

Program Complot
(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

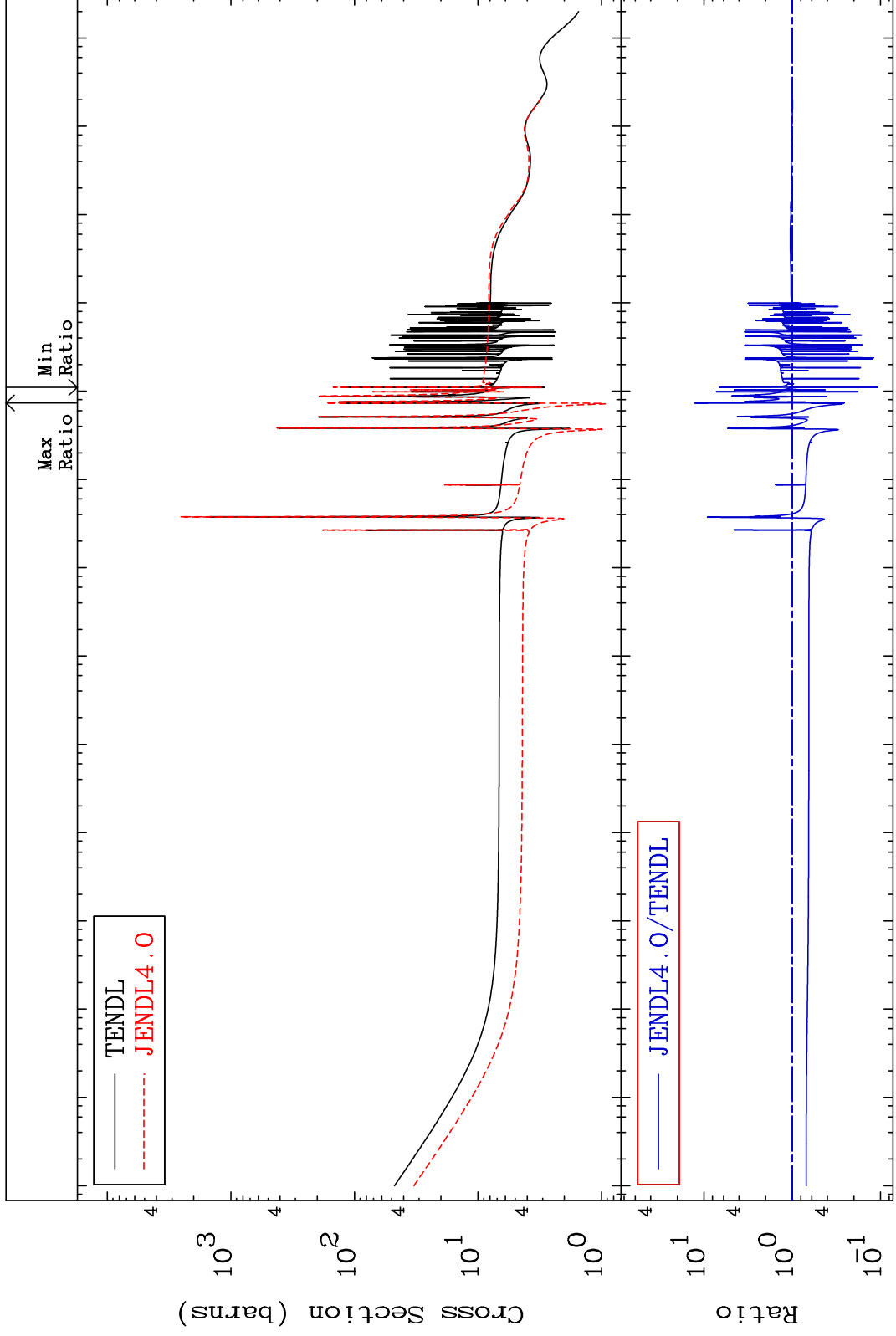
MAT 3731

Total

37-Rb-87

Cross Section

-89.14 To 1165. %



Incident Energy (eV)

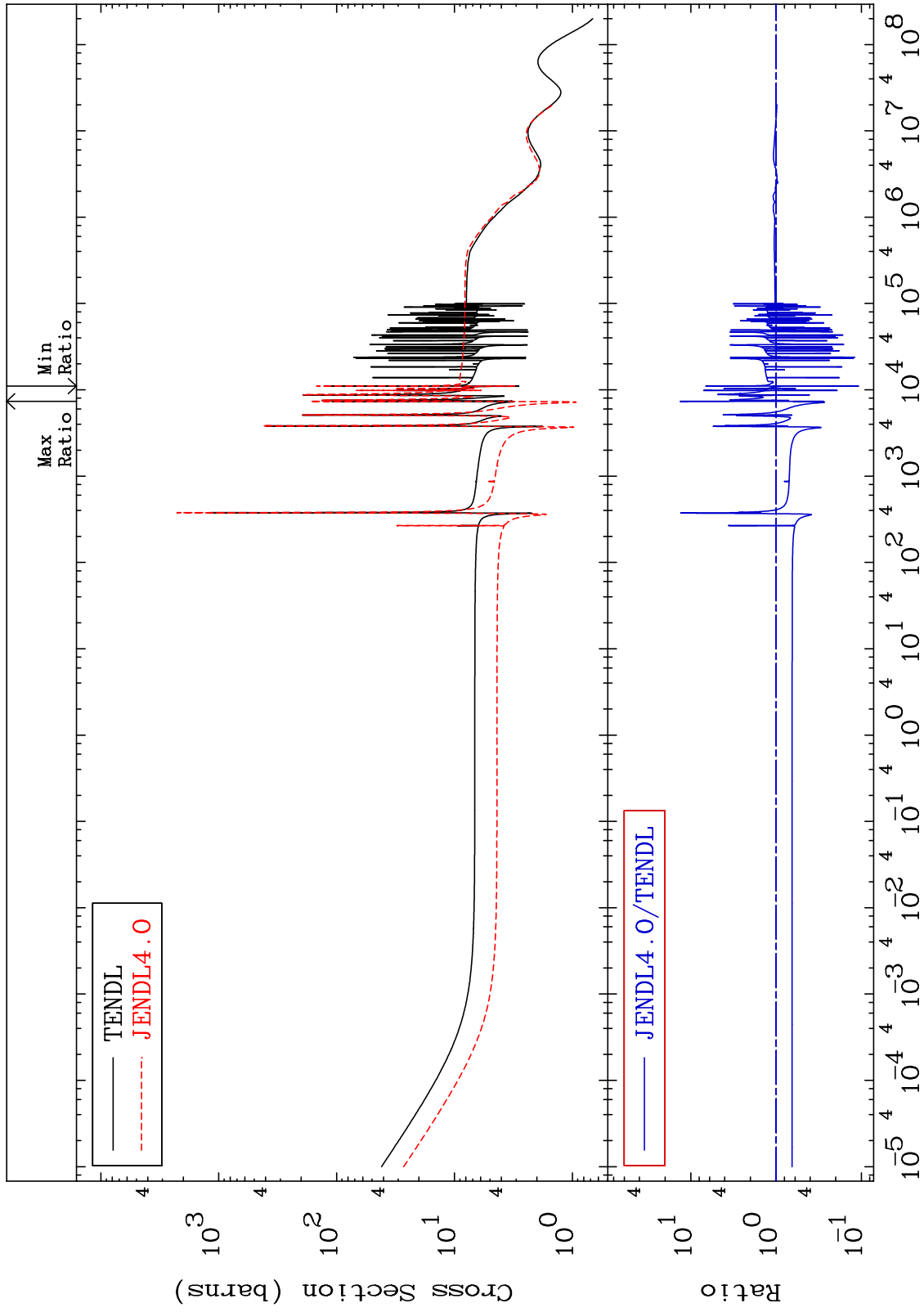
1

37-Rb-87

MAT 3731

Elastic
Cross Section

37-Rb-87
-89.15 To 1237. %



Incident Energy (eV)

