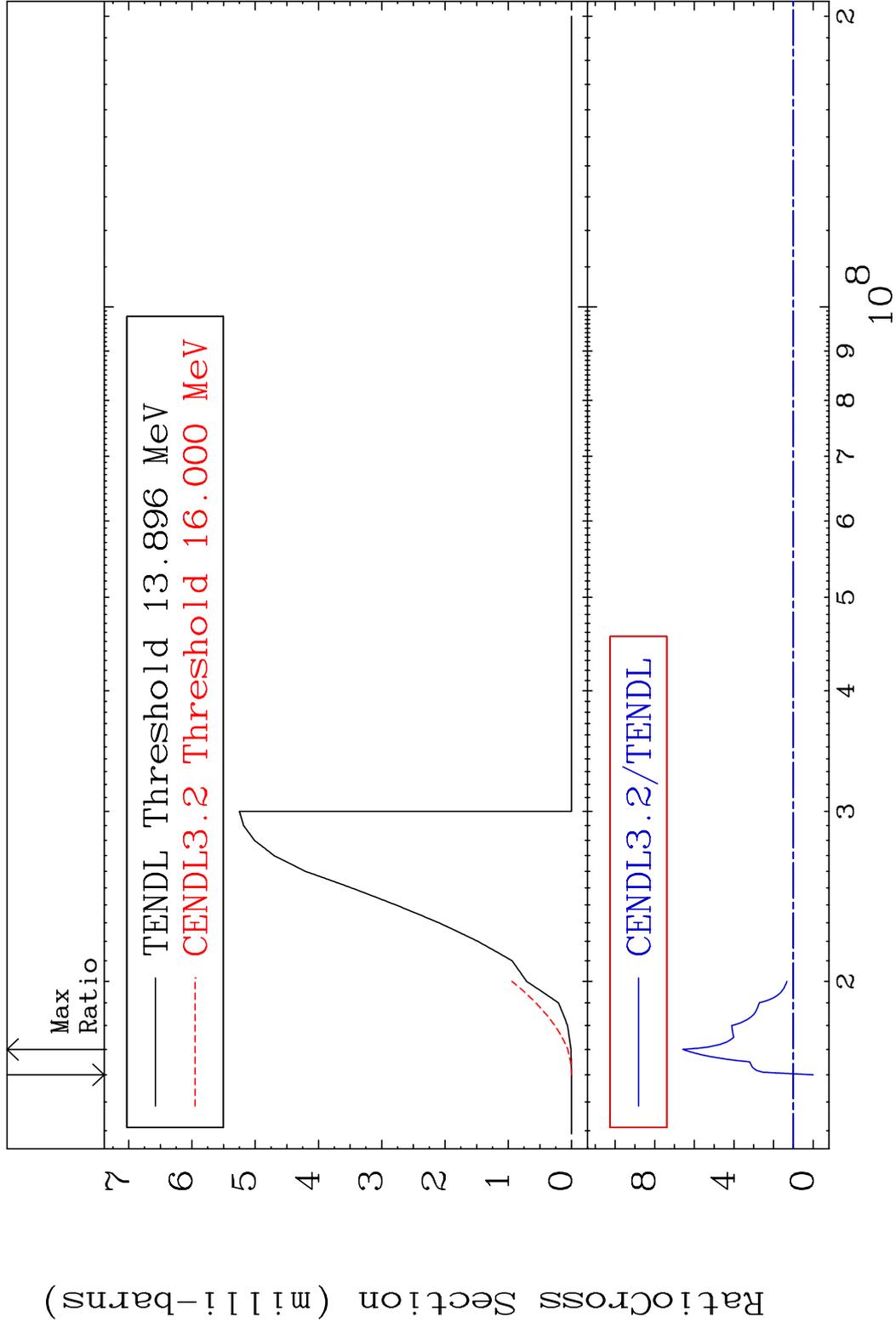


33

Incident Energy (eV)

²²Ti-48

MAT 2231 (n, t) 22-Ti-48
 Cross Section -100.0 To 557.9 %

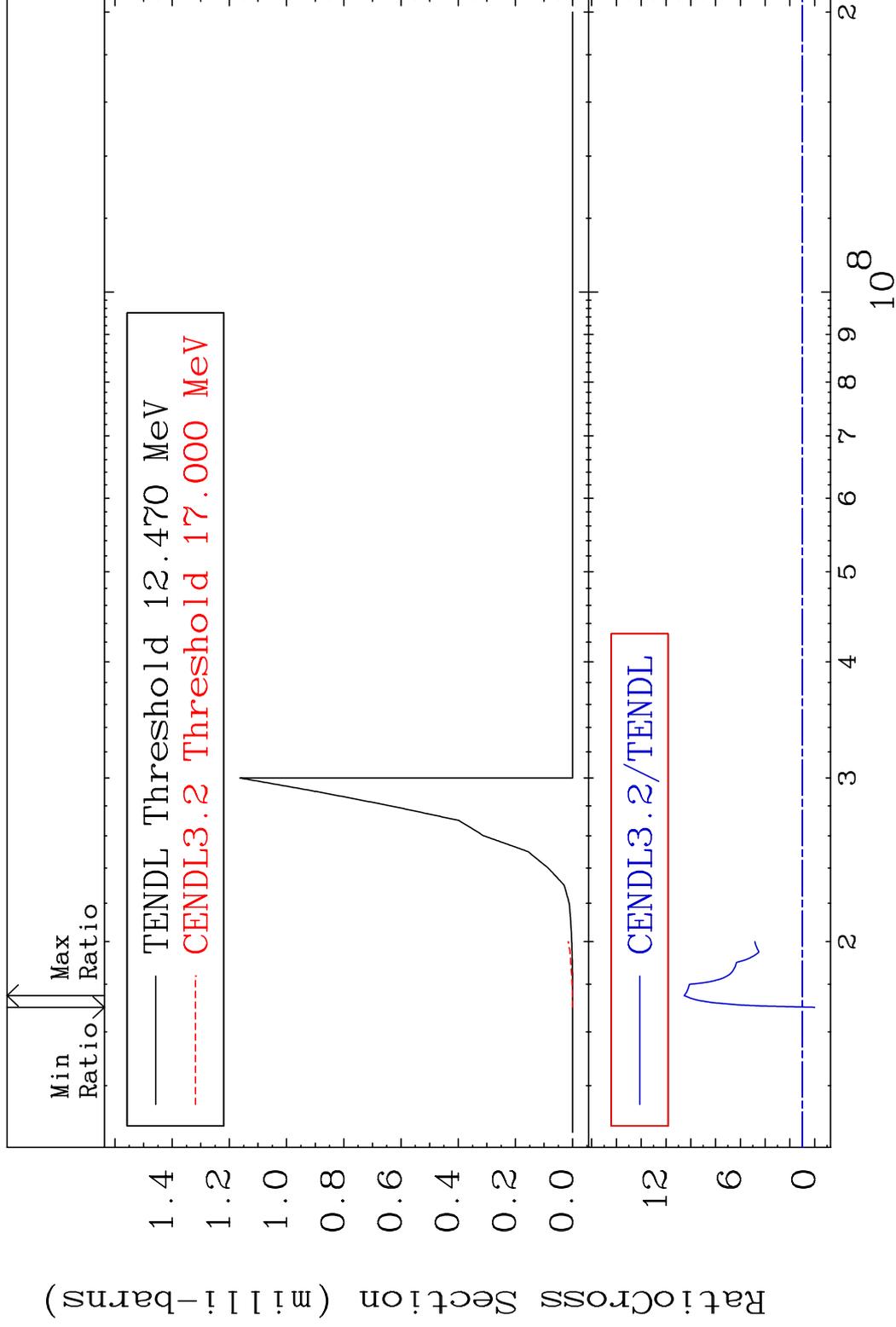


MAT 2231

(n, He-3)

²²Ti-48

Cross Section -100.0 To 953.7 %

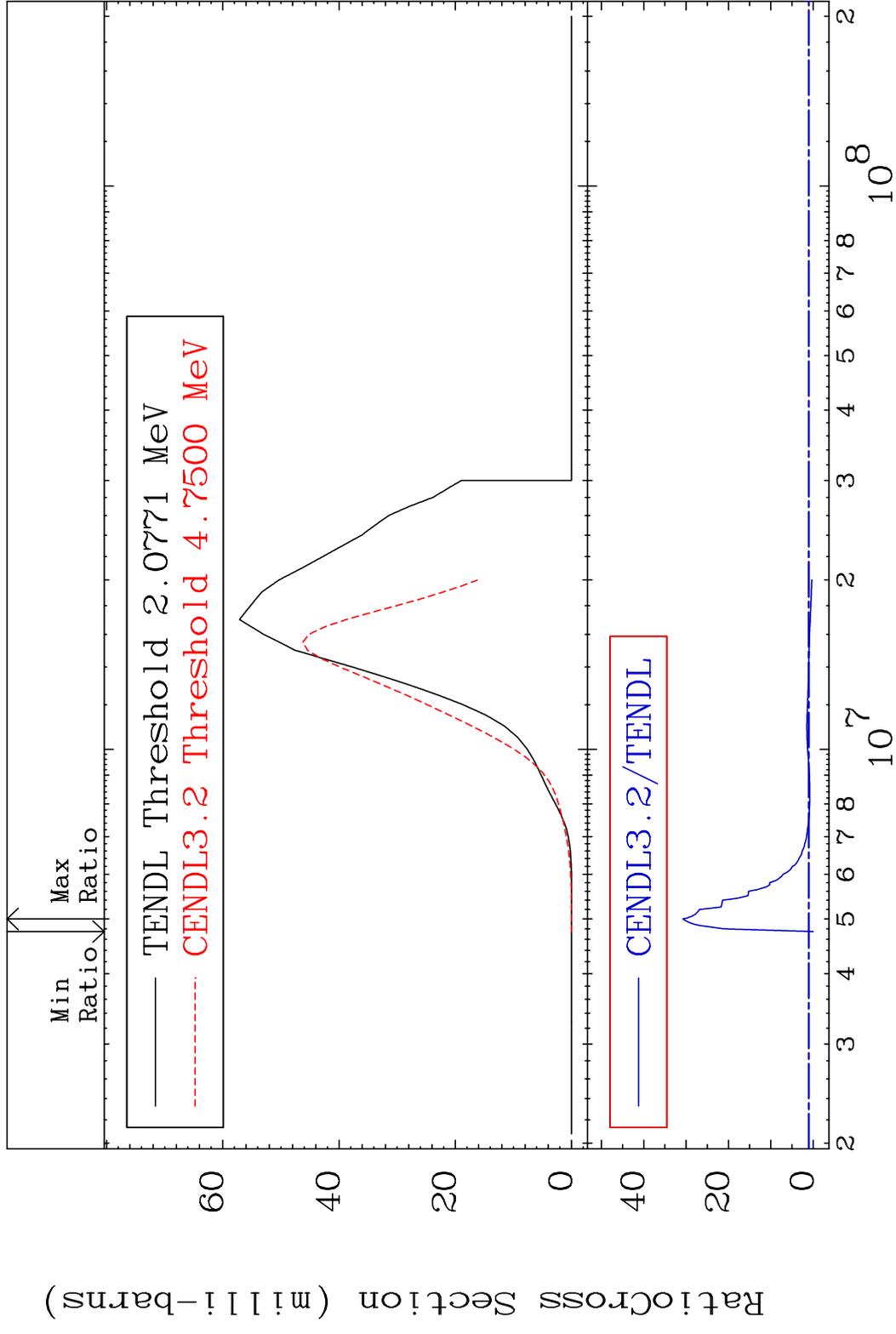


35

Incident Energy (eV)

²²Ti-48

MAT 2231 (n, α) 22-Ti-48
 Cross Section -100.0 To 2977. %

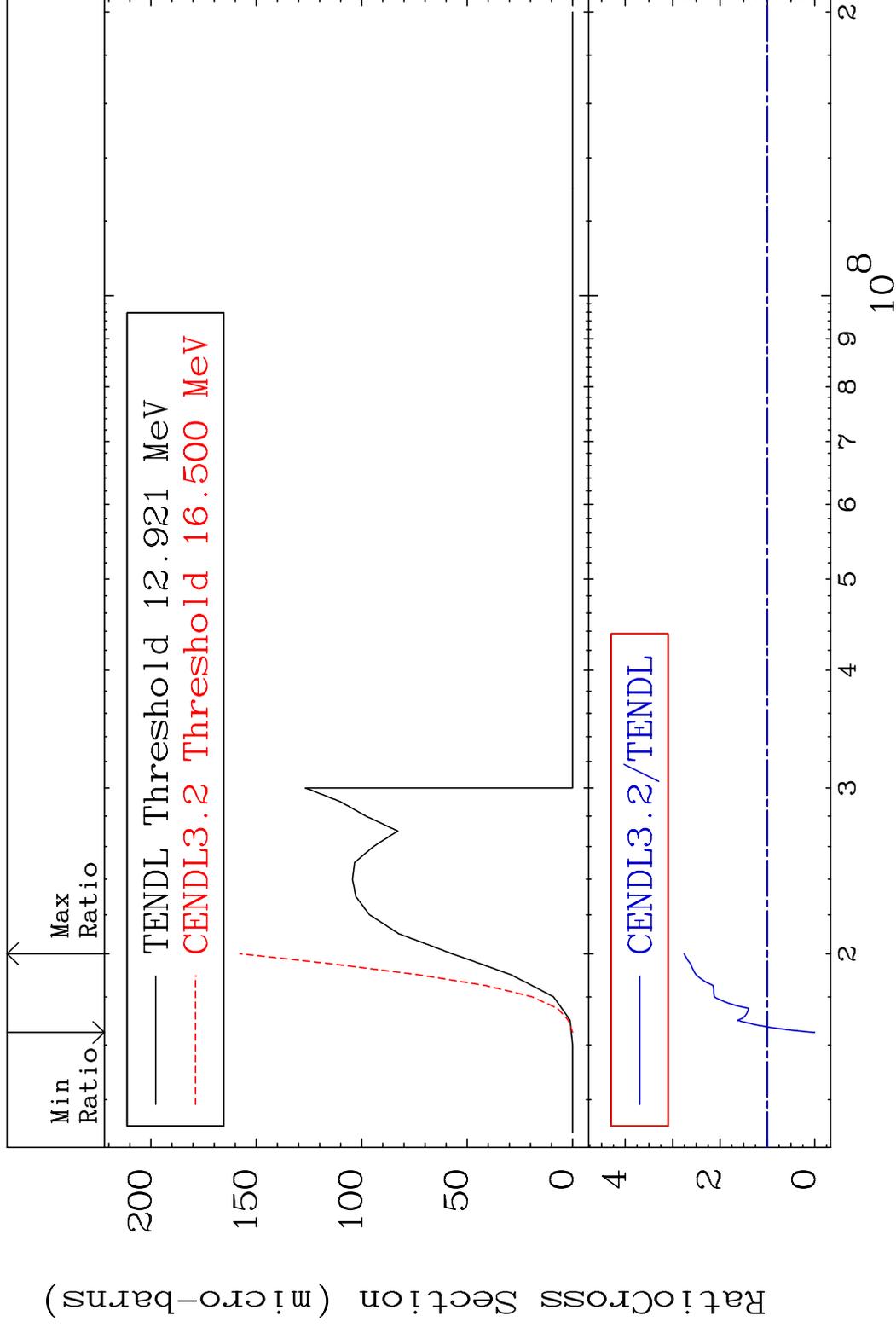


MAT 2231

(n,2p)

²²Ti-48

Cross Section -100.0 To 175.7 %

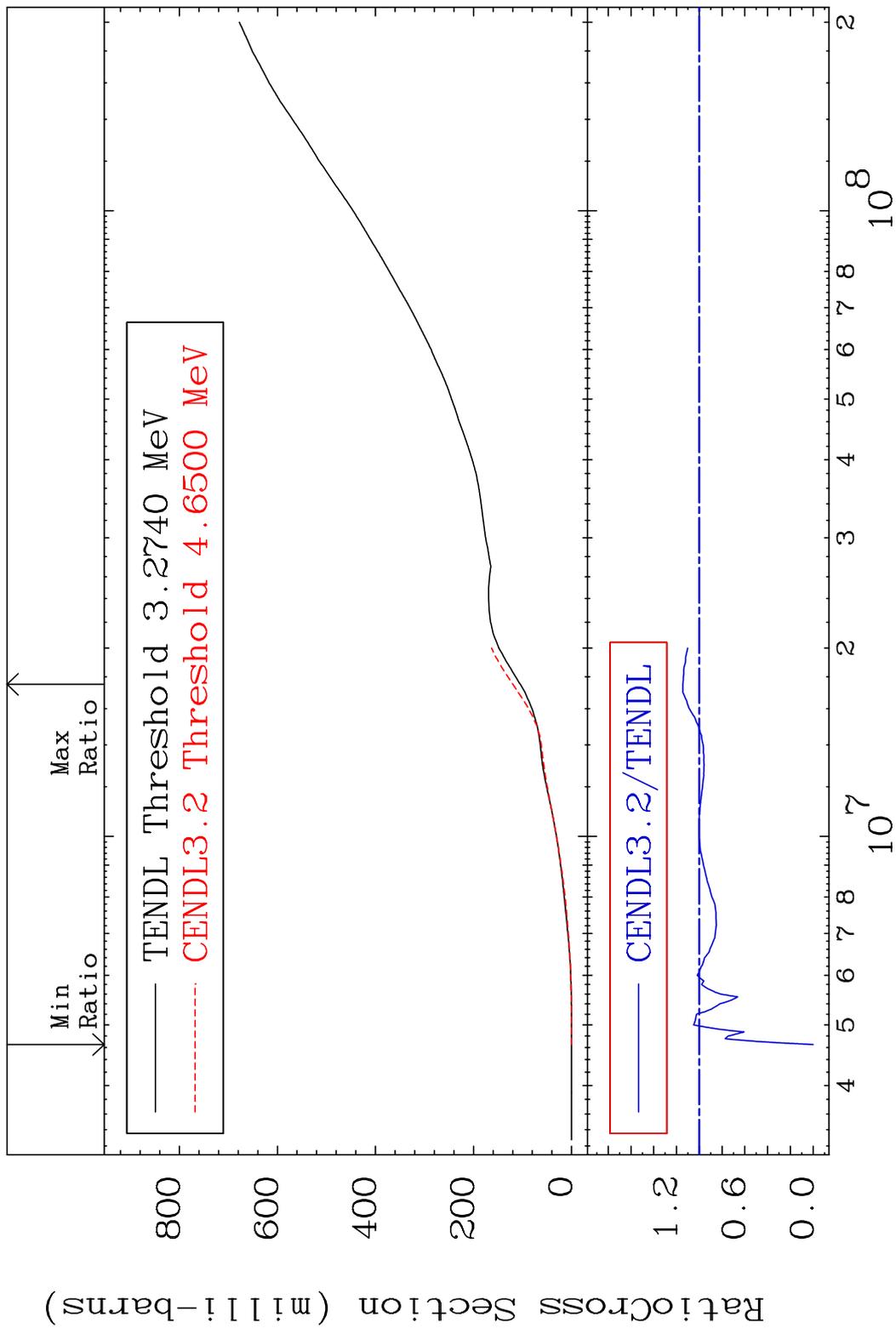


37

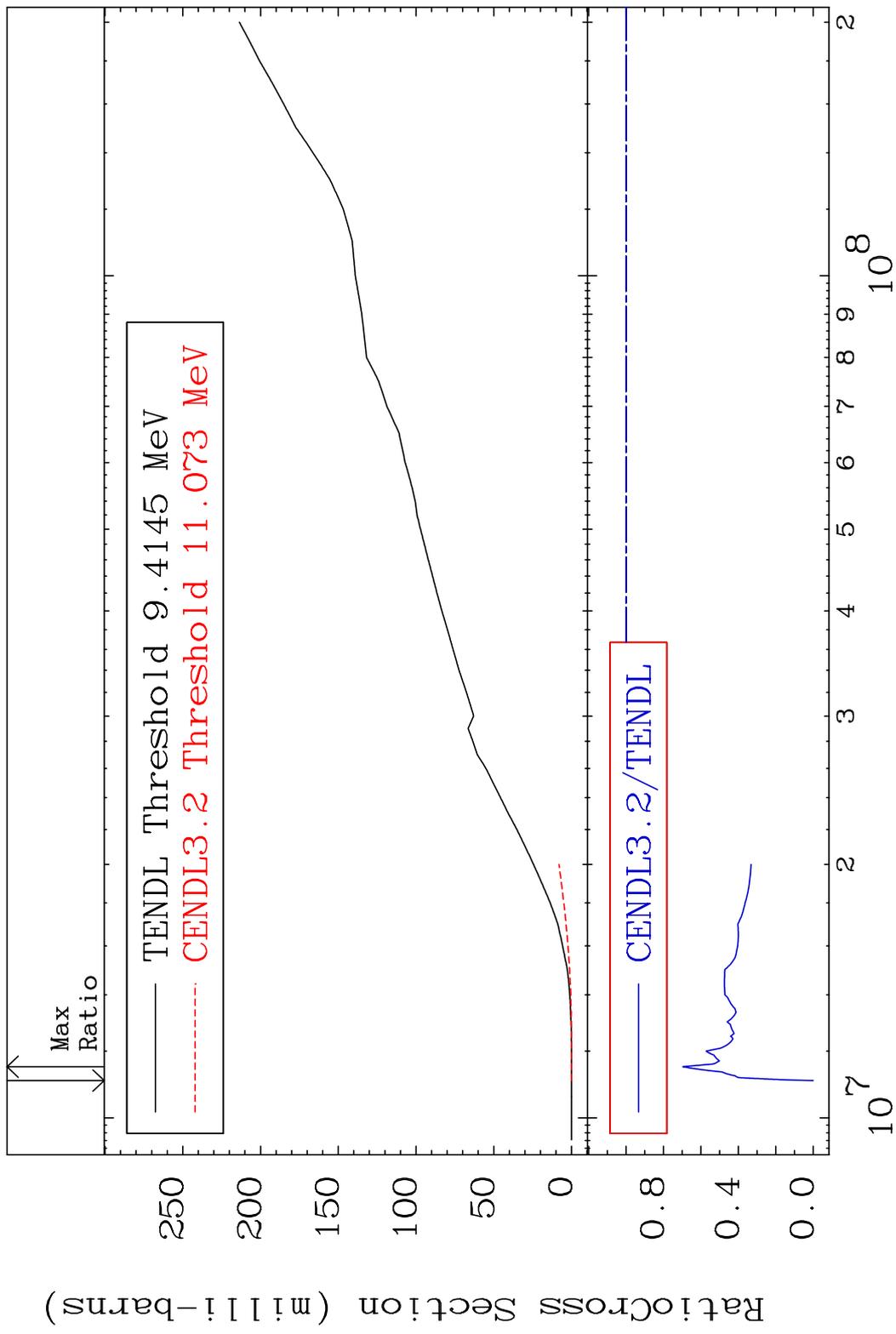
Incident Energy (eV)