37-Rb-87

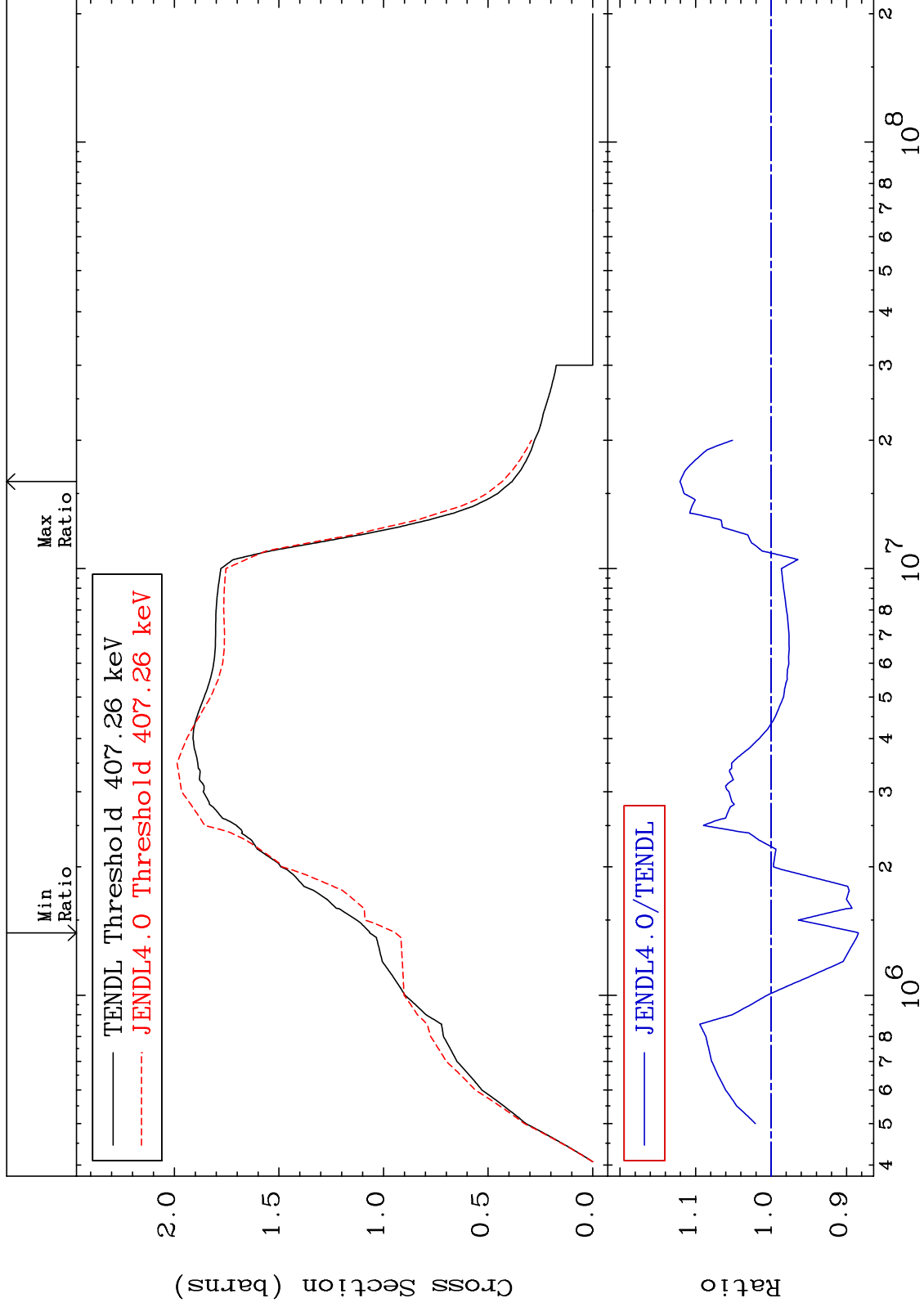
MAT 3731

³⁷Rb-87

Inelastic

Cross Section

-11.56 To 12.06 %



3

Incident Energy (eV)

³⁷Rb-87

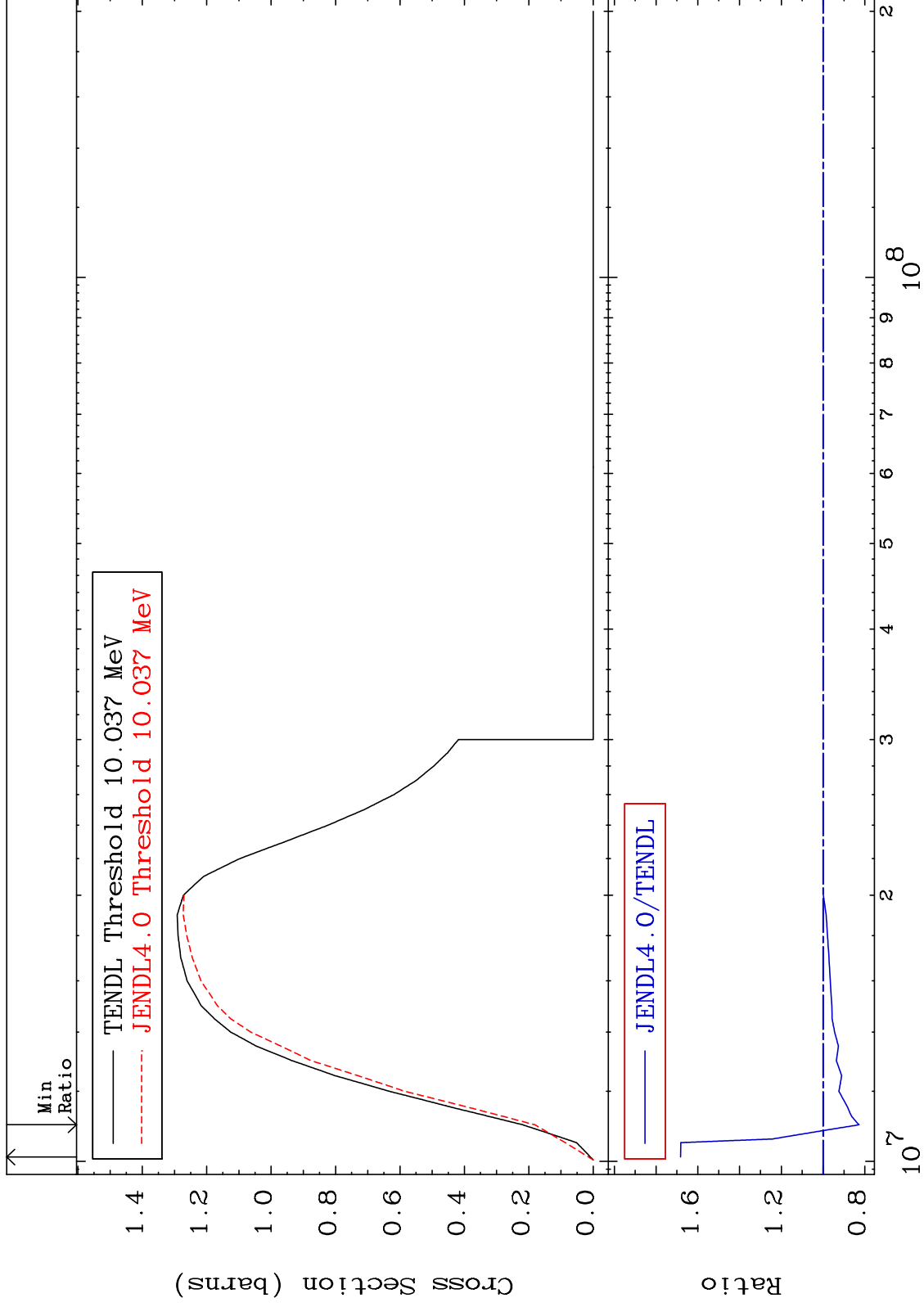
MAT 3731

(n,2n)

37-Rb-87

Cross Section

-17.26 To 68.24 %



37-Rb-87

37-Rb-87

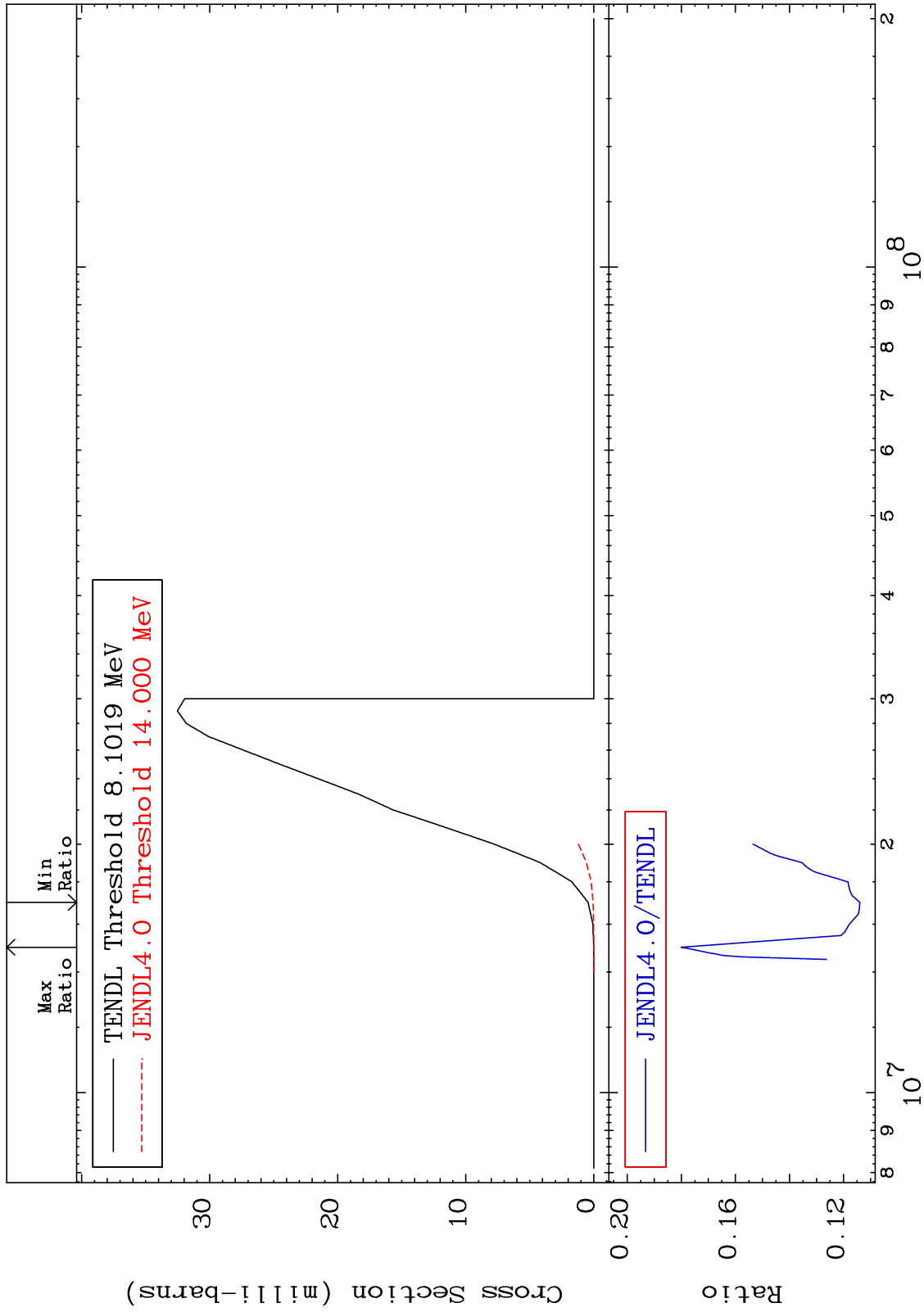
MAT 3731

(n, n') α

37-Rb-87

Cross Section

-88.61 To -82.00%



Incident Energy (eV)