²²Ti-48

MAT 2231 Hydrogen Production $^{22}\text{Ti-48}$
 Cross Section -100.0 To 14.45 %



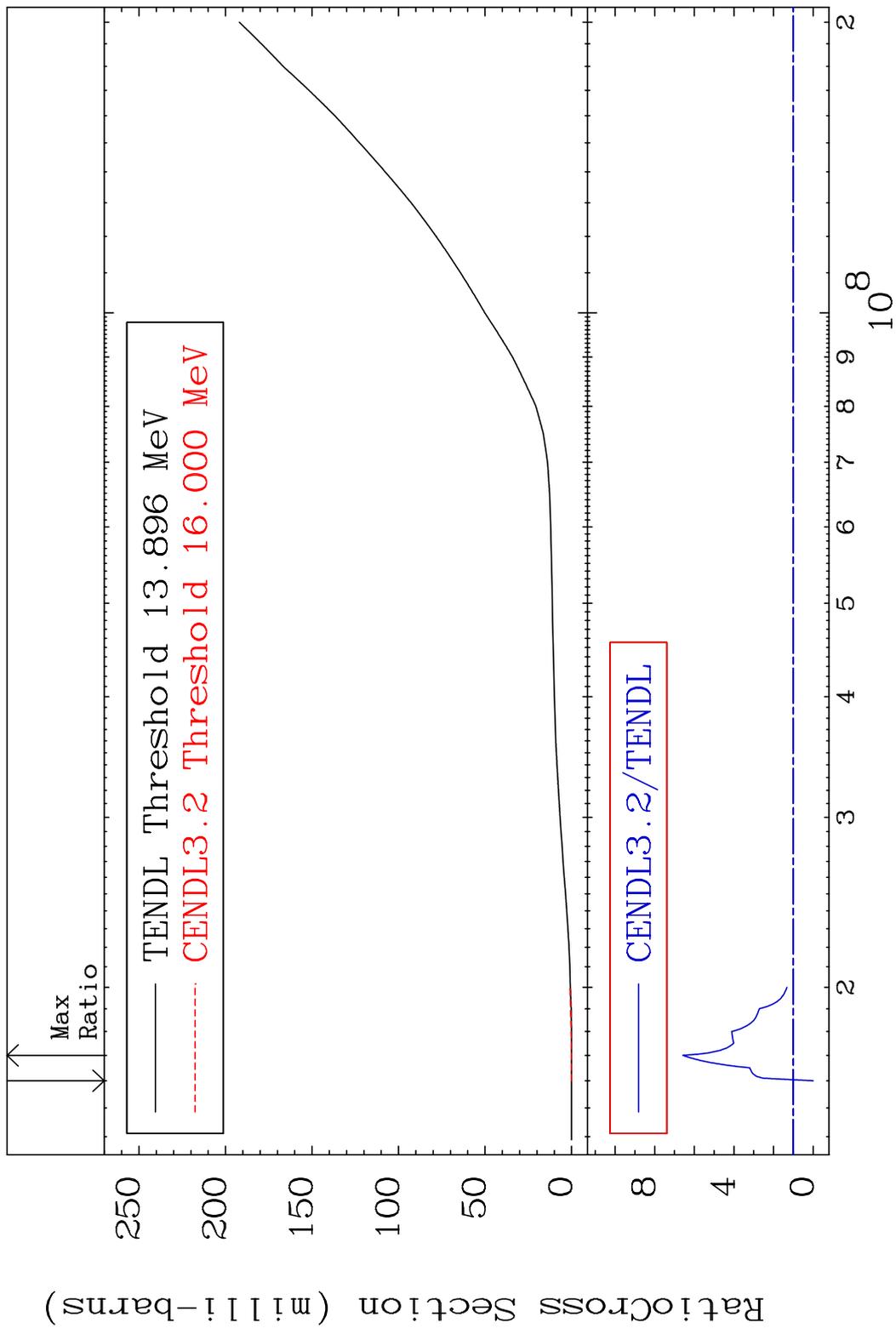
MAT 2231 Deuterium Production ²²Ti-48
Cross Section -100.0 To -30.34%



39

Incident Energy (eV) ²²Ti-48

MAT 2231 Tritium Production $^{22}\text{Ti}-48$
 Cross Section -100.0 To 557.9 %



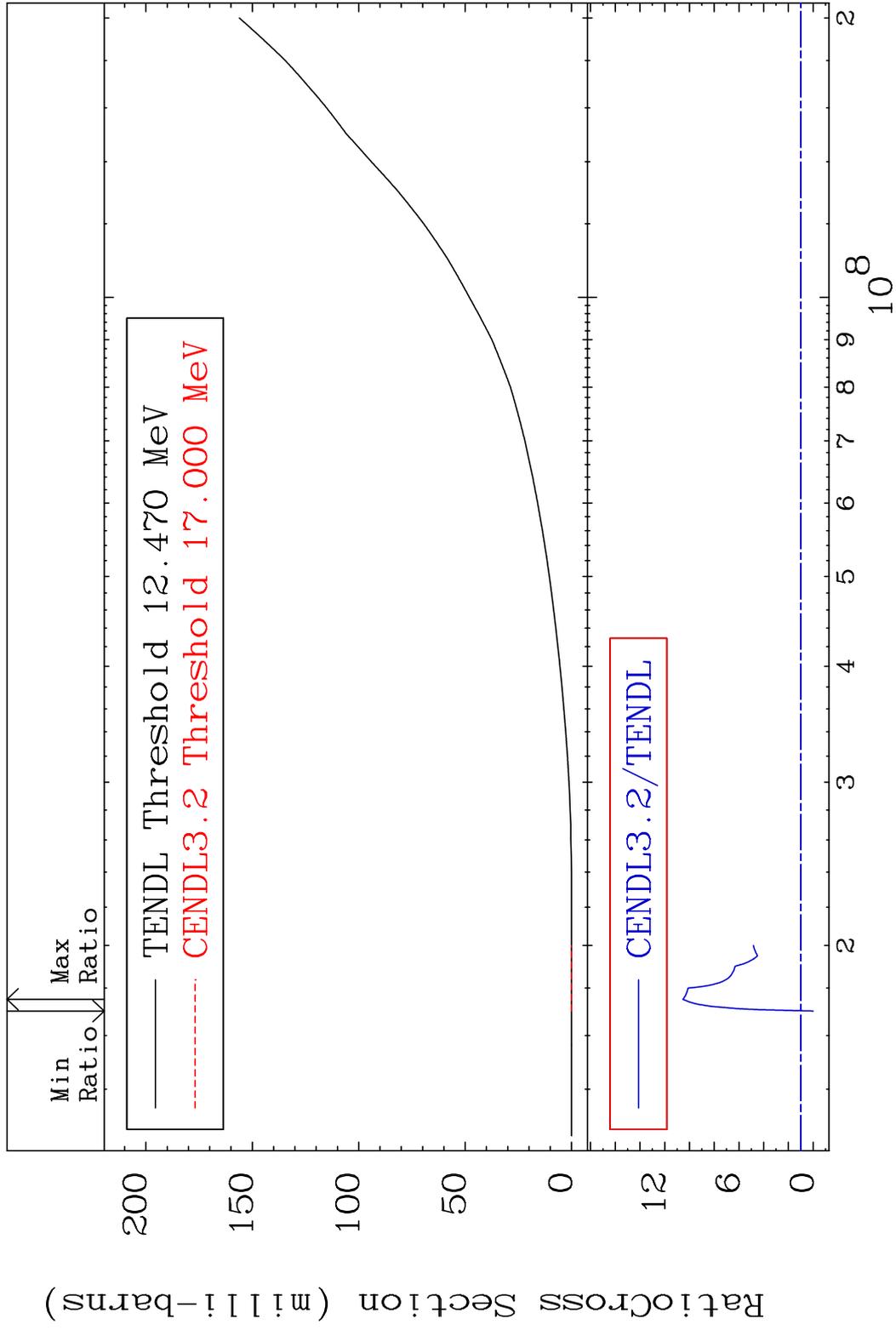
40 Incident Energy (eV) $^{22}\text{Ti}-48$

MAT 2231

He-3 Production

²²Ti-48

Cross Section -100.0 To 953.7 %



41

Incident Energy (eV)

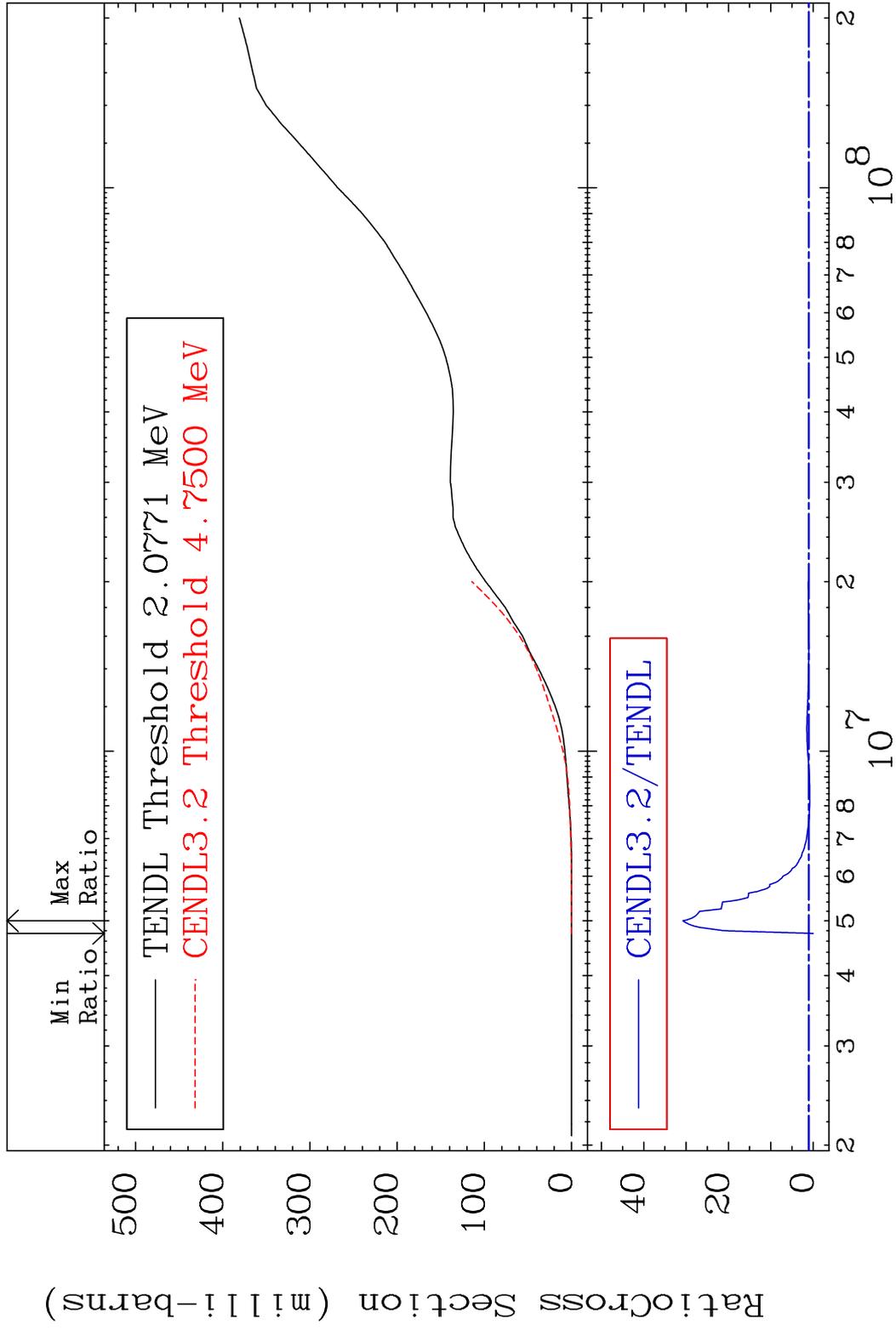
²²Ti-48

MAT 2231

He-4 Production

²²Ti-48

Cross Section -100.0 To 2977. %

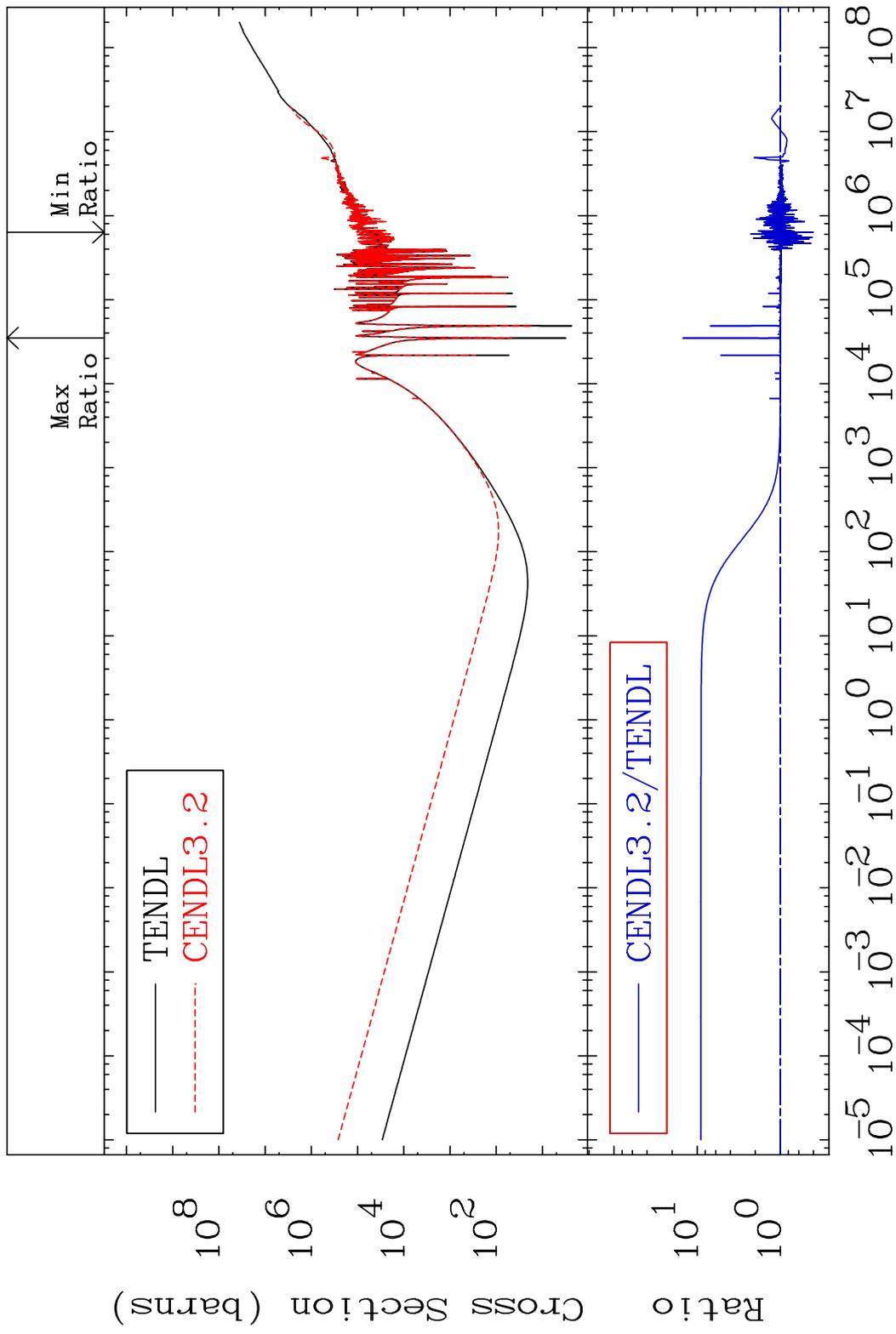


42

Incident Energy (eV)

²²Ti-48

MAT 2231 Kerma total (eV-barns) $^{22}\text{Ti-48}$
 Cross Section -59.64 To 1388. %

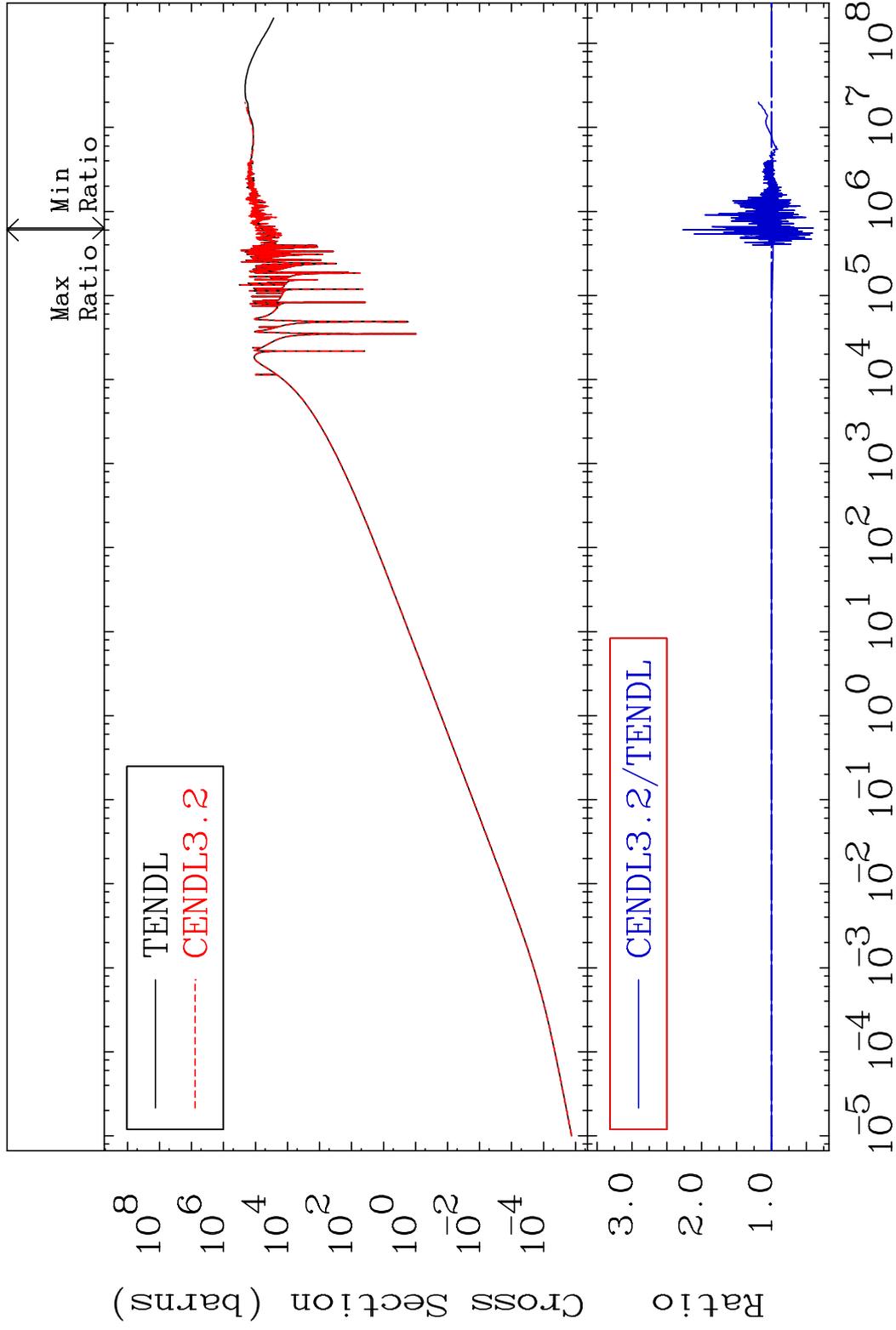


43 Incident Energy (eV) $^{22}\text{Ti-48}$

MAT 2231

Kerma elastic
Cross Section

22-Ti-48
-59.76 To 127.0 %

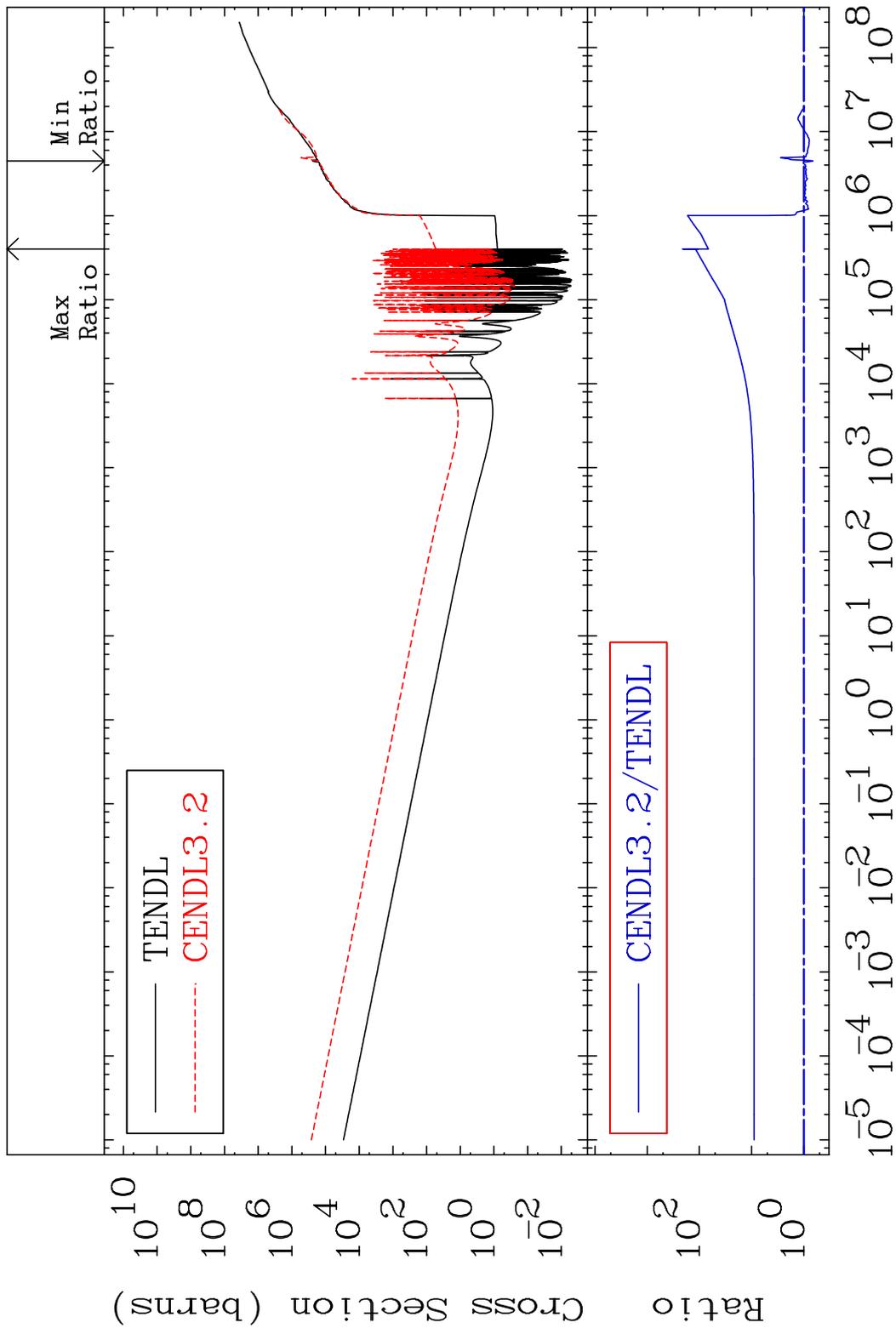


44

Incident Energy (eV)