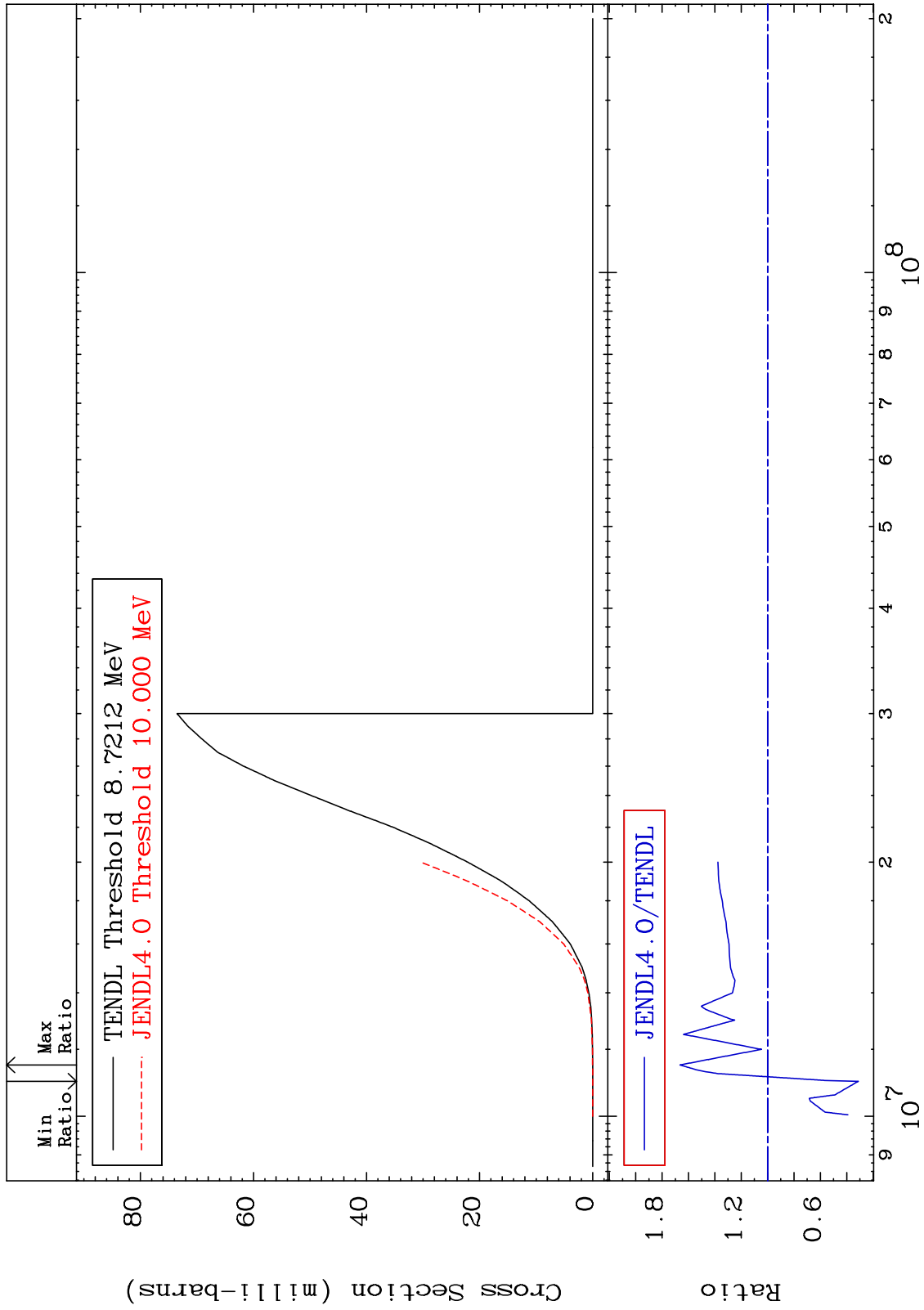
37-Rb-87

5

MAT 3731

(n,n') p
Cross Section

³⁷Rb-87
-68.84 To 66.41 %



6

Incident Energy (eV)

³⁷Rb-87

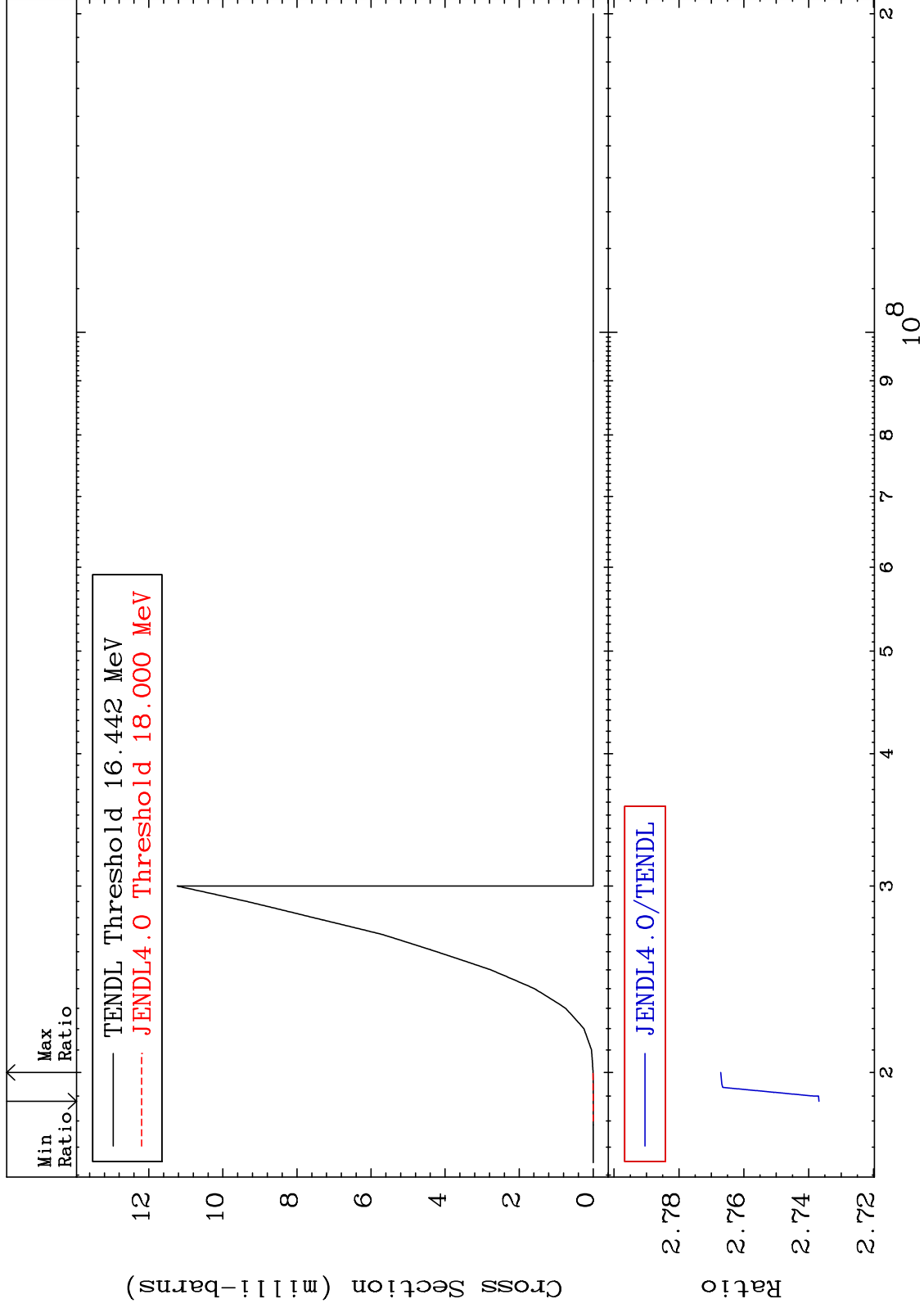
MAT 3731

(n,n') d

37-Rb-87

Cross Section

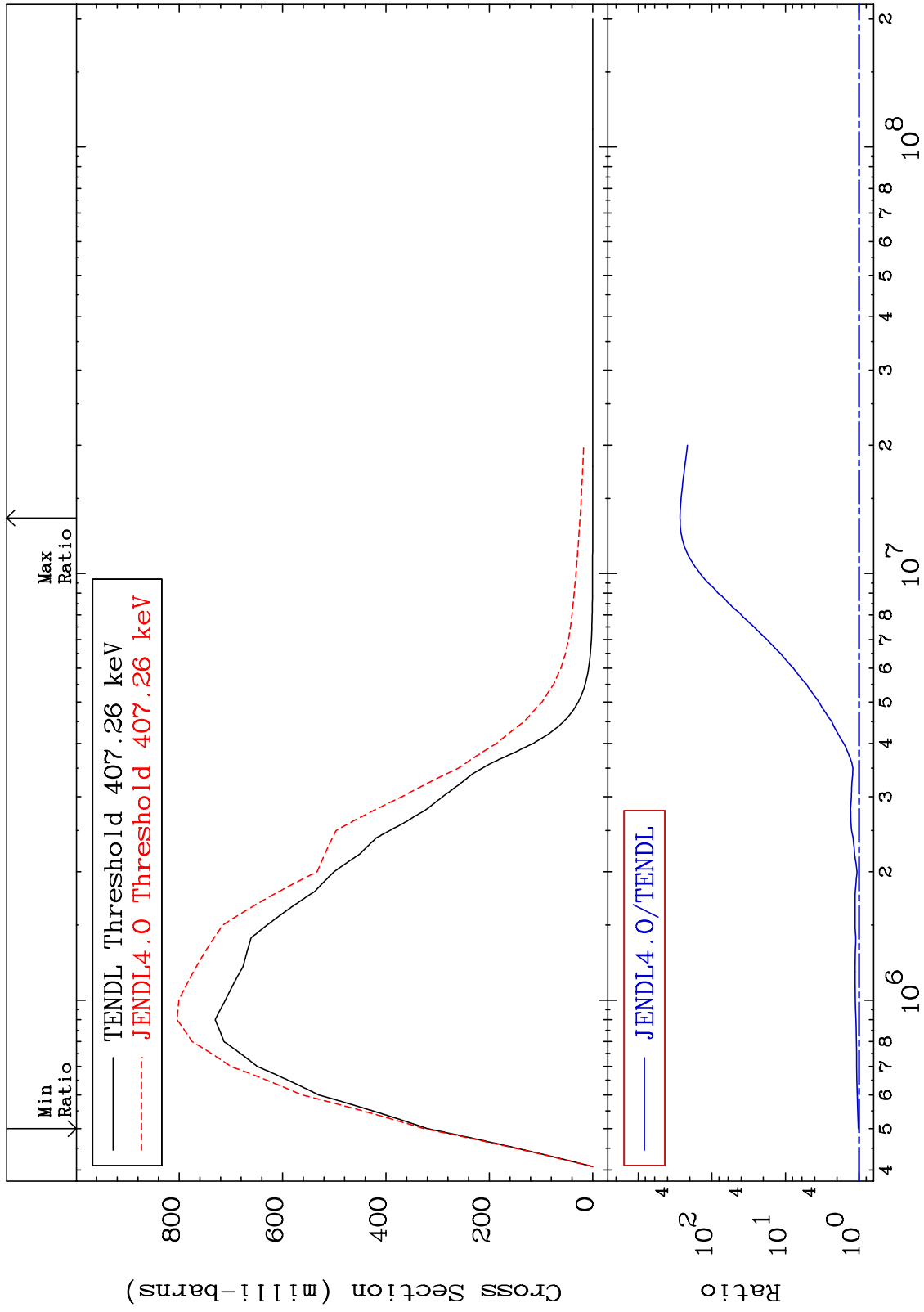
173.7 To 176.7 %



MAT 3731

MT= 51 (n,n') Level
Cross Section

37-Rb-87
2.078 To 9999. %



8

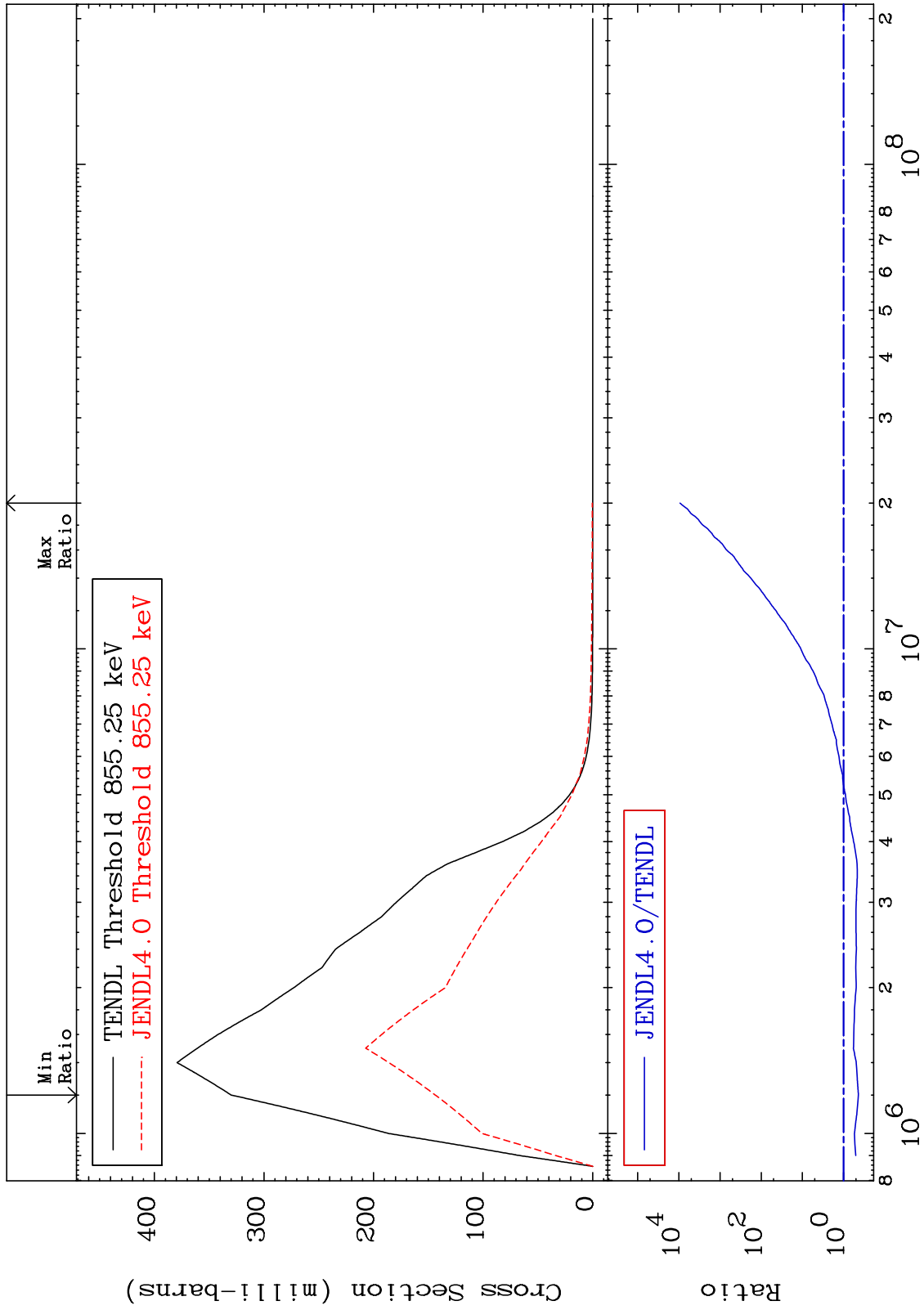
37-Rb-87

37-Rb-87