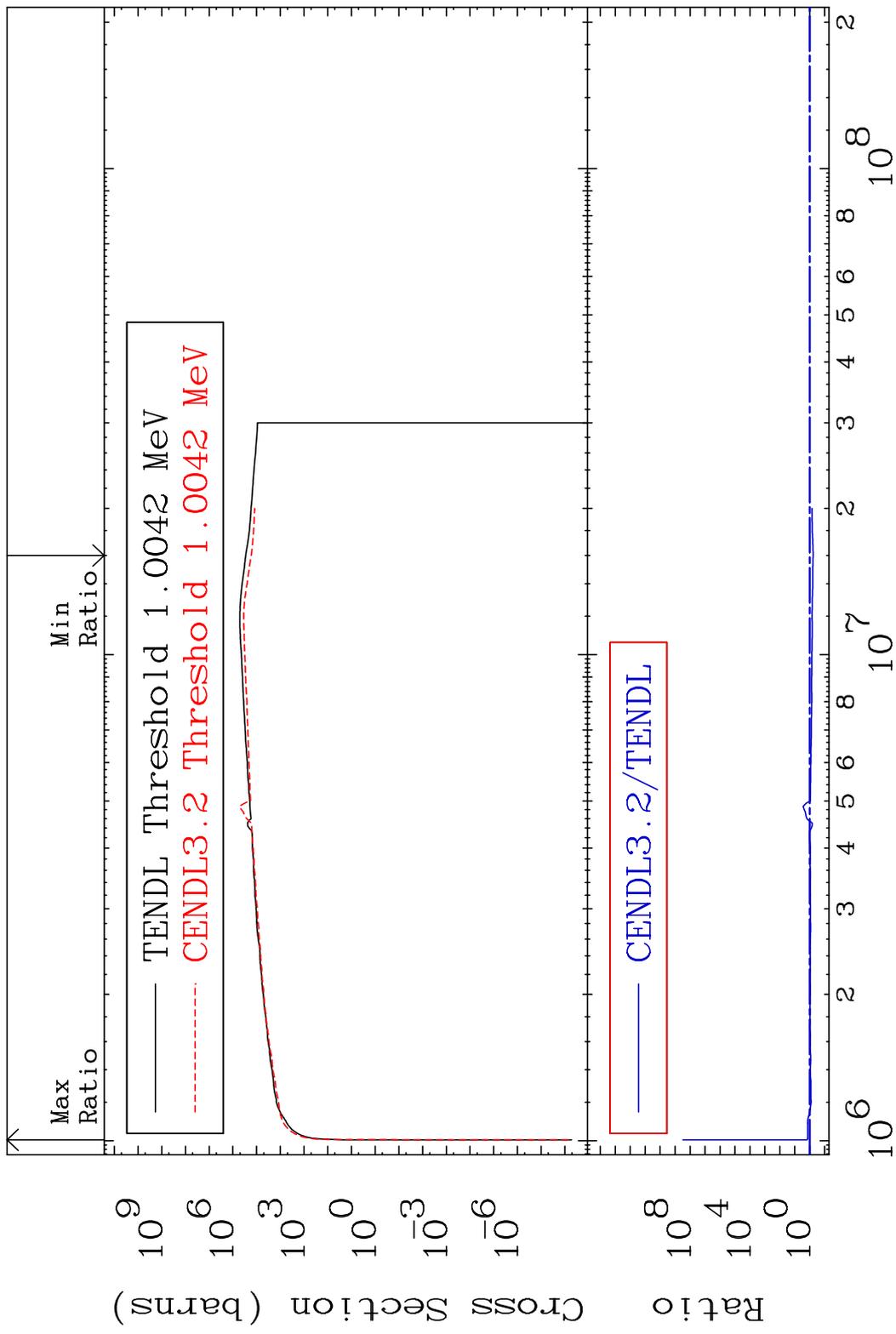
22-Ti-48

MAT 2231 Kerma non-elastic (all but mt2) 22-Ti-48
 Cross Section -33.71 To 9999. %



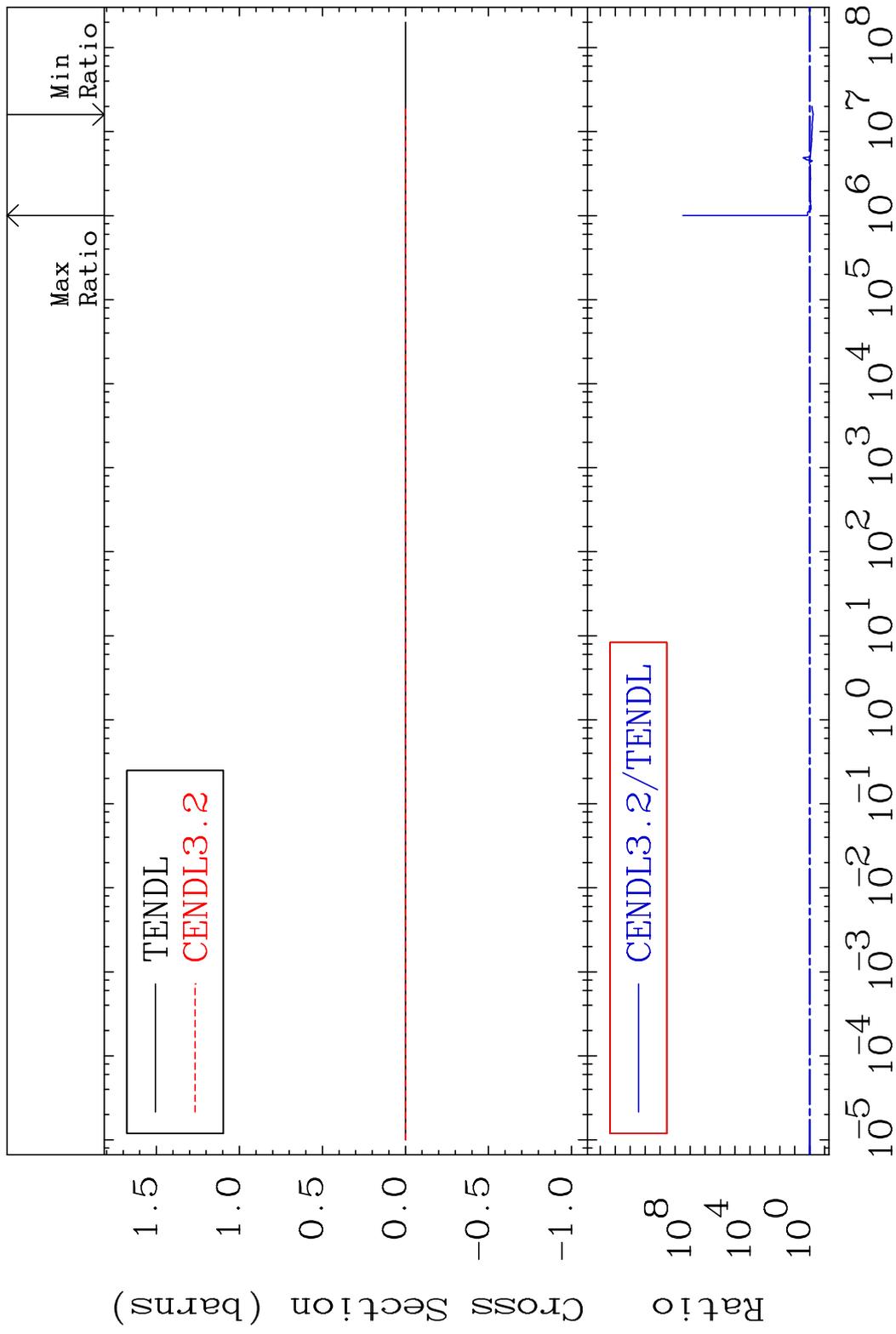
45 Incident Energy (eV) 22-Ti-48

MAT 2231 Kerma inelastic (mt51-91) 22-Ti-48
 Cross Section -41.19 To 9999. %

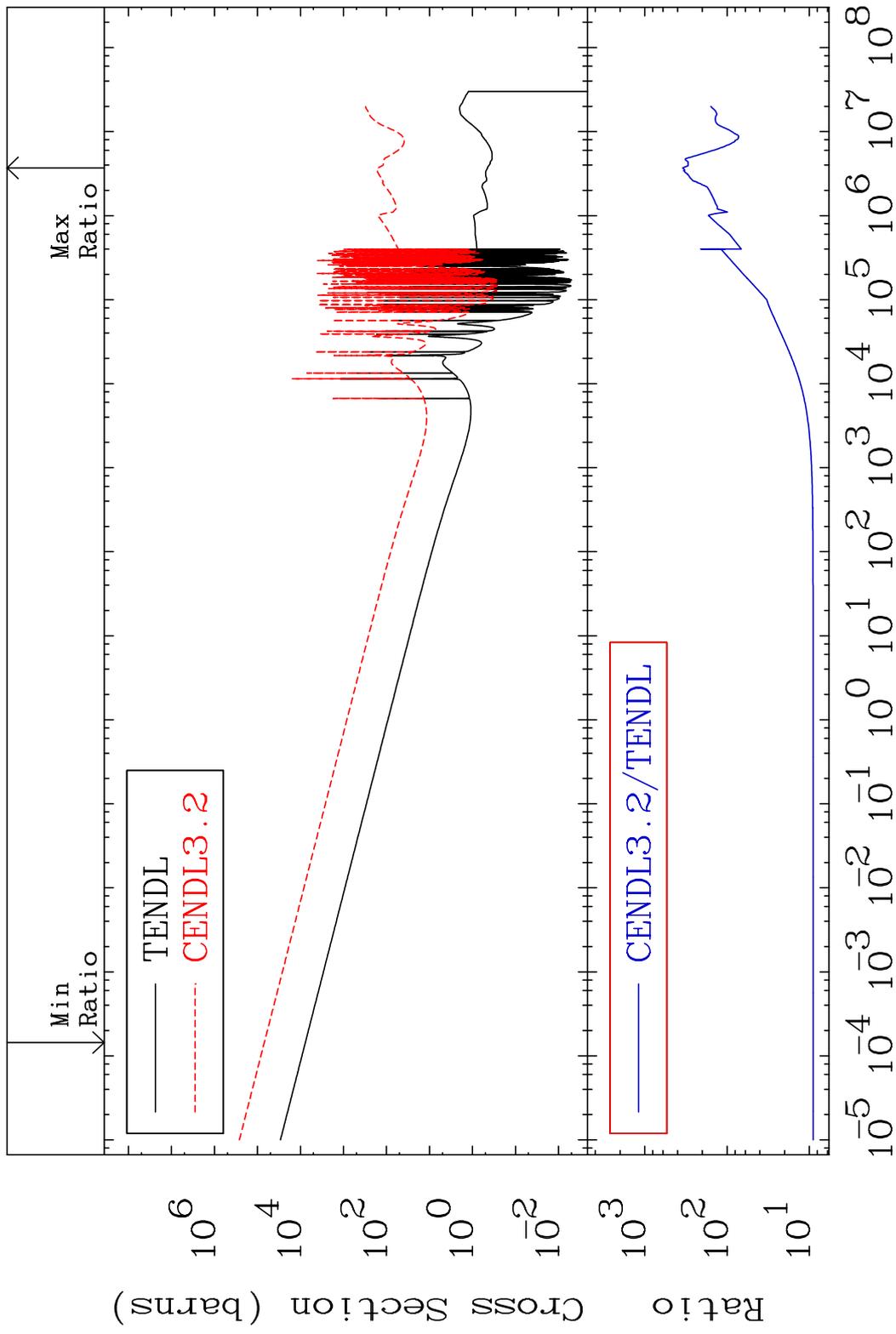


46 Incident Energy (eV) 22-Ti-48

MAT 2231 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-48
 Cross Section -41.19 To 9999. %

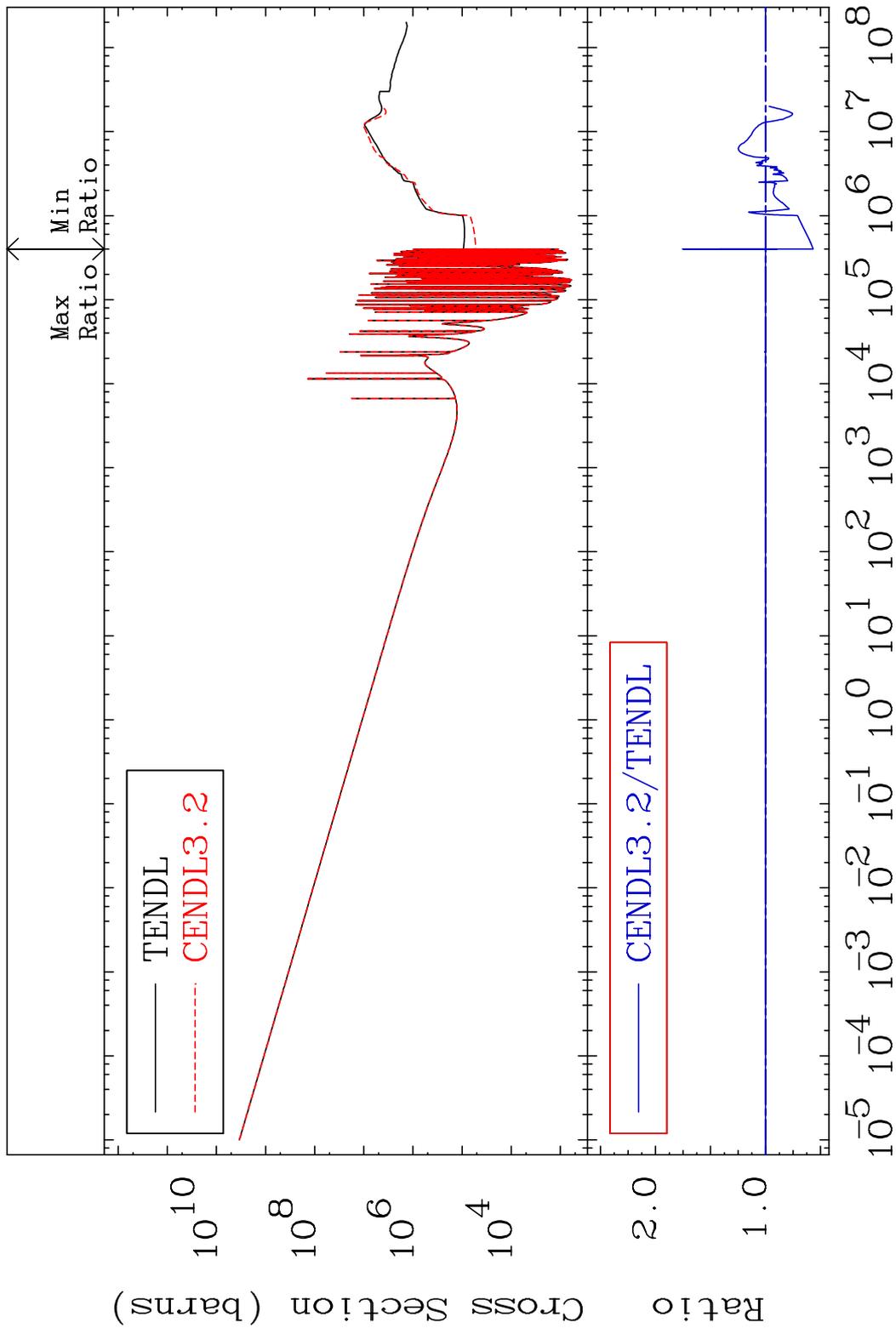


MAT 2231 Kerma capture (mt102) 22-Ti-48
 Cross Section 799.6 To 9999. %



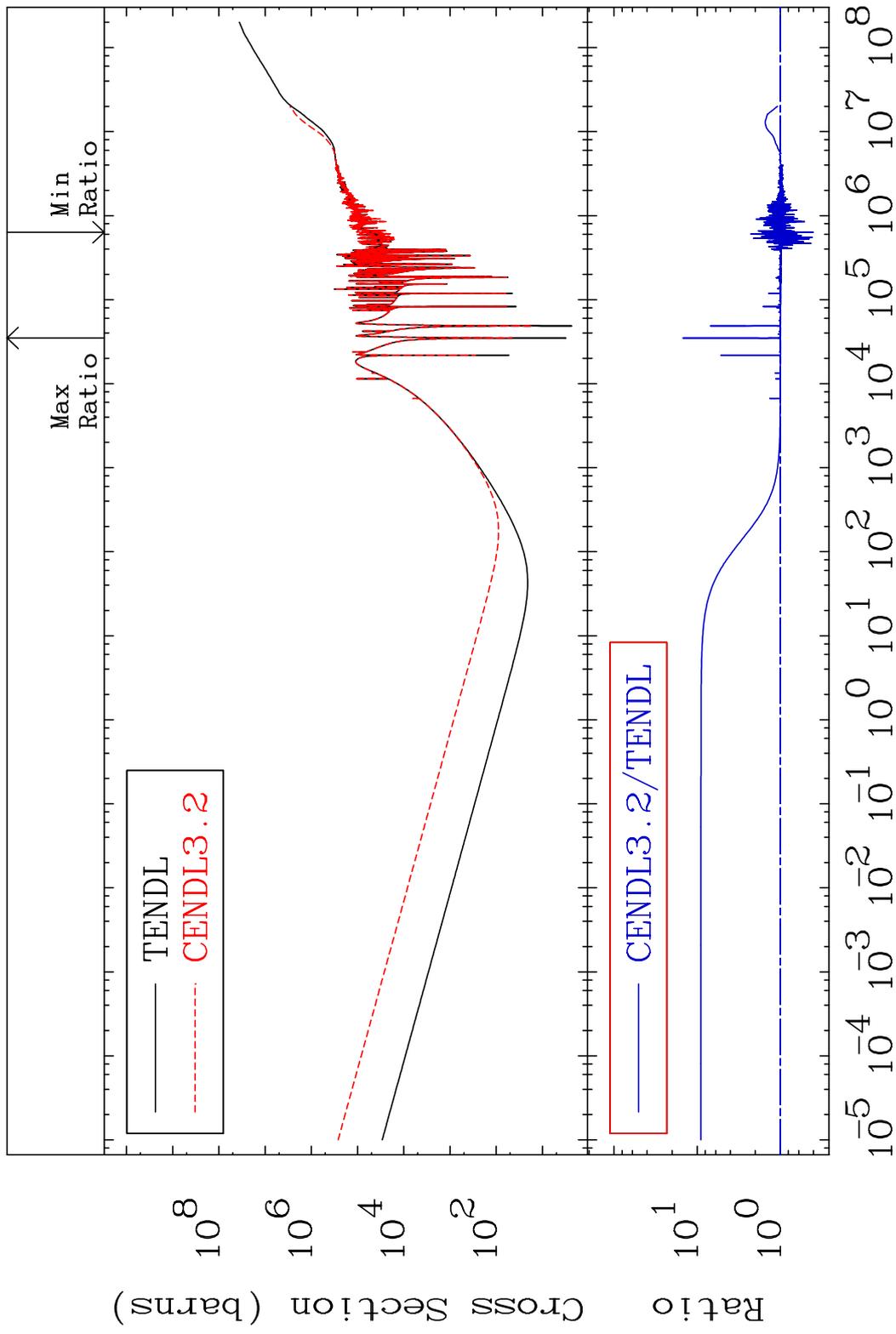
48 Incident Energy (eV) 22-Ti-48

MAT 2231 Total photon (eV-barns) 22-Ti-48
Cross Section -43.24 To 75.19 %



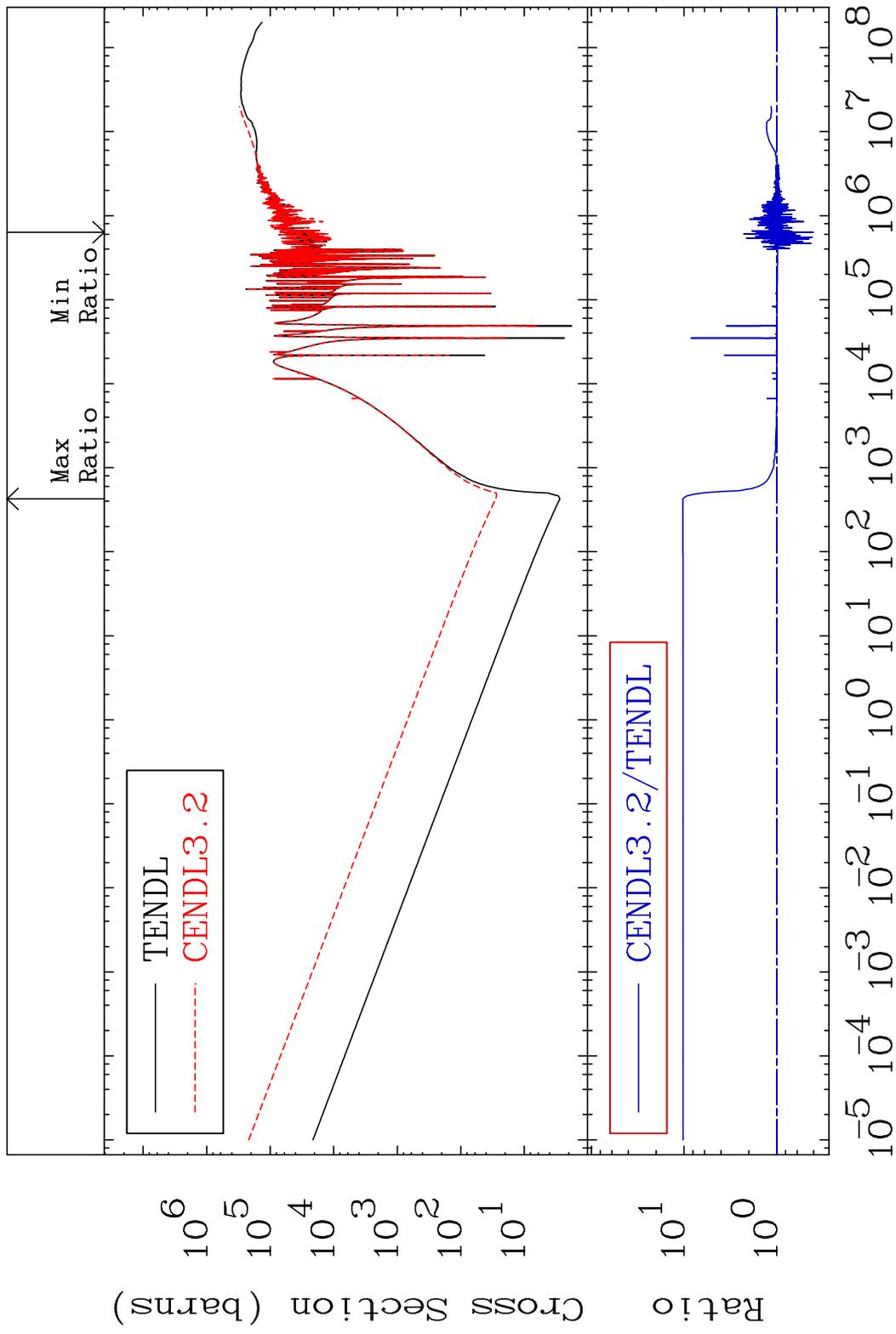
49 Incident Energy (eV) 22-Ti-48

MAT 2231 Total kinematic kerma (high limit) 22-Ti-48
 Cross Section -59.64 To 1388. %



50 Incident Energy (eV) 22-Ti-48

MAT 2231 Dpa total (eV-barns) 22-Ti-48
 Cross Section -59.59 To 930.0 %



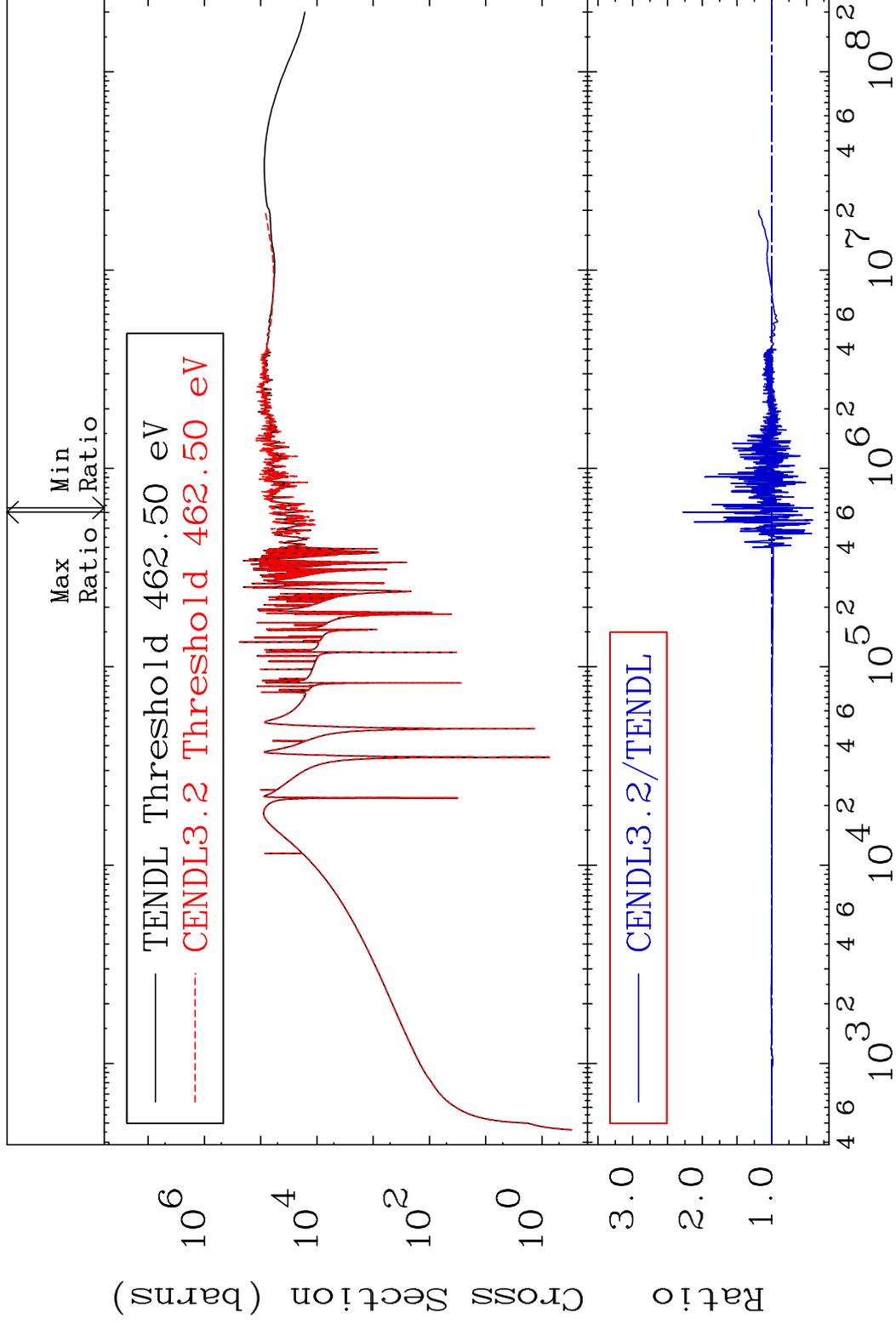
51 Incident Energy (eV) 22-Ti-48

MAT 2231

Dpa elastic (mt2)

22-Ti-48

Cross Section -59.59 To 127.9 %

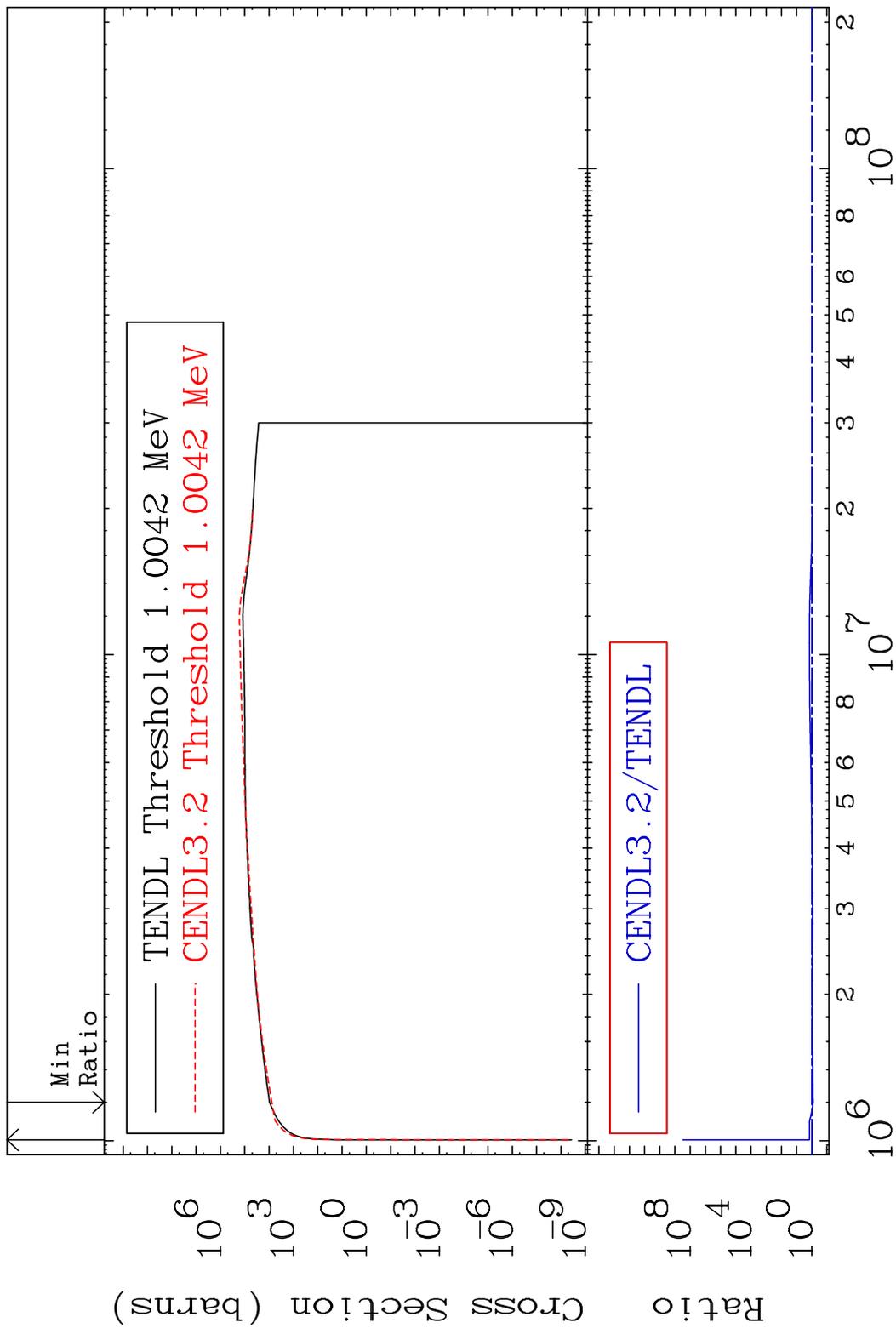


52

Incident Energy (eV)

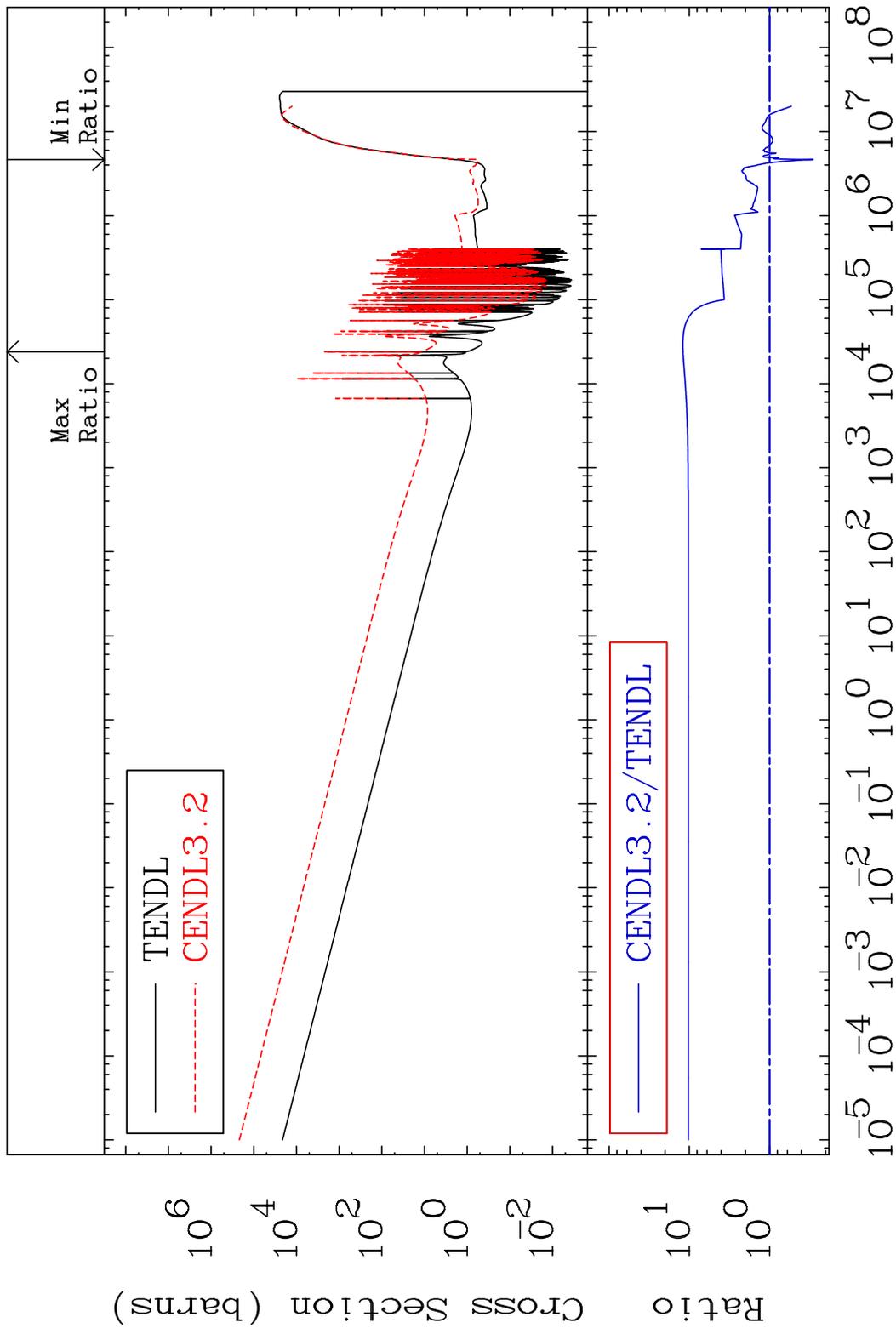
22-Ti-48

MAT 2231 Dpa inelastic (mt51-91) 22-Ti-48
 Cross Section -18.92 To 9999. %

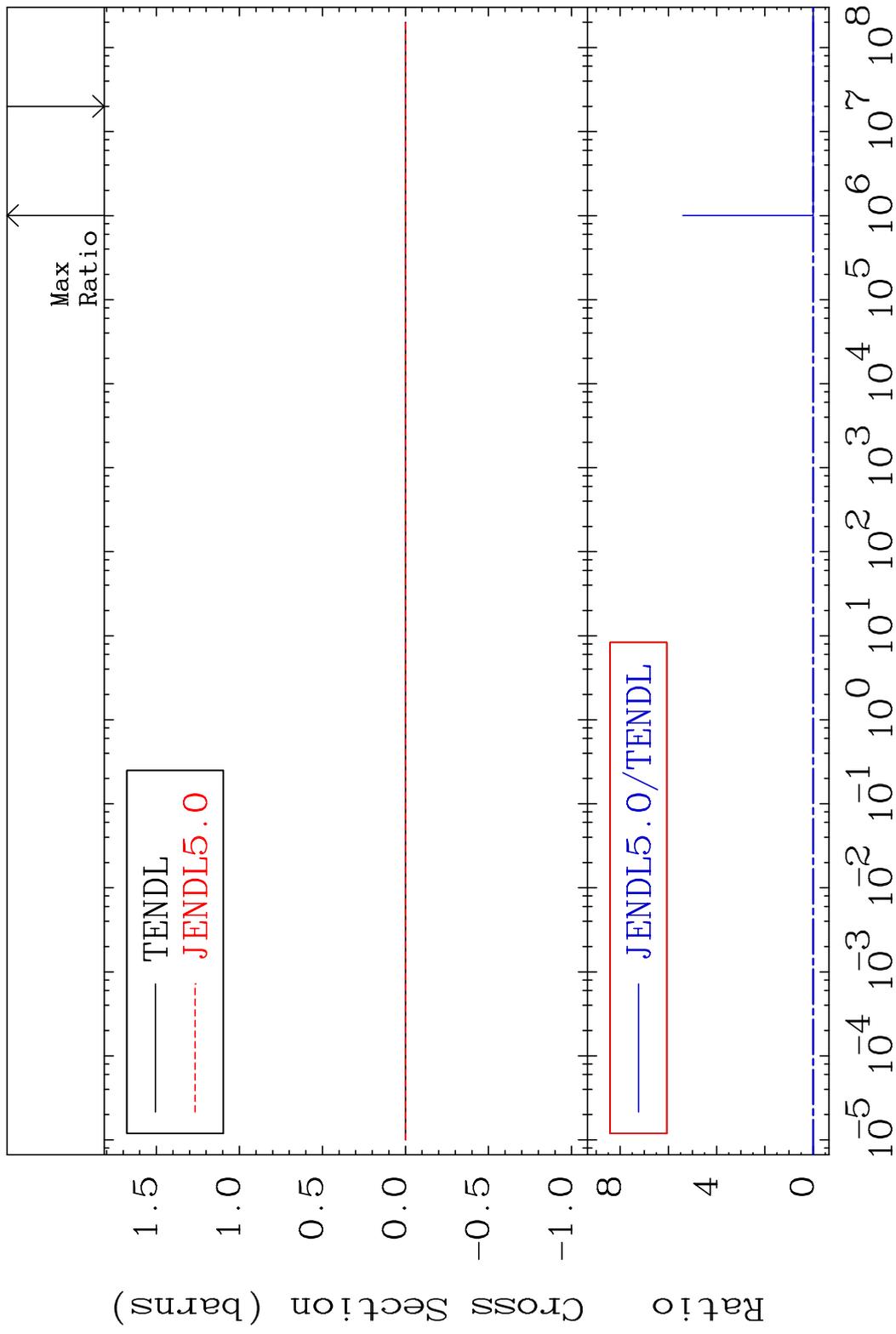


53 Incident Energy (eV) 22-Ti-48

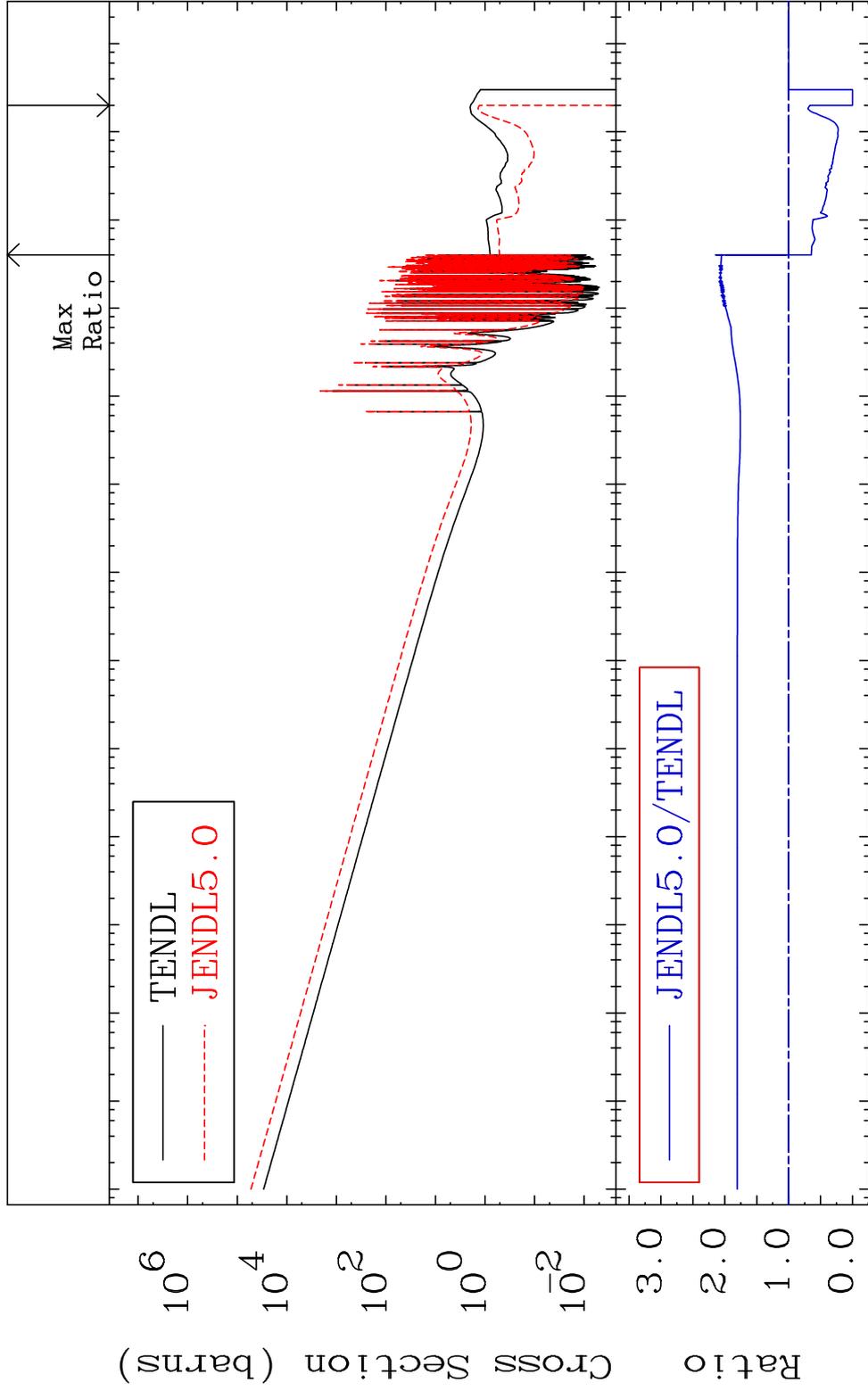
MAT 2231 Dpa disappearance (mt102 -120) 22-Ti-48
 Cross Section -71.44 To 1104. %



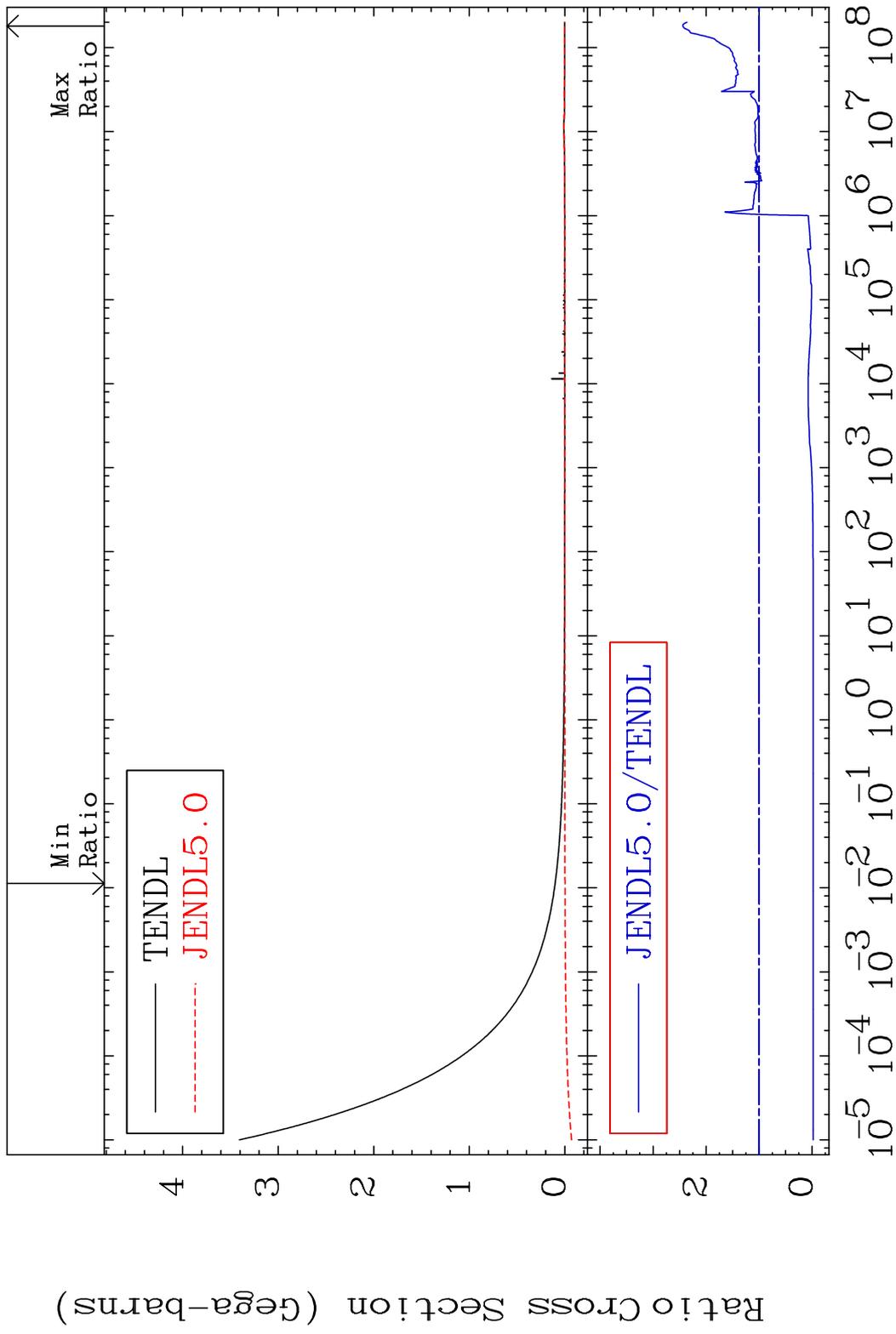
MAT 2231 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-48
 Cross Section -100.0 To 9999. %