MAT 3731

MT= 52 (n,n') Level
Cross Section

37-Rb-87
-56.48 To 9999. %



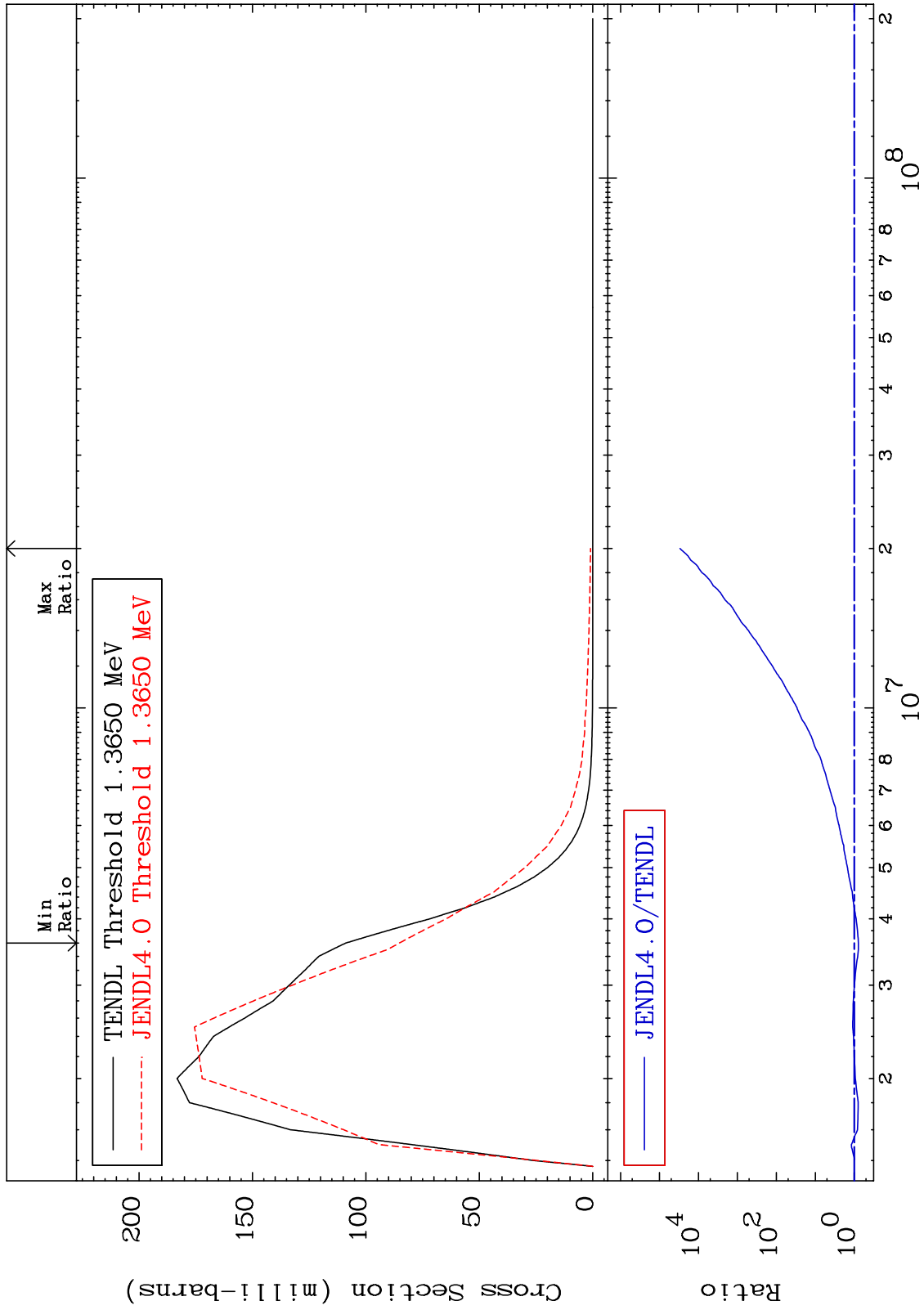
Incident Energy (eV)

37-Rb-87

MAT 3731

MT= 53 (n, n') Level
Cross Section

37-Rb-87
-21.70 To 9999. %



10

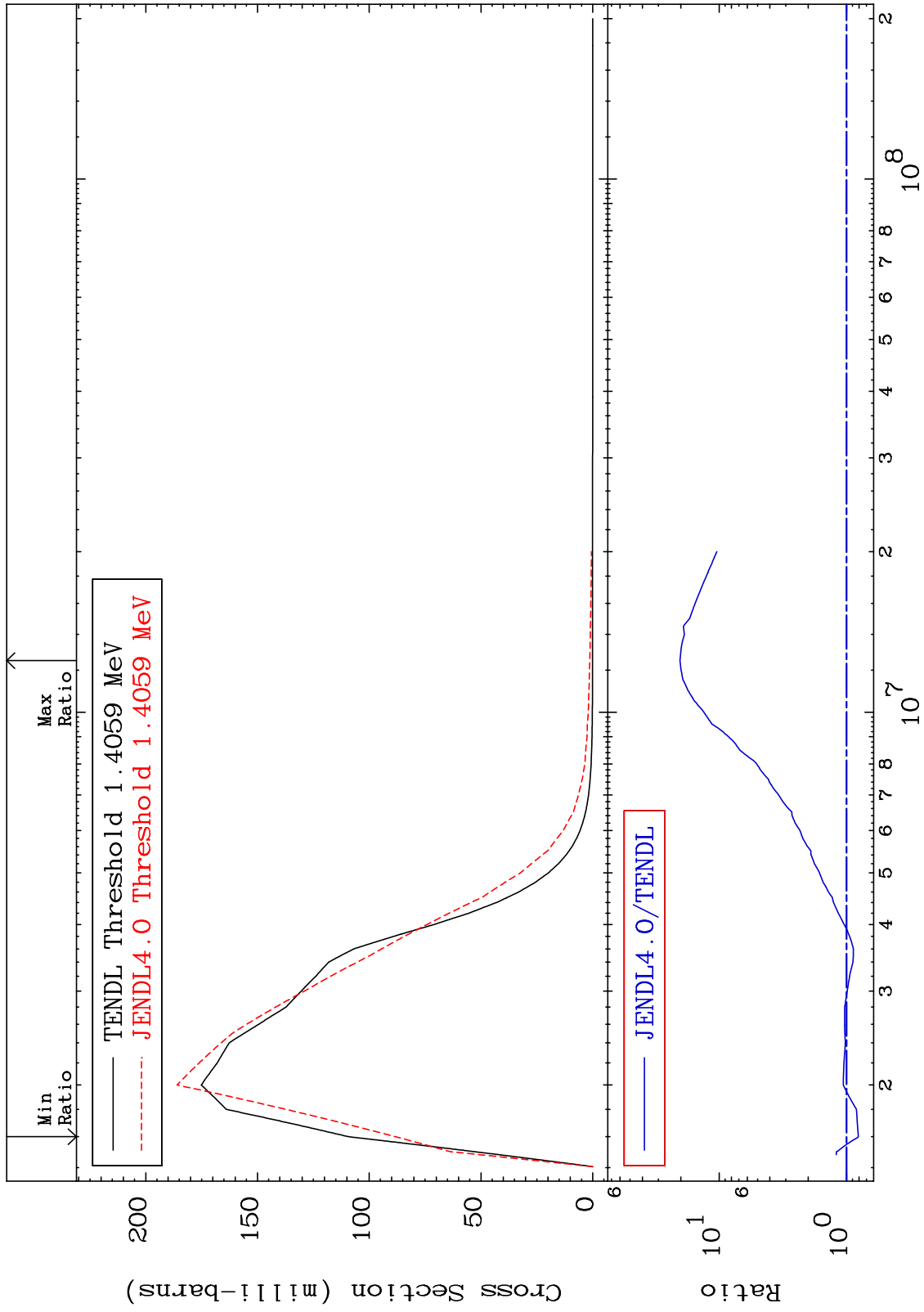
Incident Energy (eV)

37-Rb-87

MAT 3731

MT= 54 (n,n') Level
Cross Section

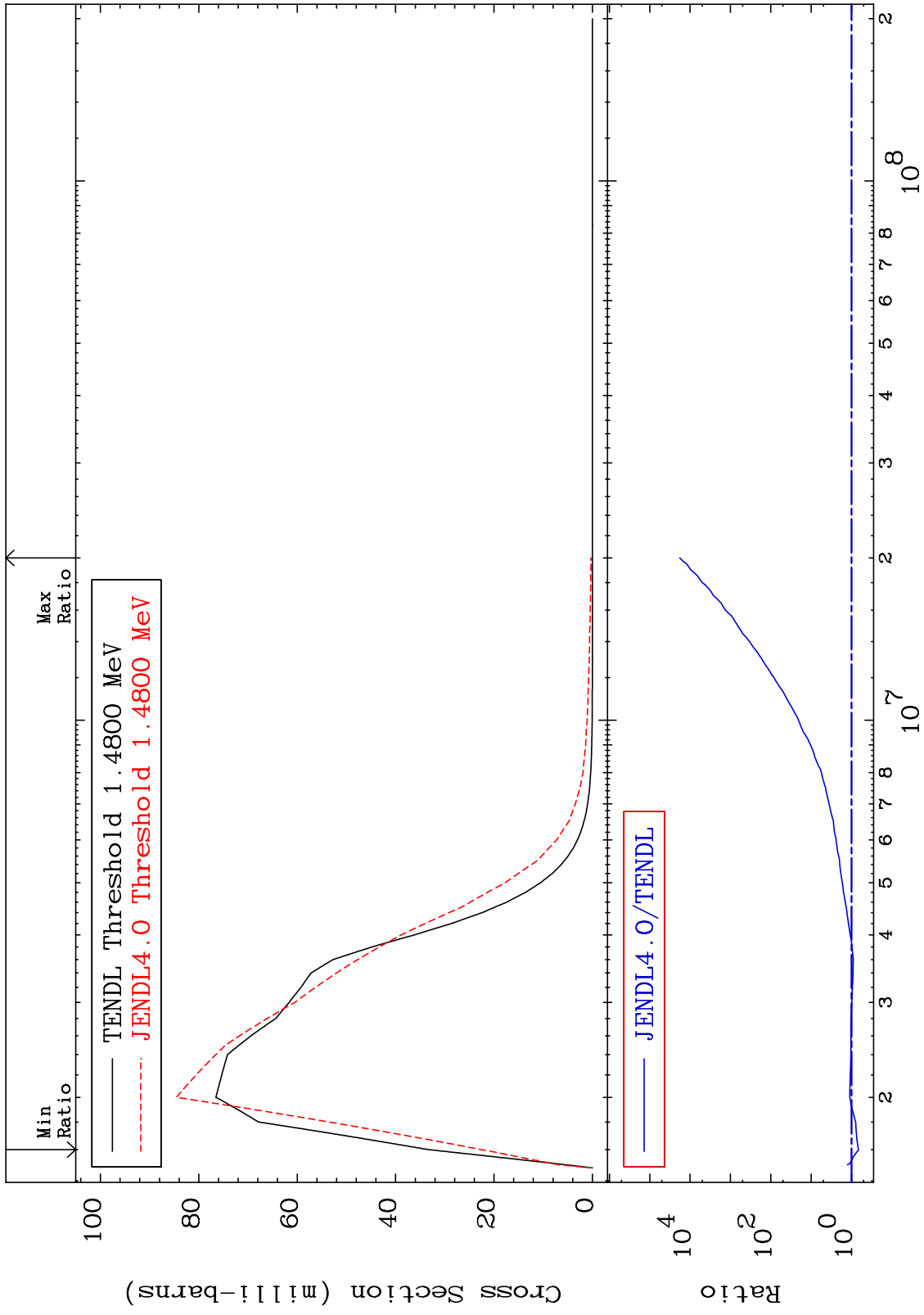
37-Rb-87
-19.24 To 1929. %



MAT 3731

MT= 55 (n,n') Level
Cross Section

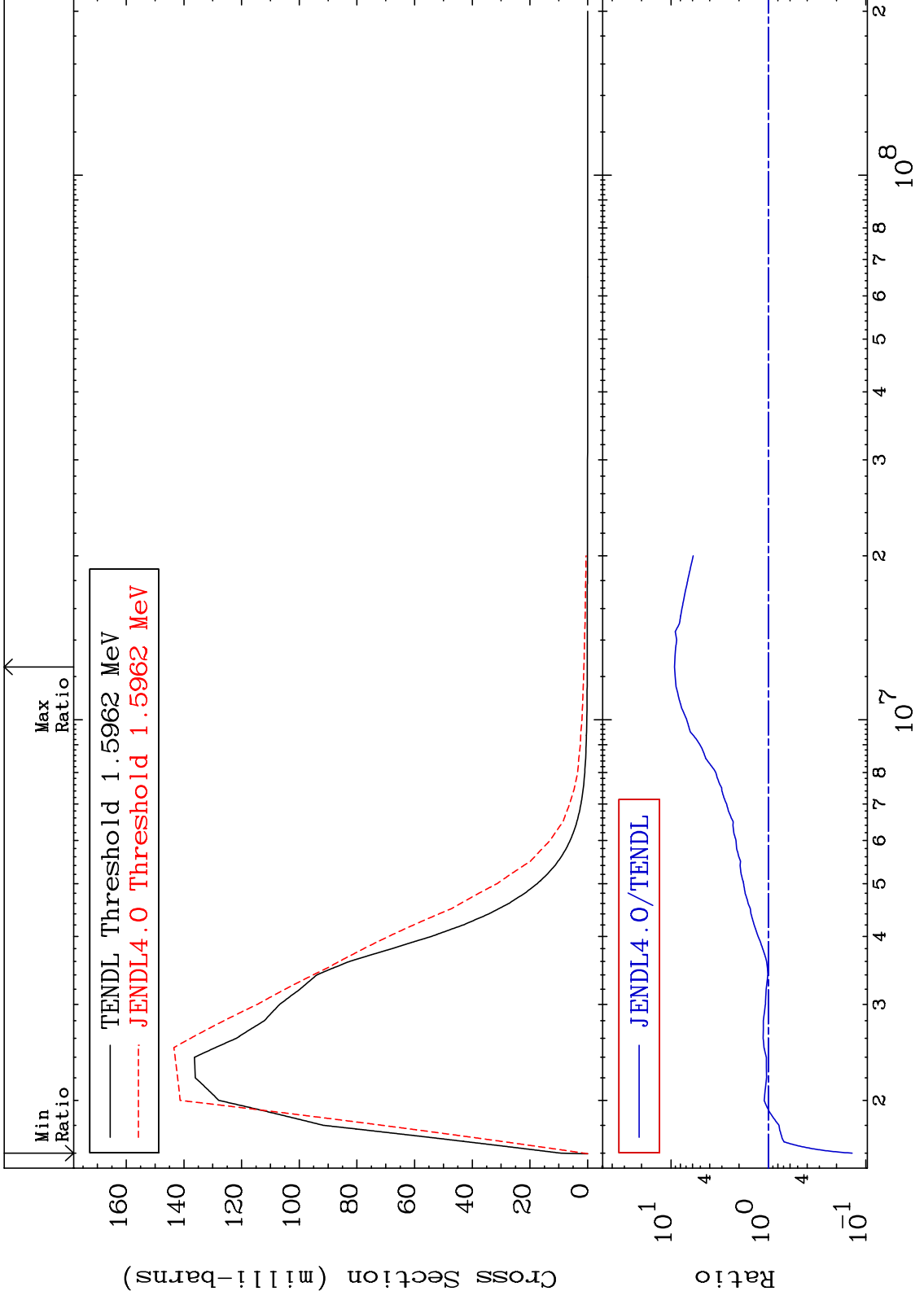
37-Rb-87
-32.44 To 9999. %



MAT 3731