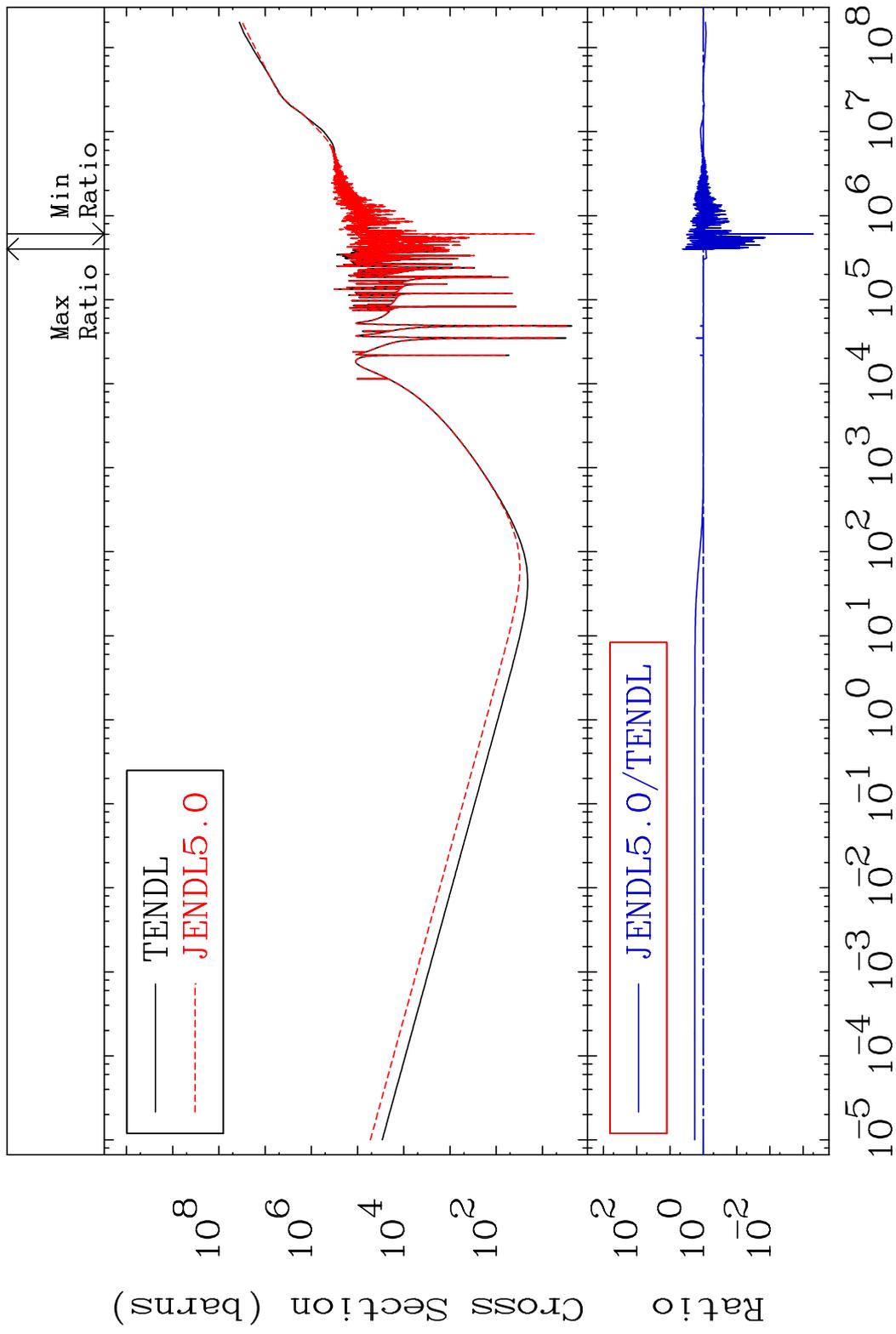
MAT 2231 Kerma capture (mt102) ²²Ti-48
 Cross Section -100.0 To 114.0 %



MAT 2231 Total photon (eV-barns) 22-Ti-48
Cross Section -102.1 To 143.9 %



MAT 2231 Total kinematic kerma (high limit) 22-Ti-48
 Cross Section -99.95 To 313.8 %

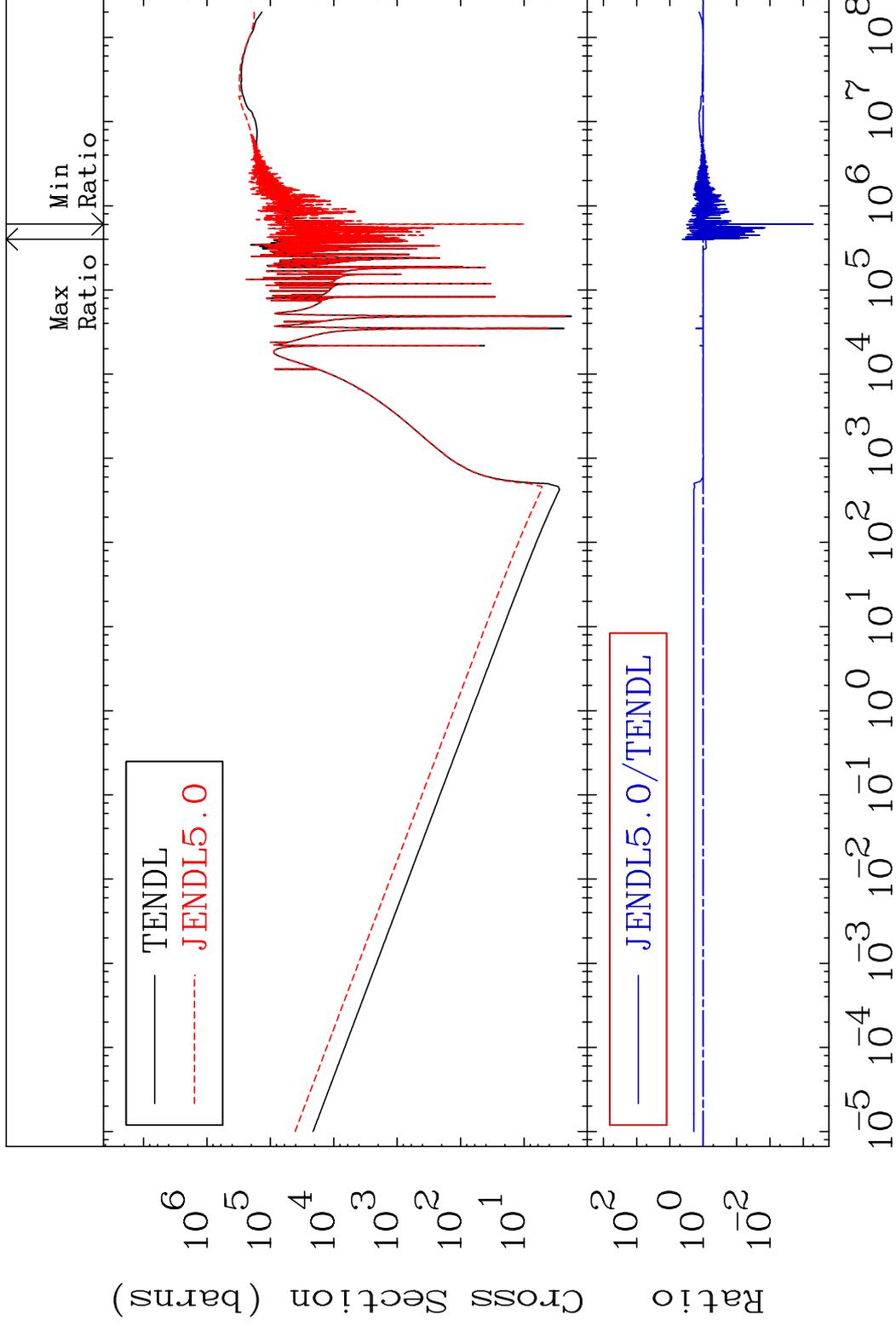


MAT 2231

Dpa total (eV-barns)

22-Ti-48

Cross Section -99.95 To 316.3 %



59

Incident Energy (eV)

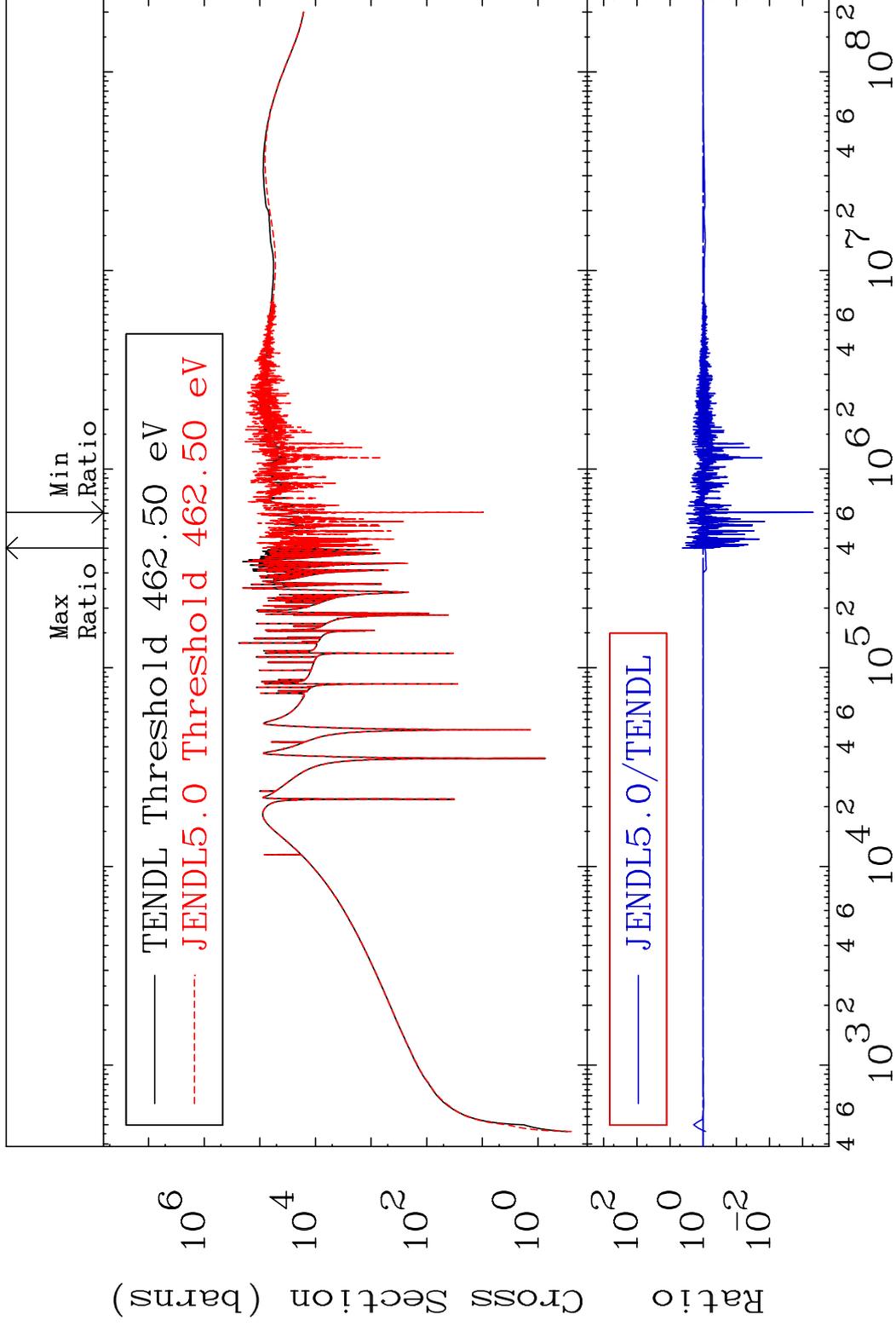
22-Ti-48

MAT 2231

Dpa elastic (mt2)

22-Ti-48

Cross Section -99.95 To 316.3 %

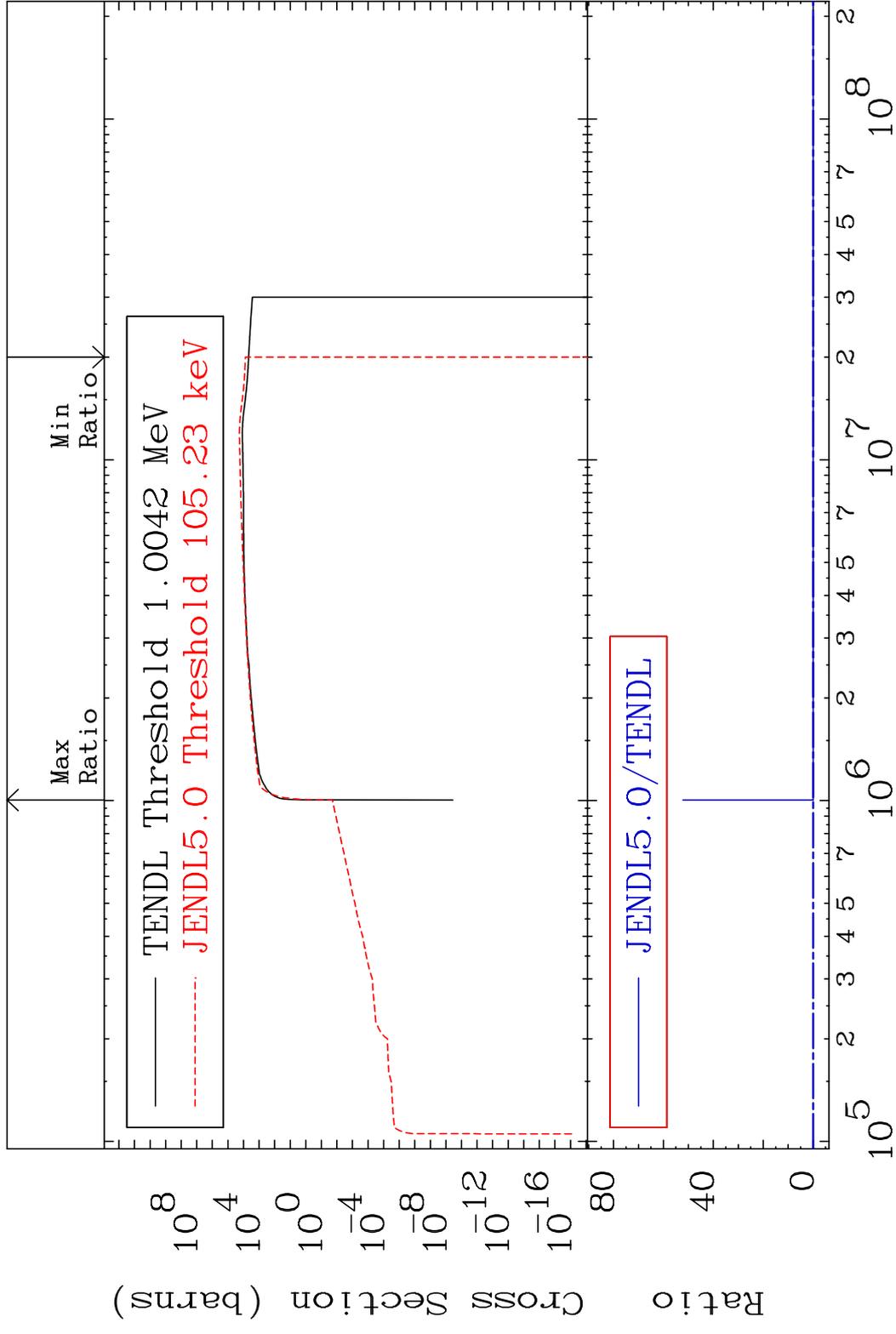


60

Incident Energy (eV)

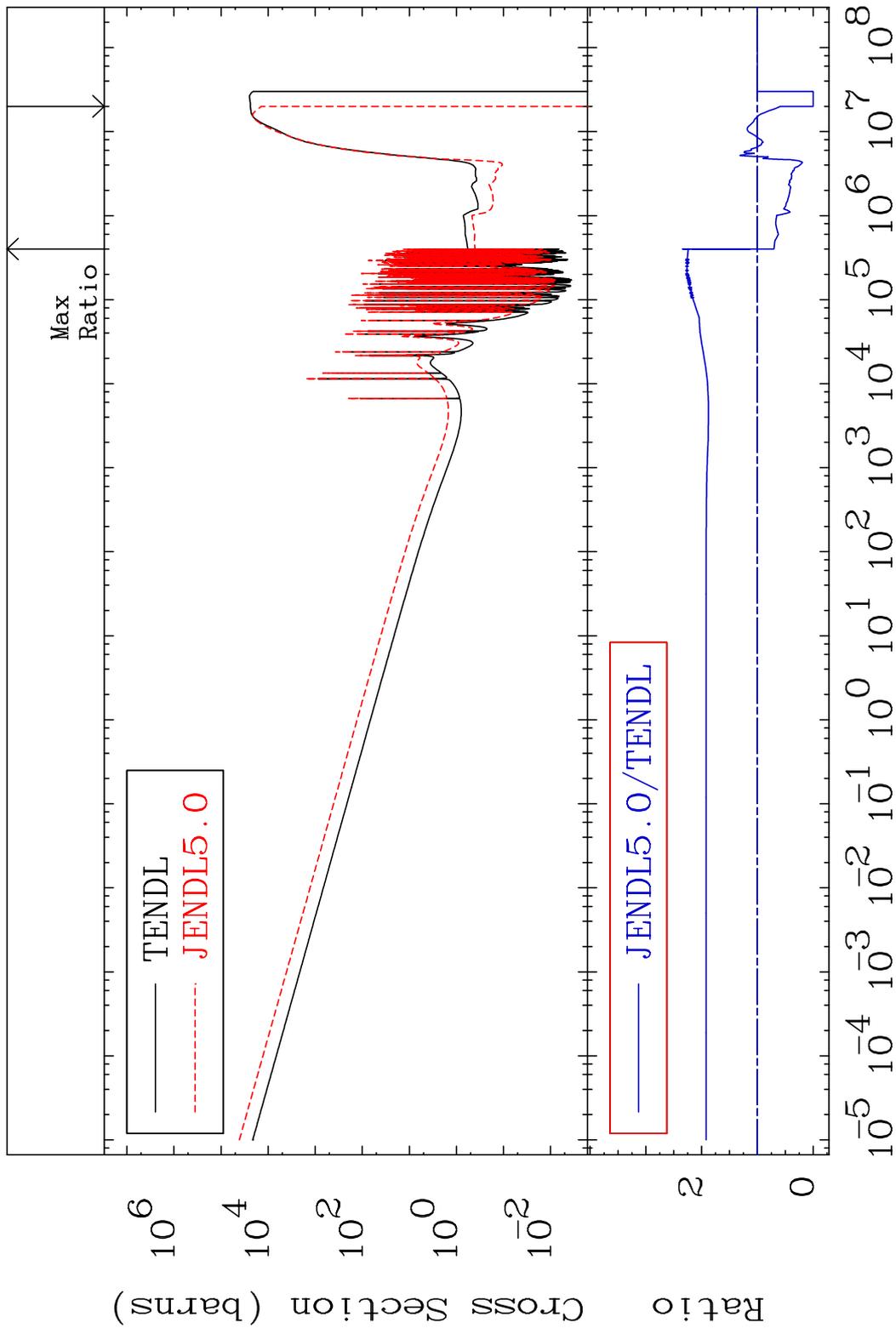
22-Ti-48

MAT 2231 Dpa inelastic (mt51-91) 22-Ti-48
 Cross Section -100.0 To 9999. %



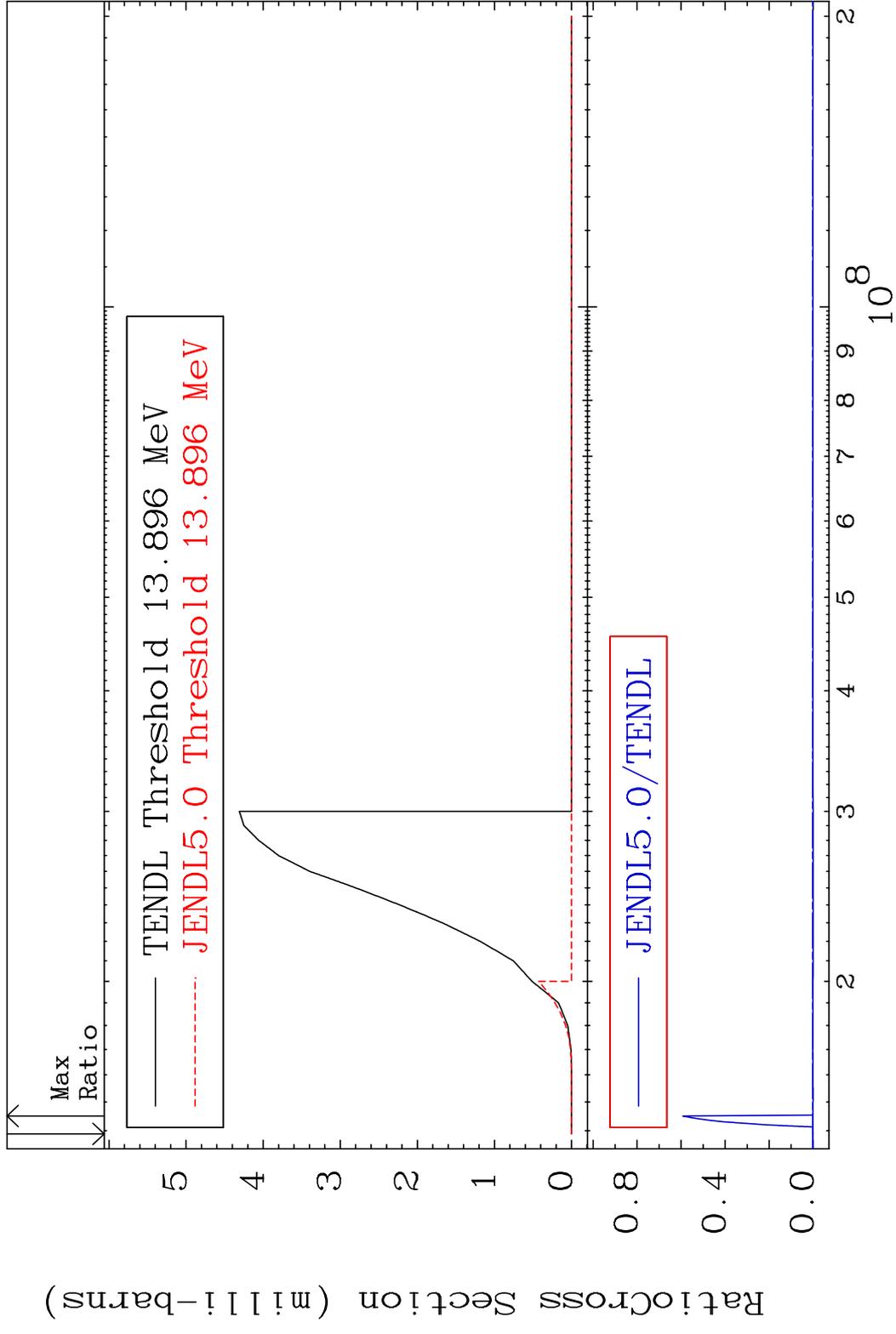
61 Incident Energy (eV) 22-Ti-48

MAT 2231 Dpa disappearance (mt102 -120) 22-Ti-48
 Cross Section -100.0 To 133.7 %

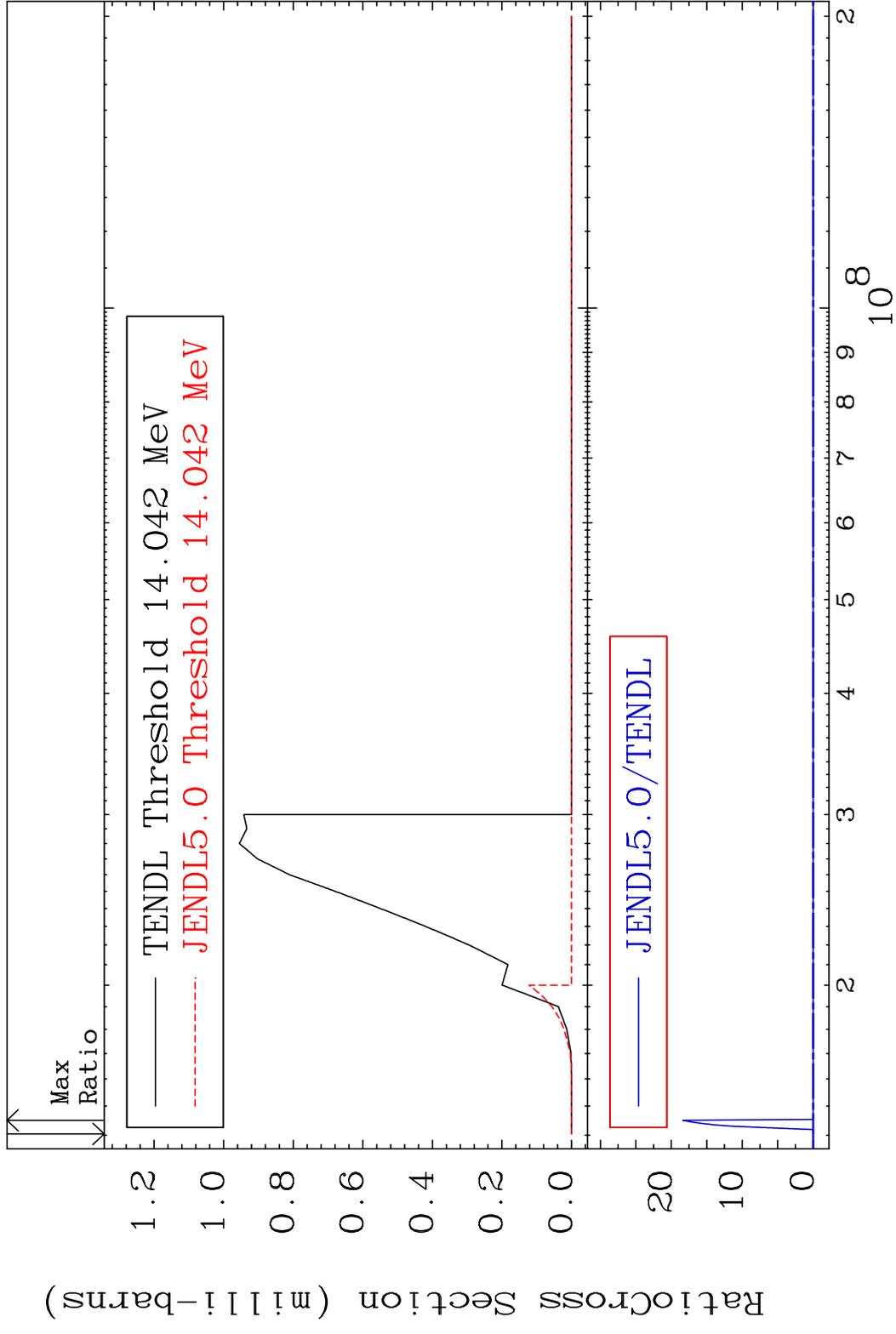


62 Incident Energy (eV) 22-Ti-48

MAT 2231 (n, t):21-Sc-46g 22-Ti-48
 Radionuclide Production Cross Section Ratio 9999. %



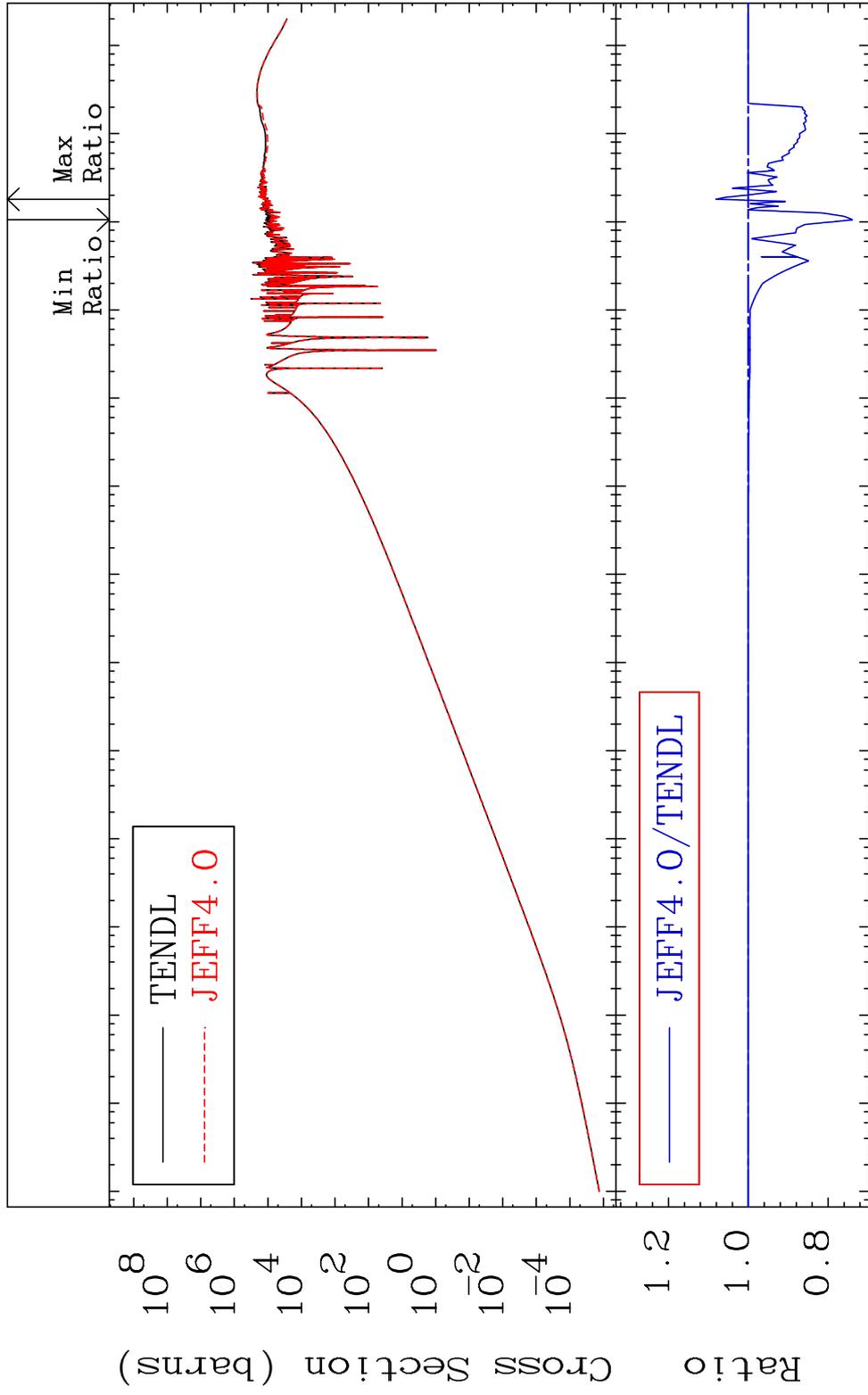
MAT 2231 (n,t):21-Sc-46m2 22-Ti-48
 Radionuclide Production Cross Section Ratio 9999. %



MAT 2231

Kerma elastic
Cross Section

22-Ti-48
-26.10 To 8.126 %

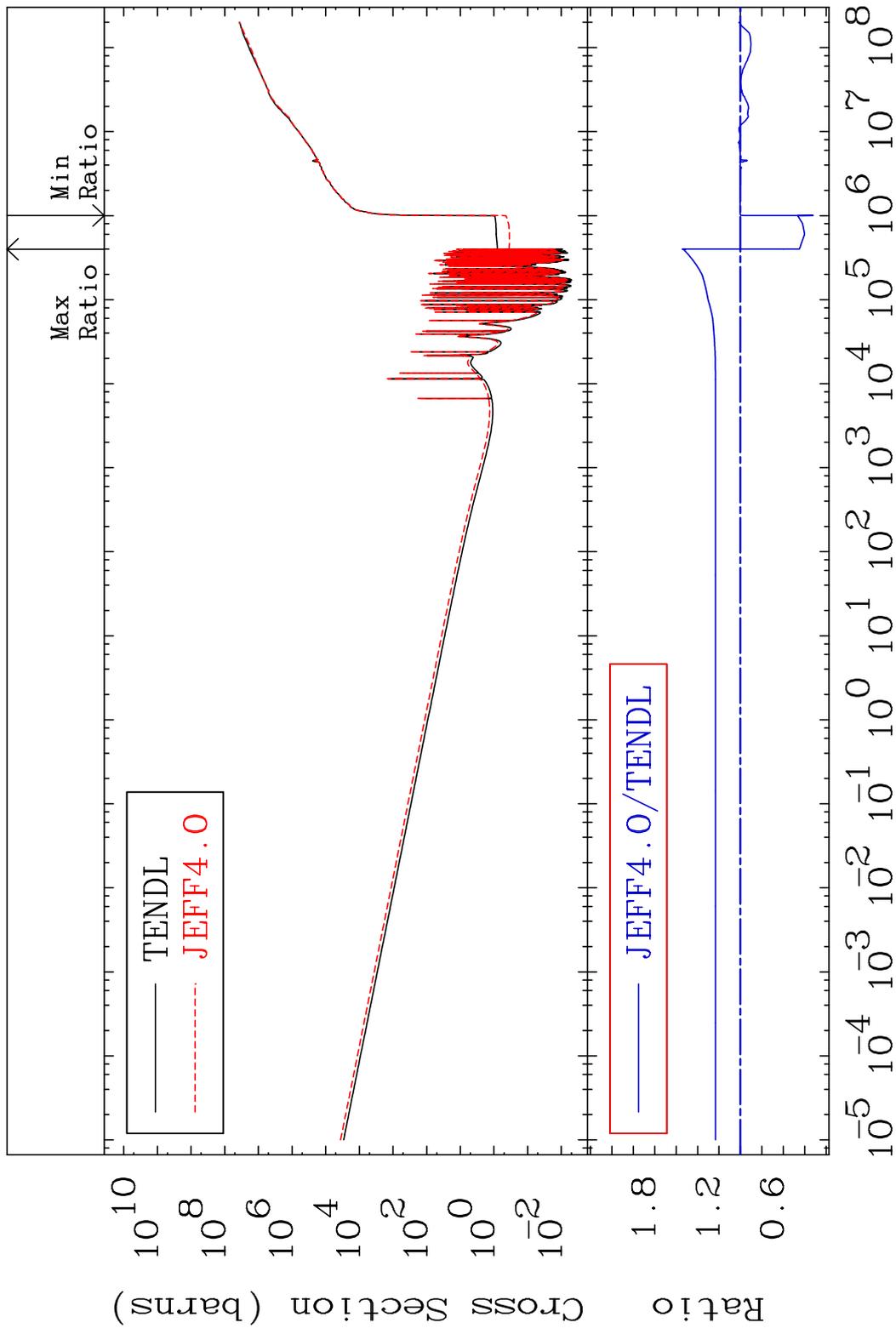


65

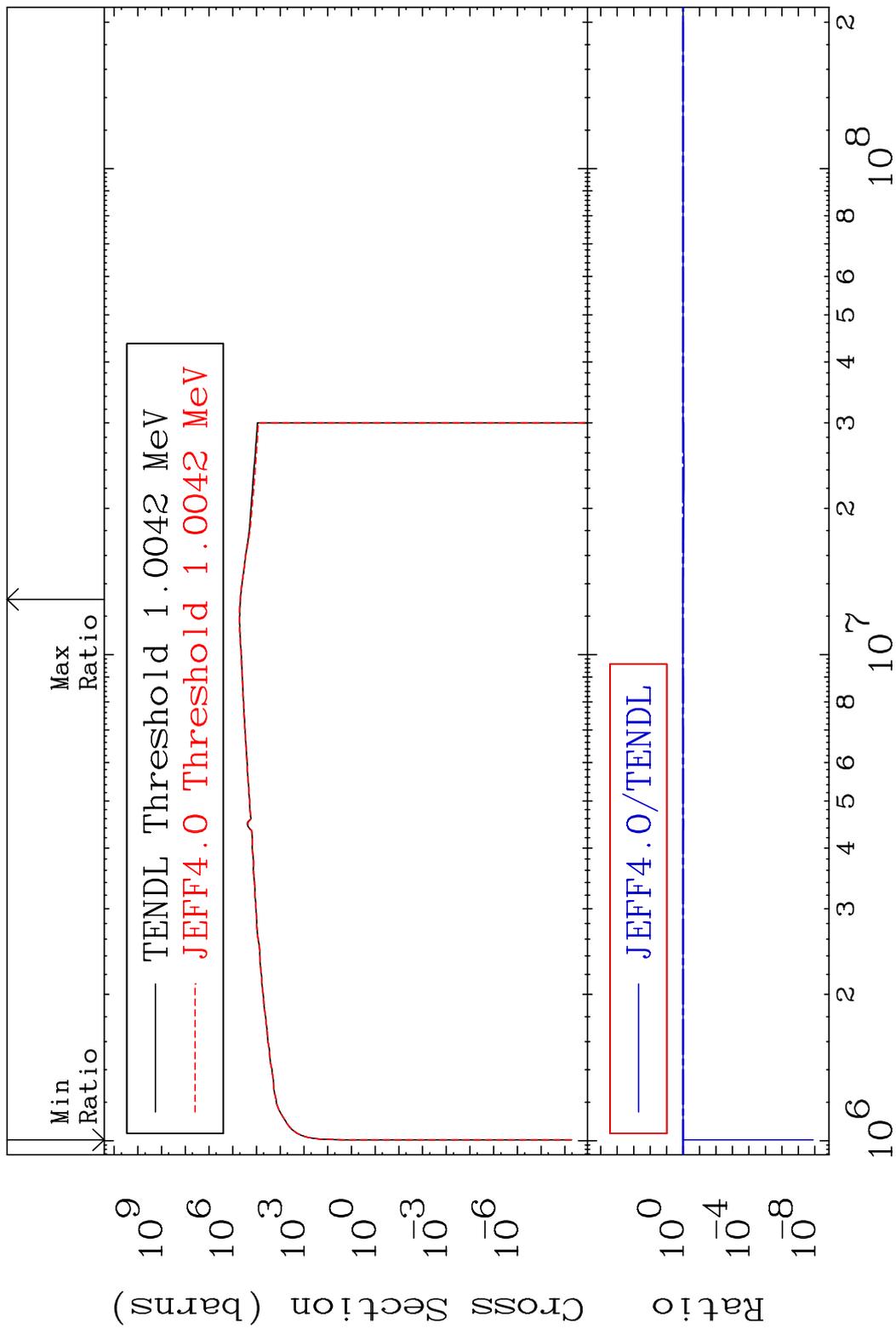
Incident Energy (eV)

22-Ti-48

MAT 2231 Kerma non-elastic (all but mt2) 22-Ti-48
 Cross Section -67.87 To 53.80 %

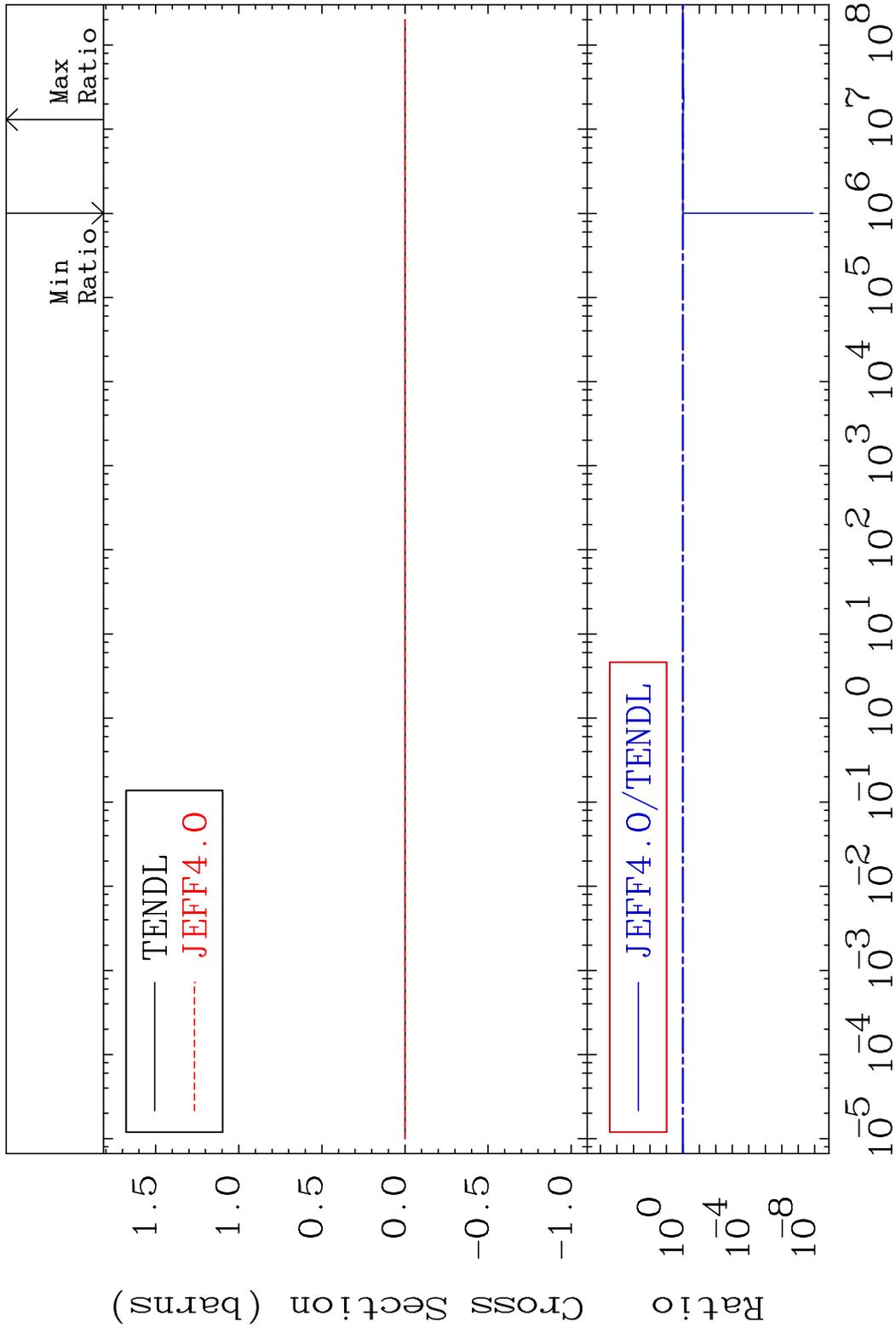


MAT 2231 Kerma inelastic (mt51-91) 22-Ti-48
 Cross Section -100.0 To 3.549 %



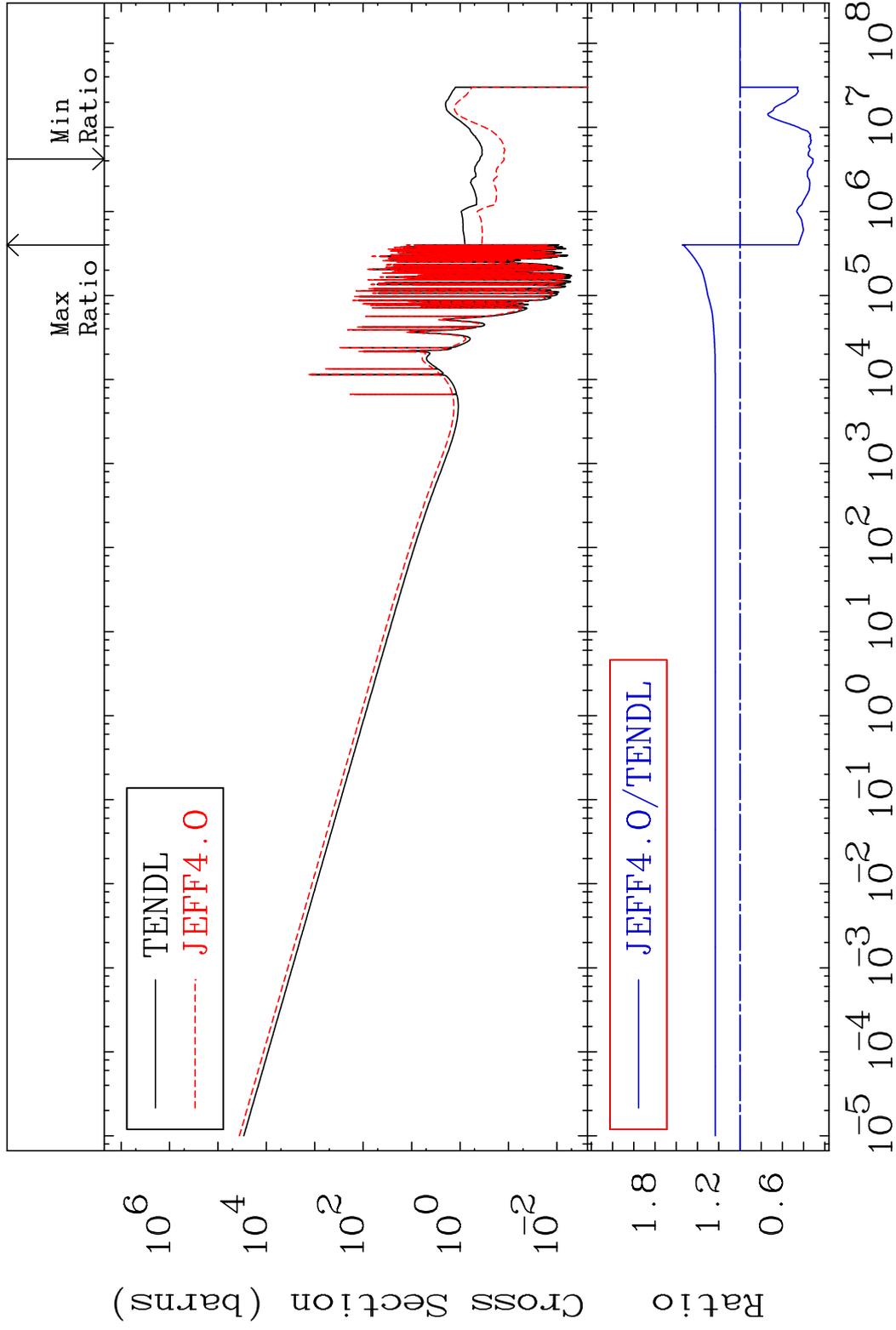
67 Incident Energy (eV) 22-Ti-48

MAT 2231 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-48
 Cross Section -100.0 To 3.549 %



MAT 2231

Kerma capture (mt102) 22-Ti-48
Cross Section -68.98 To 53.80 %

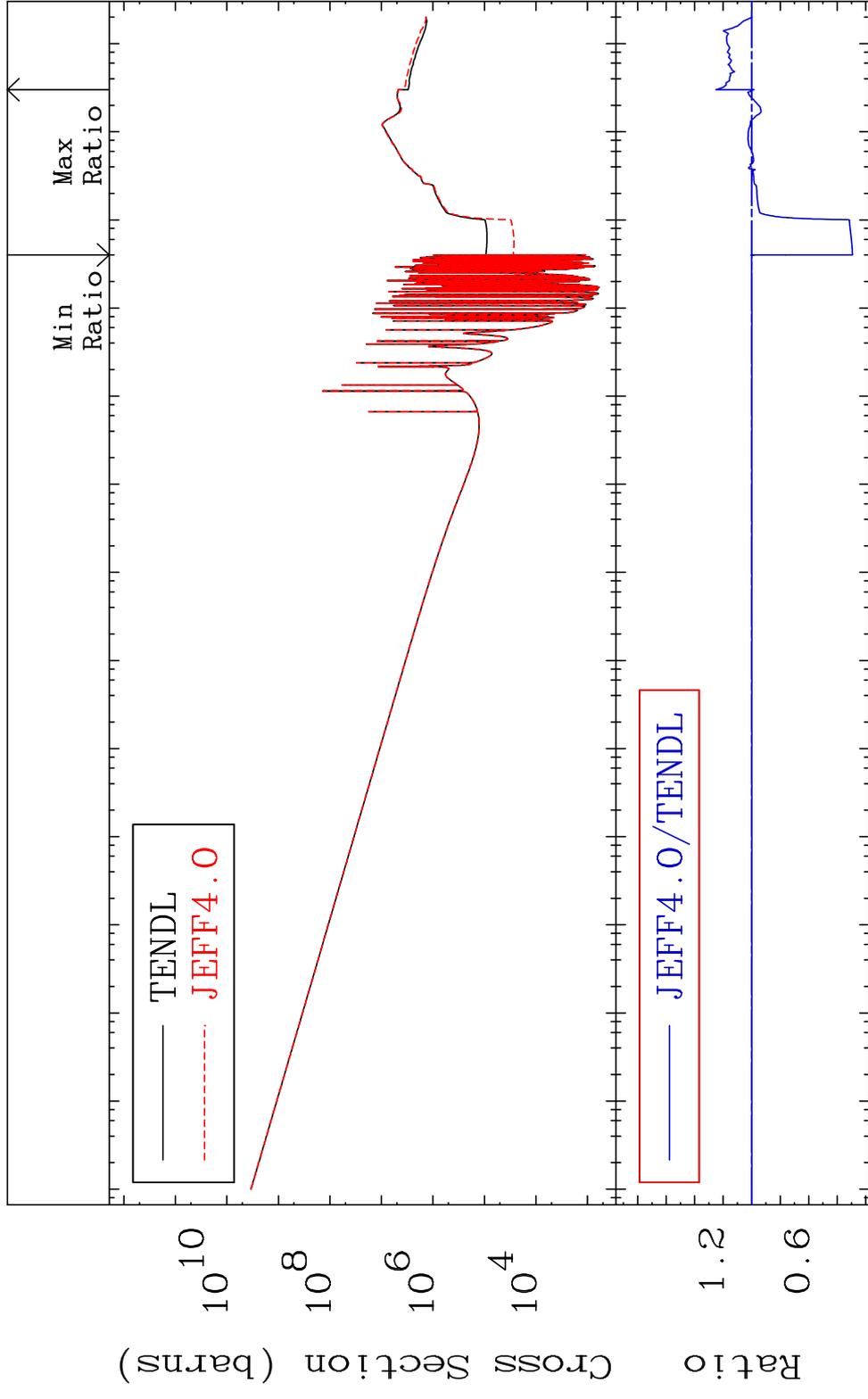


69

Incident Energy (eV)

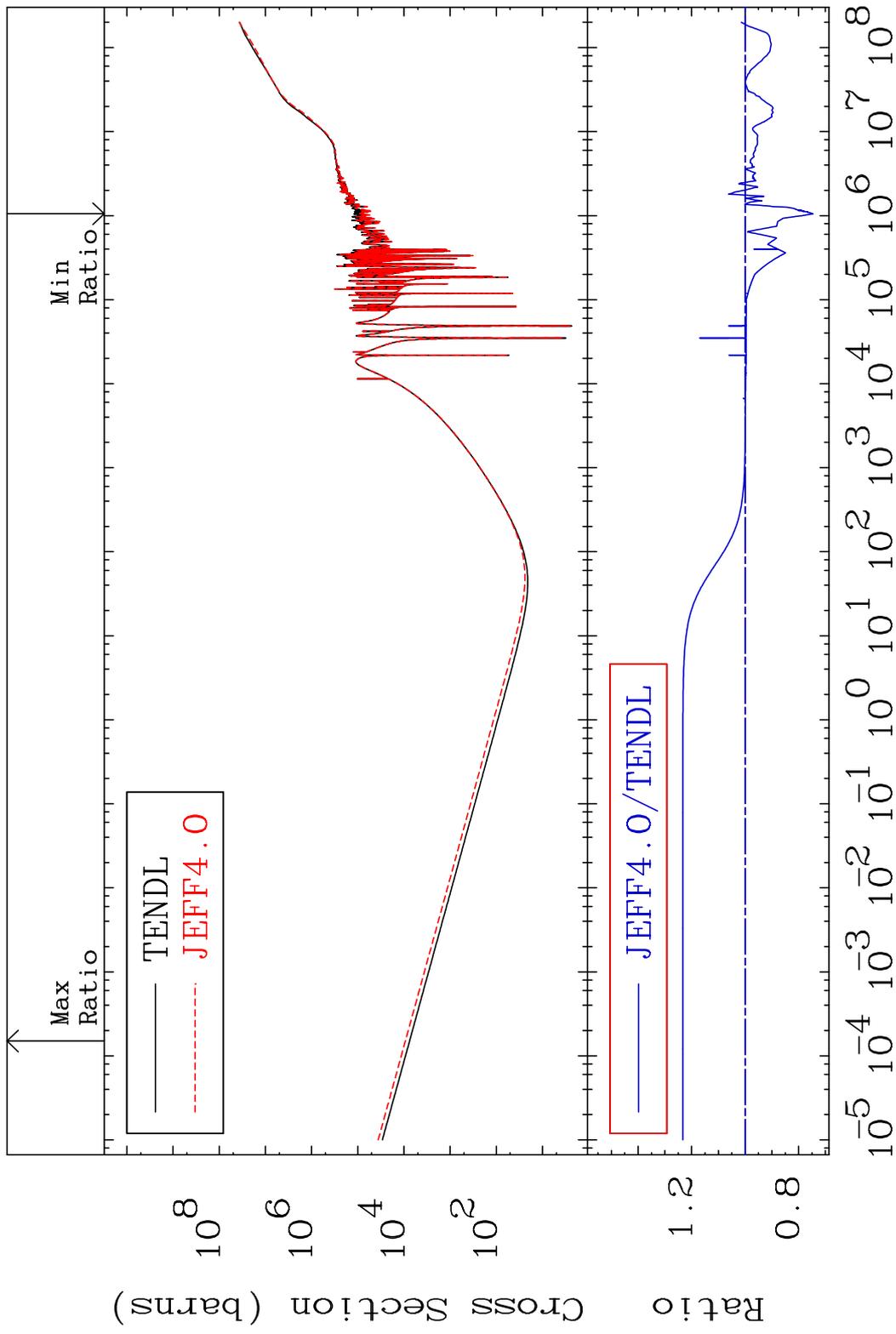
22-Ti-48

MAT 2231 Total photon (eV-barns) 22-Ti-48
 Cross Section -70.70 To 25.13 %



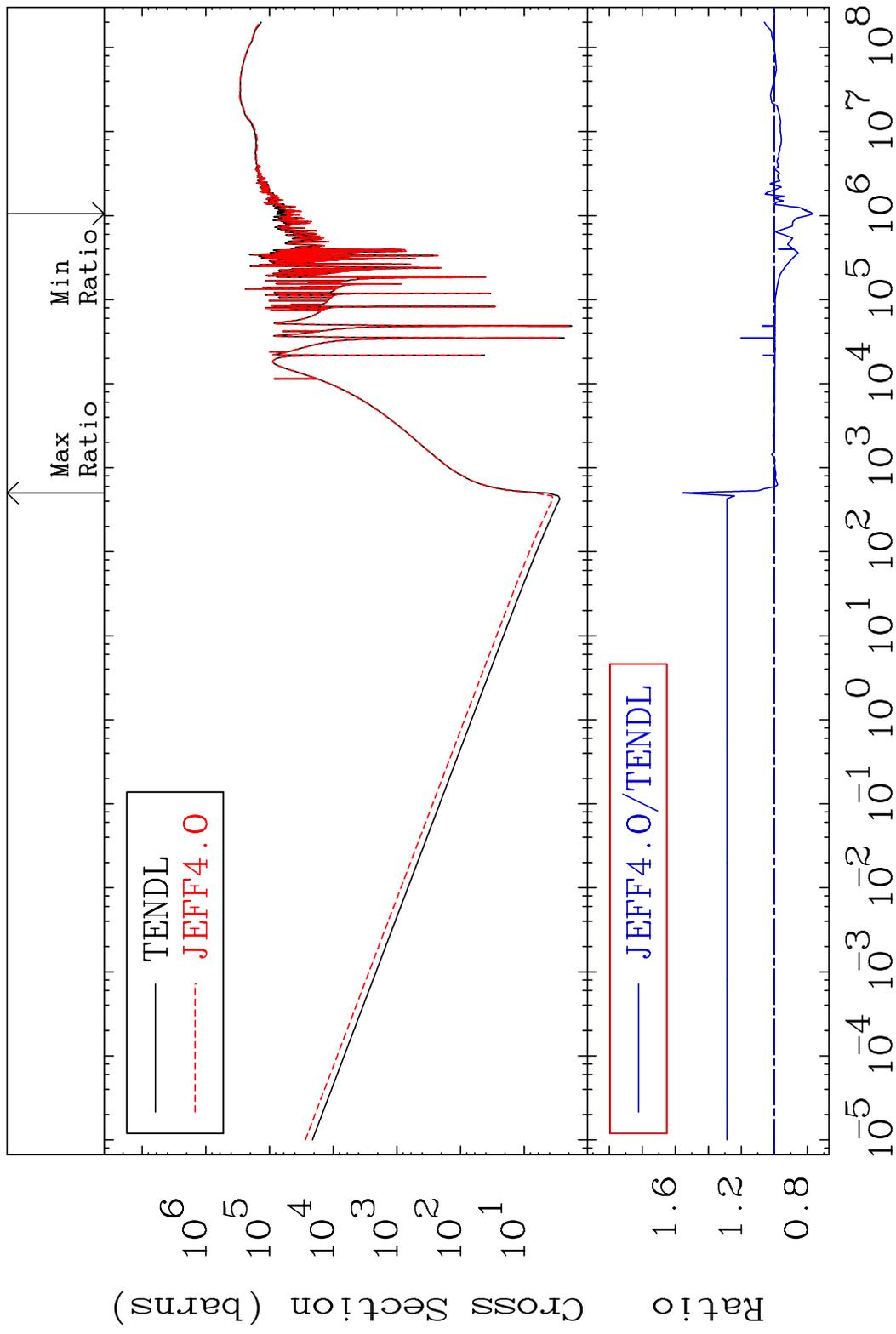
70 Incident Energy (eV) 22-Ti-48

MAT 2231 Total kinematic kerma (high limit) 22-Ti-48
 Cross Section -25.43 To 23.29 %



71 Incident Energy (eV) 22-Ti-48

MAT 2231 Dpa total (eV-barns) 22-Ti-48
 Cross Section -23.52 To 55.45 %



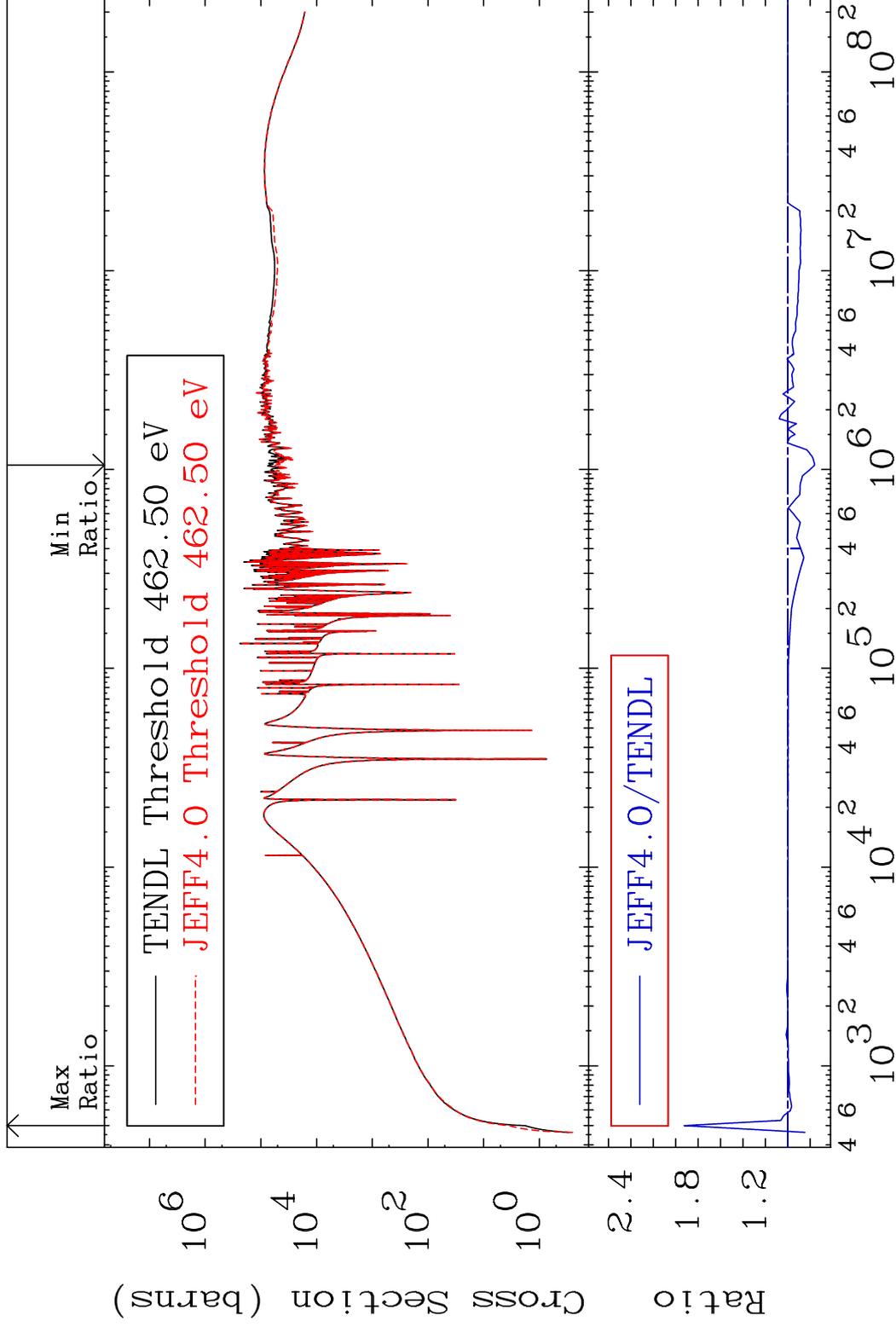
72 Incident Energy (eV) 22-Ti-48

MAT 2231

Dpa elastic (mt2)

22-Ti-48

Cross Section -24.14 To 92.49 %

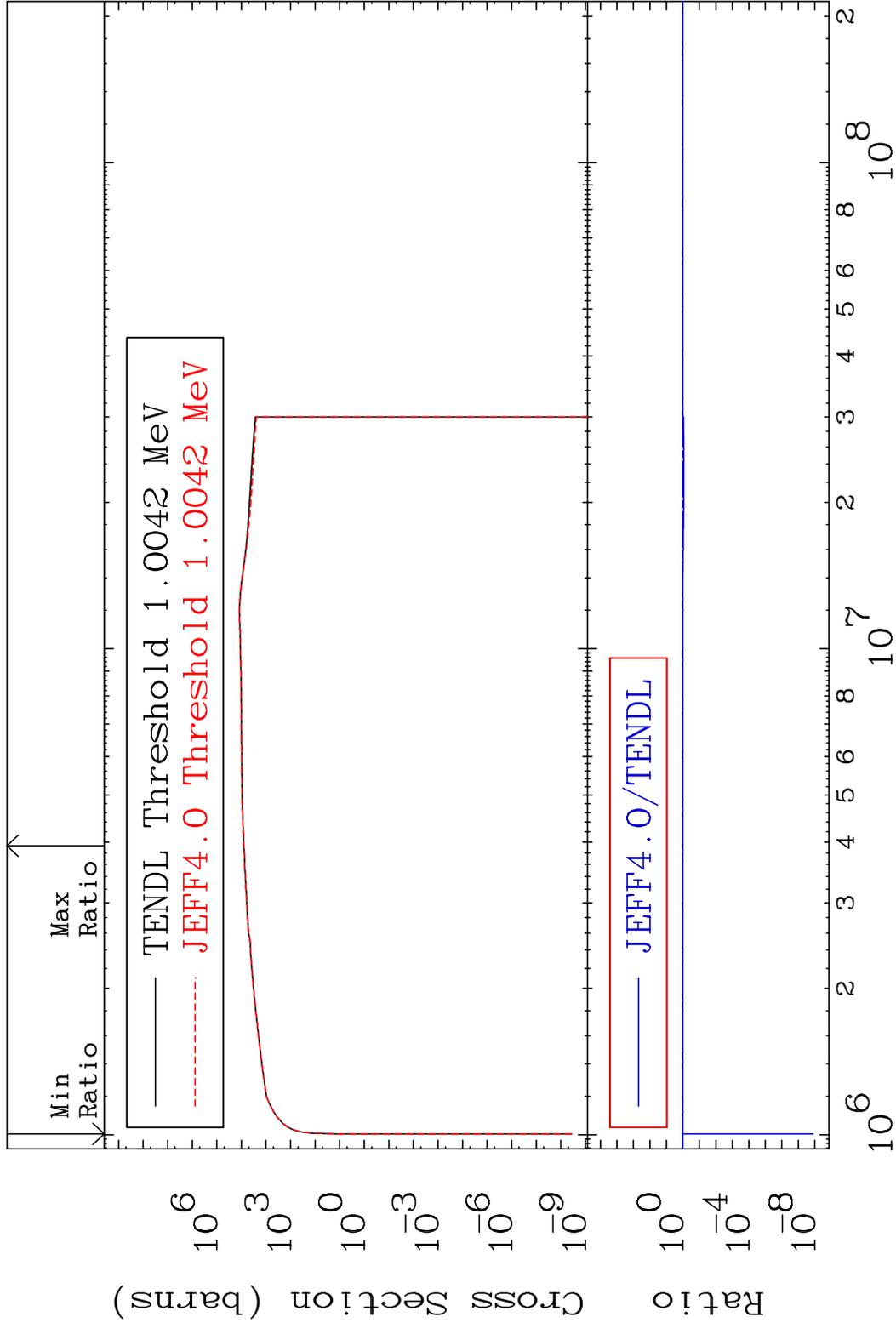


73

Incident Energy (eV)

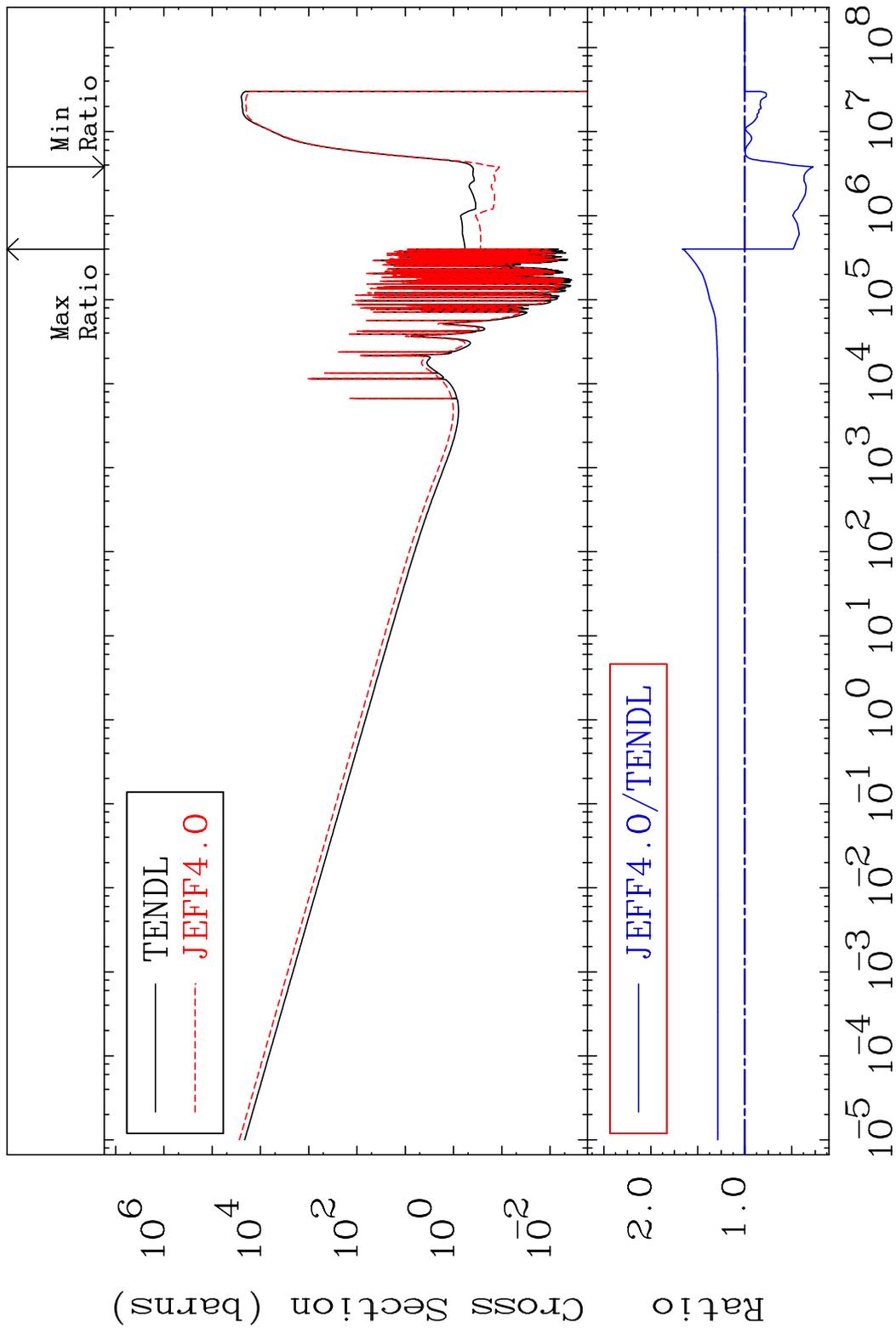
22-Ti-48

MAT 2231 Dpa inelastic (mt51-91) 22-Ti-48
 Cross Section -100.0 To 0.750 %



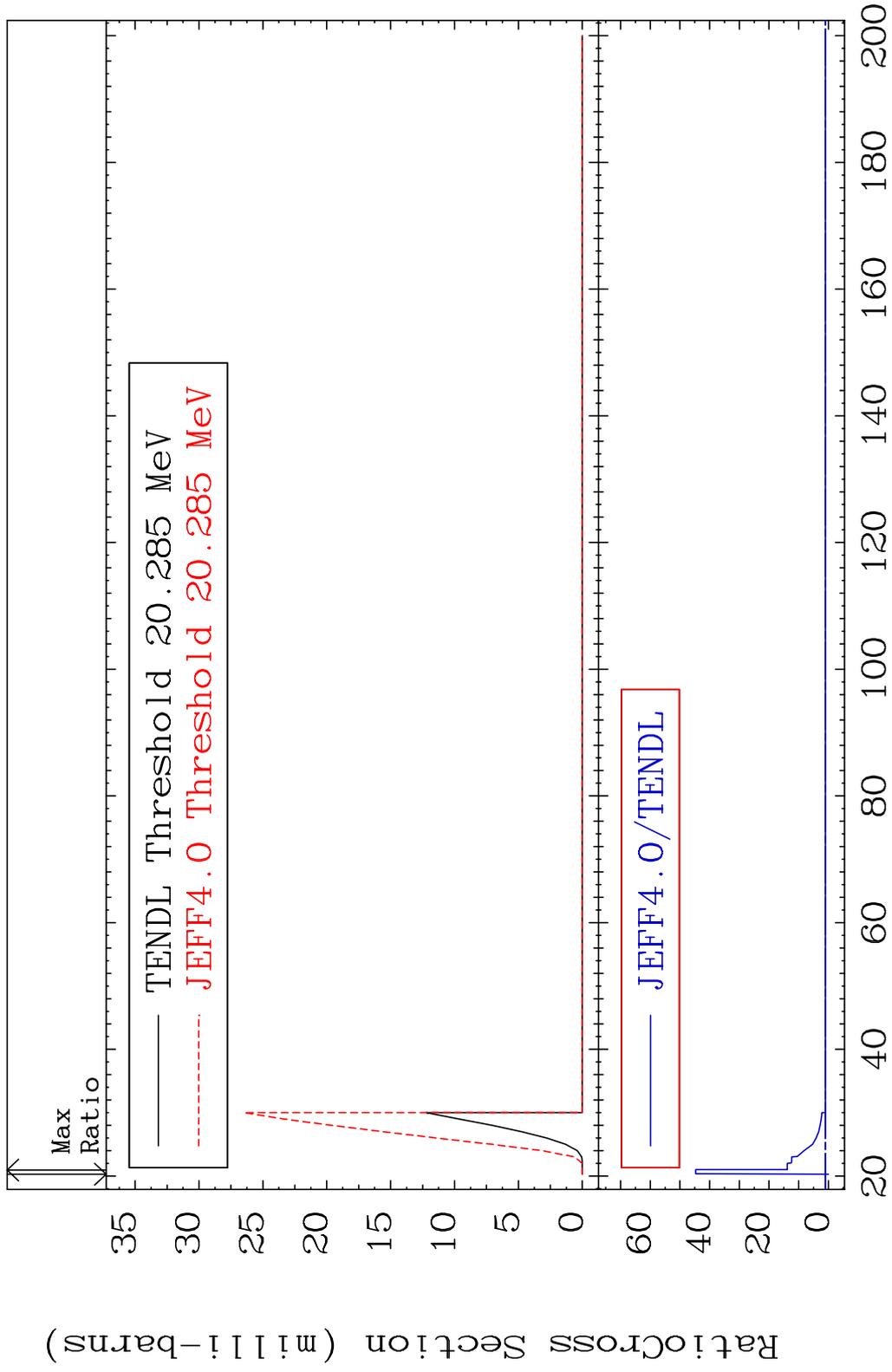
74 Incident Energy (eV) 22-Ti-48

MAT 2231 Dpa disappearance (mt102 -120) 22-Ti-48
 Cross Section -72.79 To 65.93 %



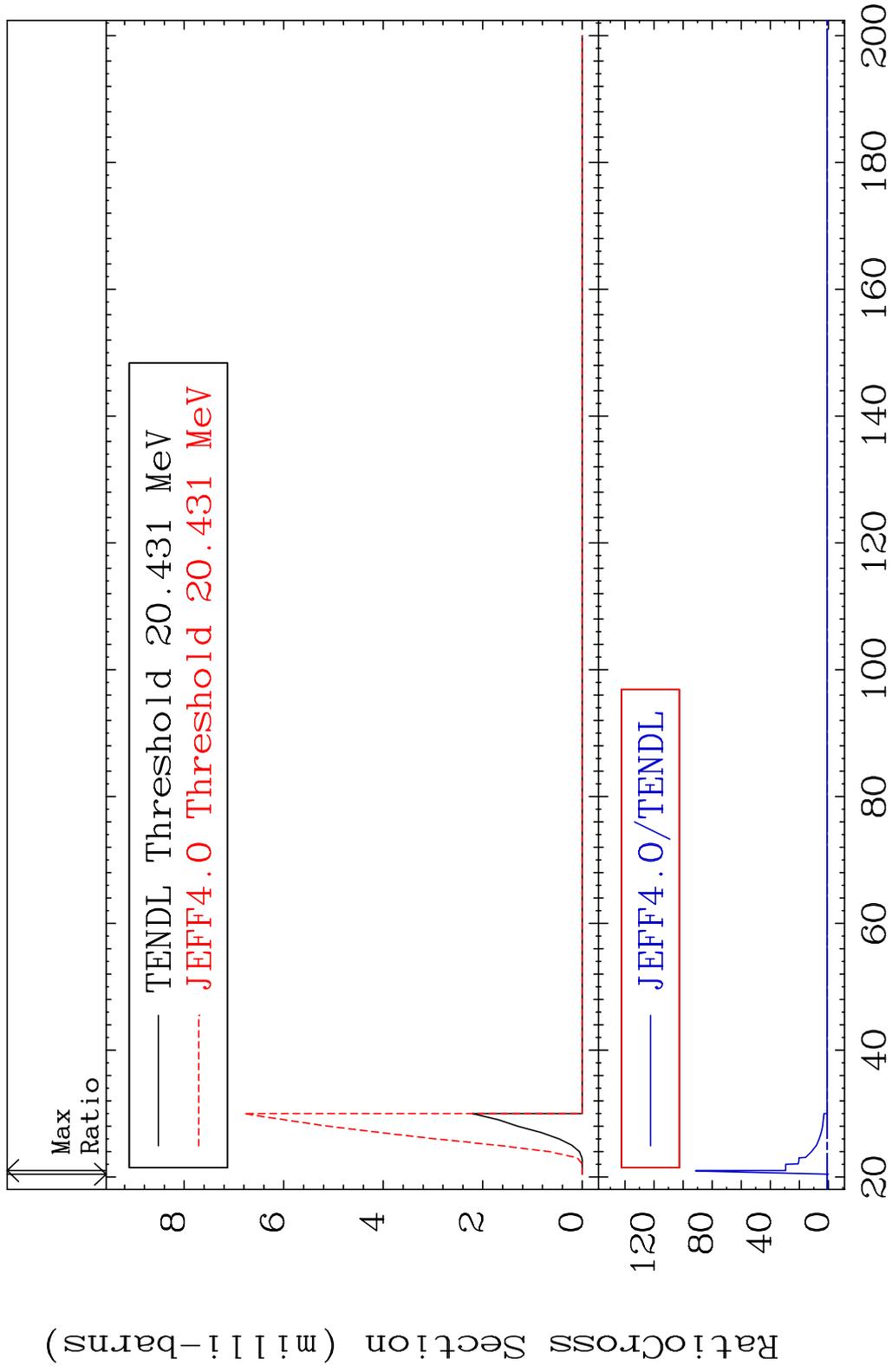
75 Incident Energy (eV) 22-Ti-48

MAT 2231 (n, n') d:21-Sc-46g 22-Ti-48
 Radionuclide Production Cross Section 1800.0 dno 4372. %

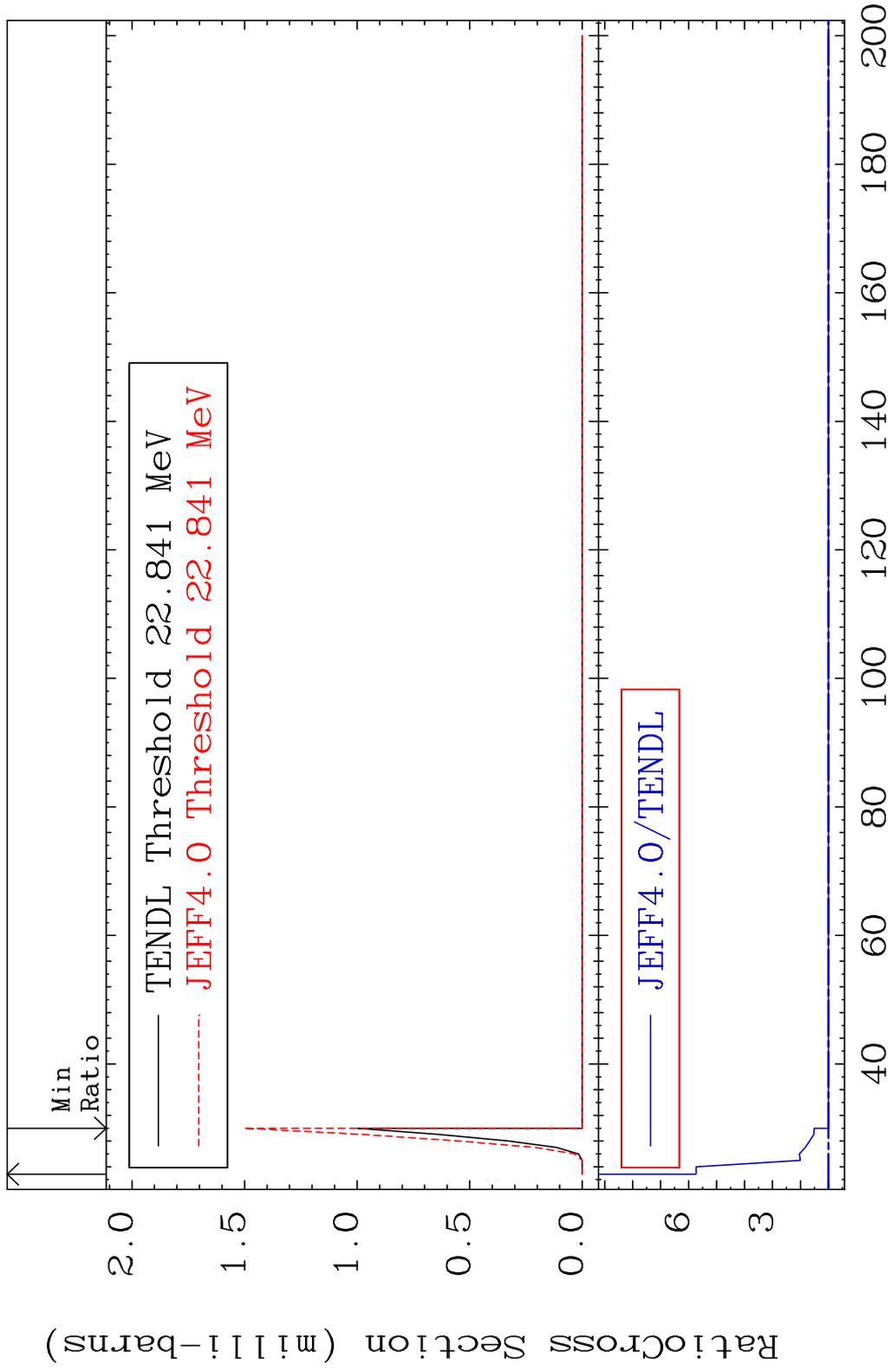


76 Incident Energy (MeV) 22-Ti-48

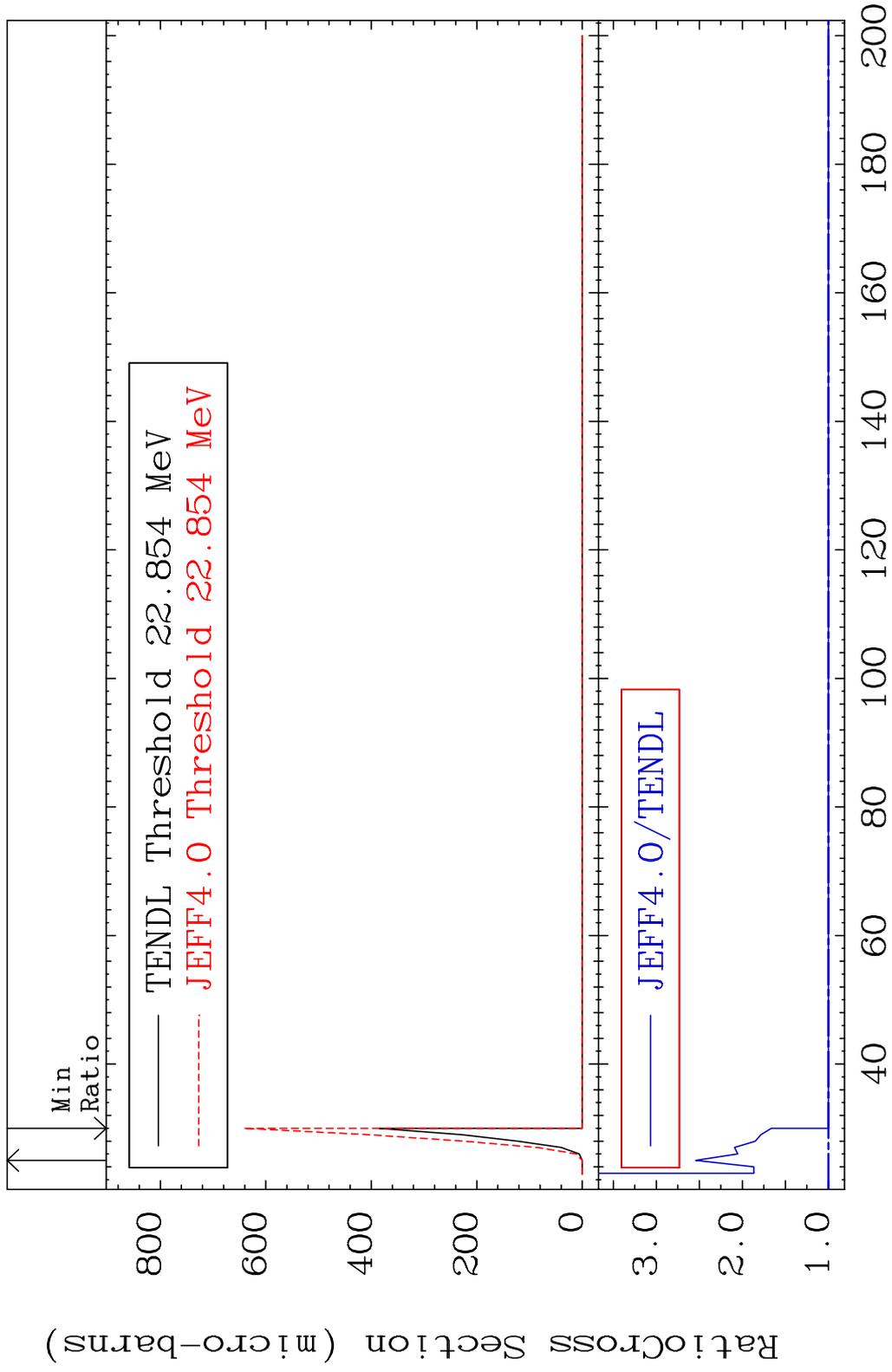
MAT 2231 (n, n') d:21-Sc-46m2 22-Ti-48
 Radionuclide Production Cross Section 1800.0 dno 9034. %



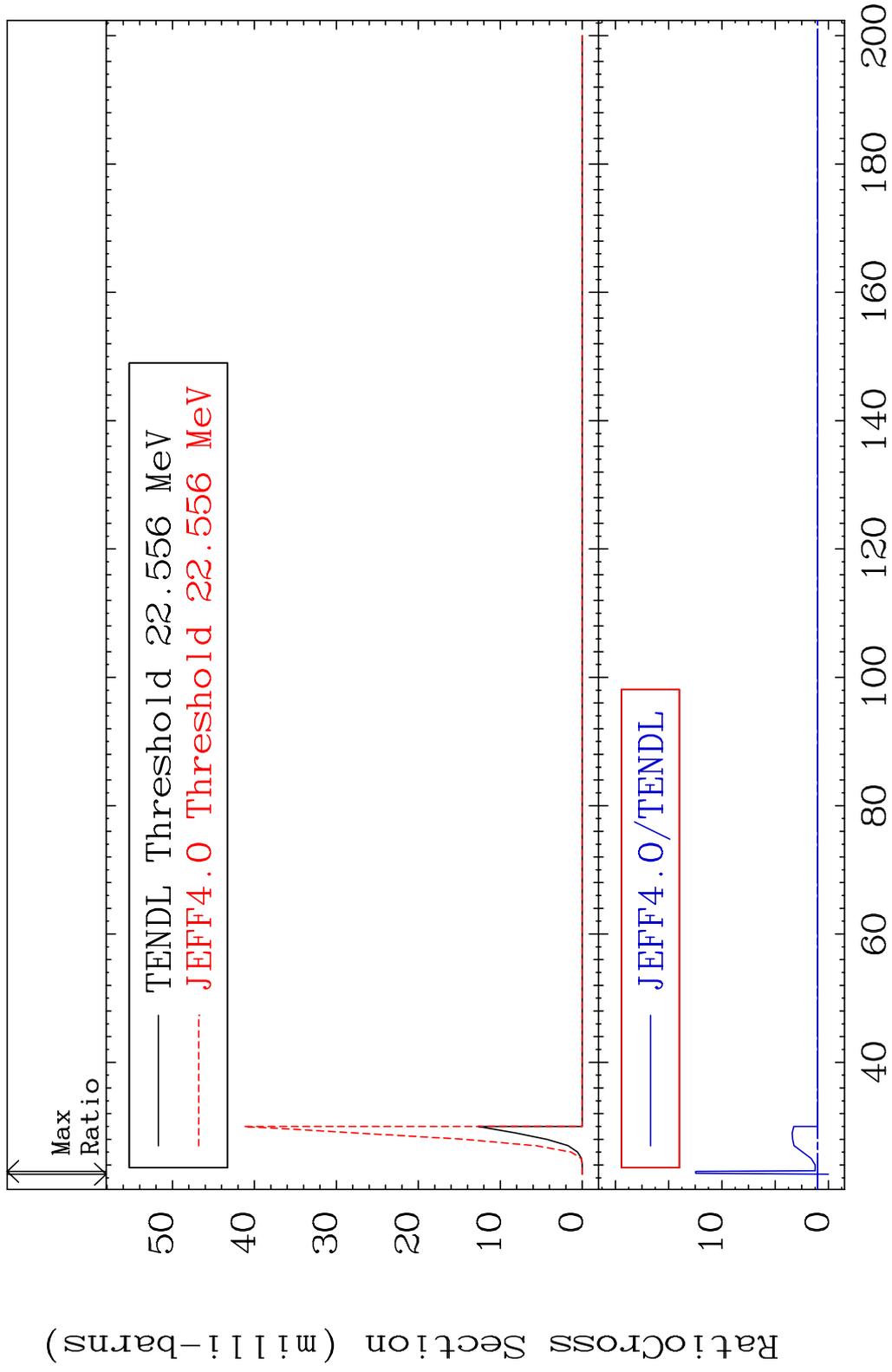
MAT 2231 (n, n') t:21-Sc-45g 22-Ti-48
 Radionuclide Production Cross Section 474.8 %



MAT 2231 (n, n') t:21-Sc-45m1 22-Ti-48
 Radionuclide Production Cross Section 154.3 %



MAT 2231 (n,2n) p:21-Sc-46g 22-Ti-48
Radionuclide Production Cross Section 180.0 dno 1146. %



80 Incident Energy (MeV) 22-Ti-48