MT= 56 (n,n') Level
Cross Section

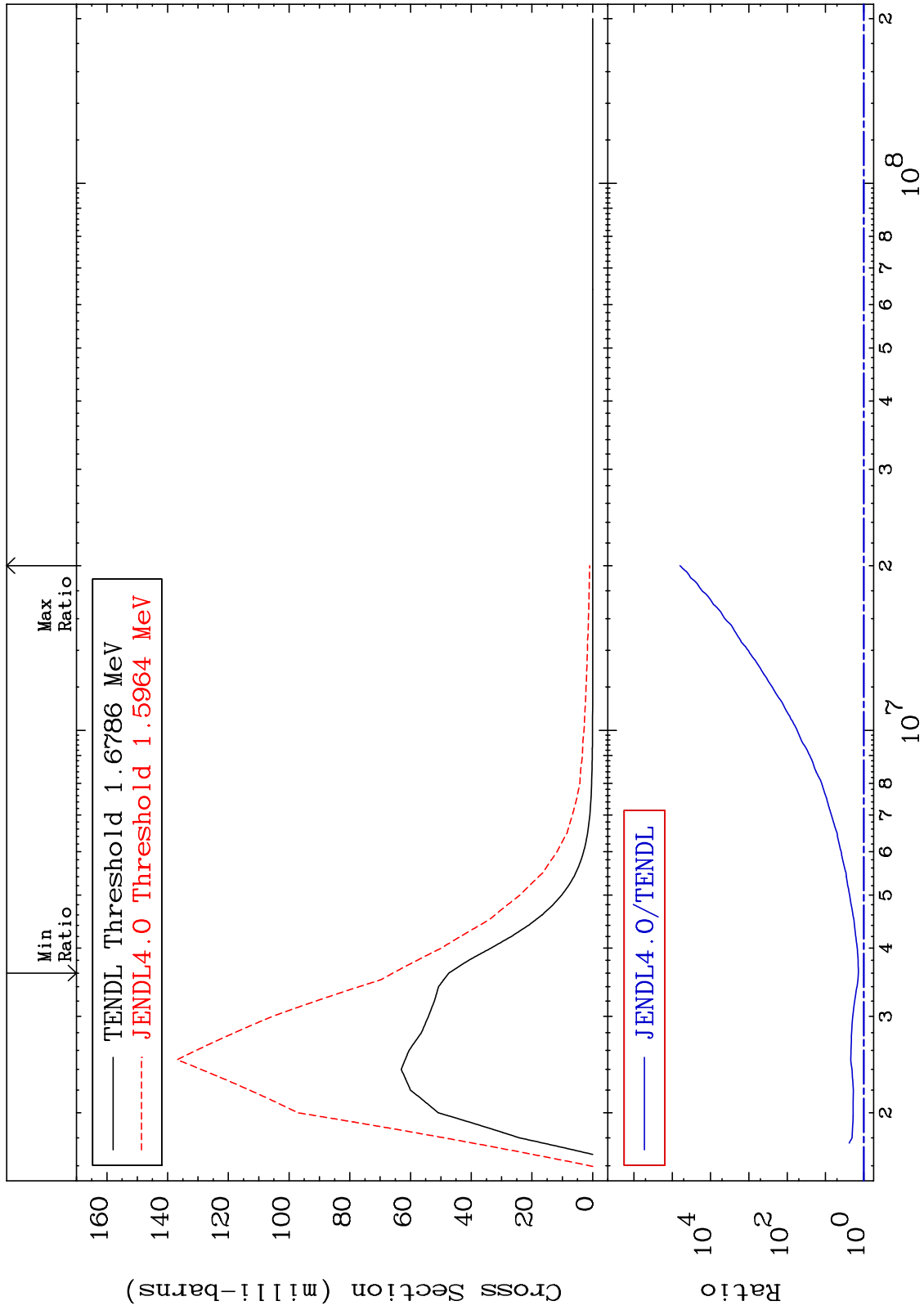
37-Rb-87
-86.20 To 817.5 %



MAT 3731

MT= 57 (n,n') Level
Cross Section

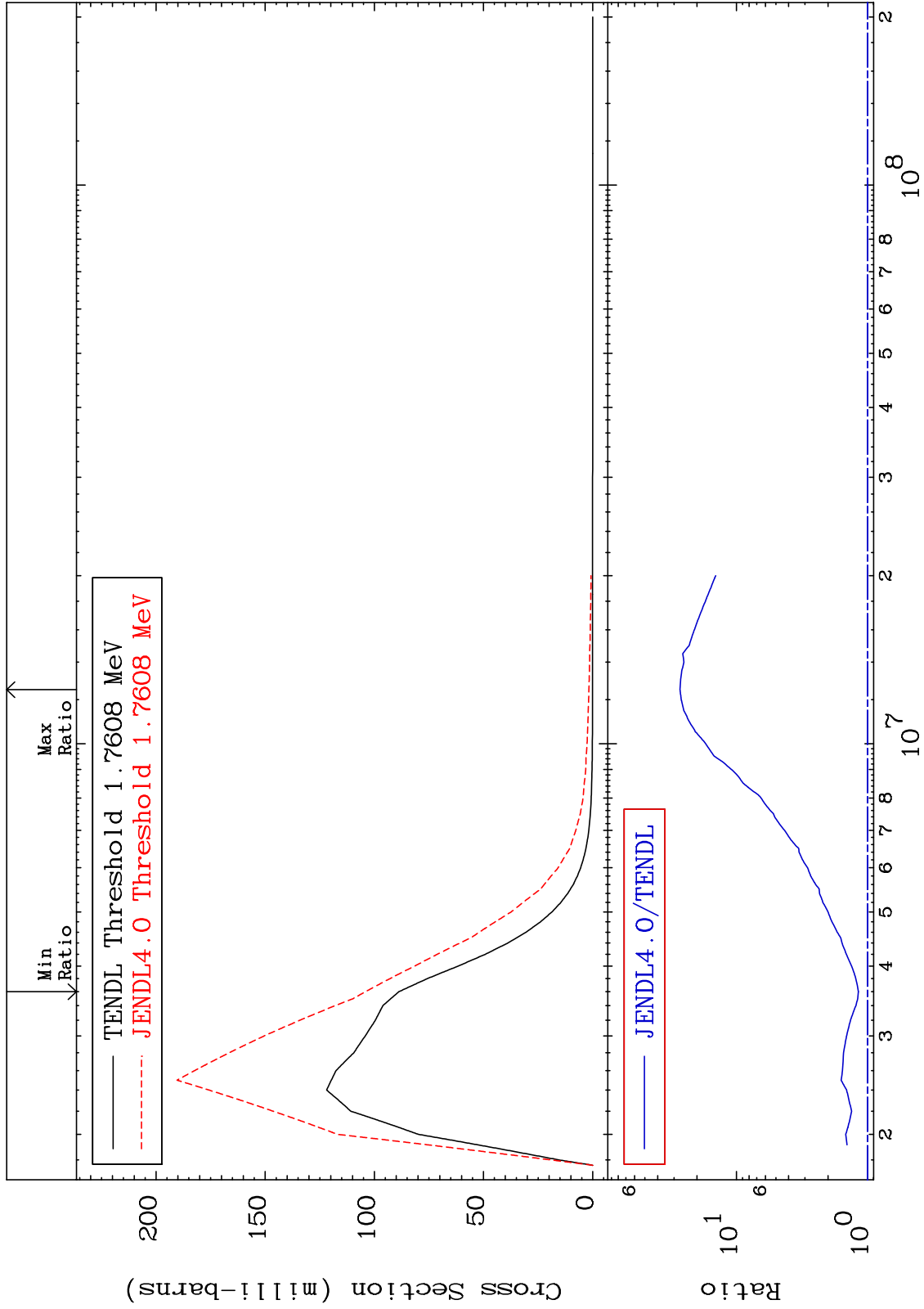
37-Rb-87
38.78 To 9999. %



MAT 3731

MT= 58 (n,n') Level
Cross Section

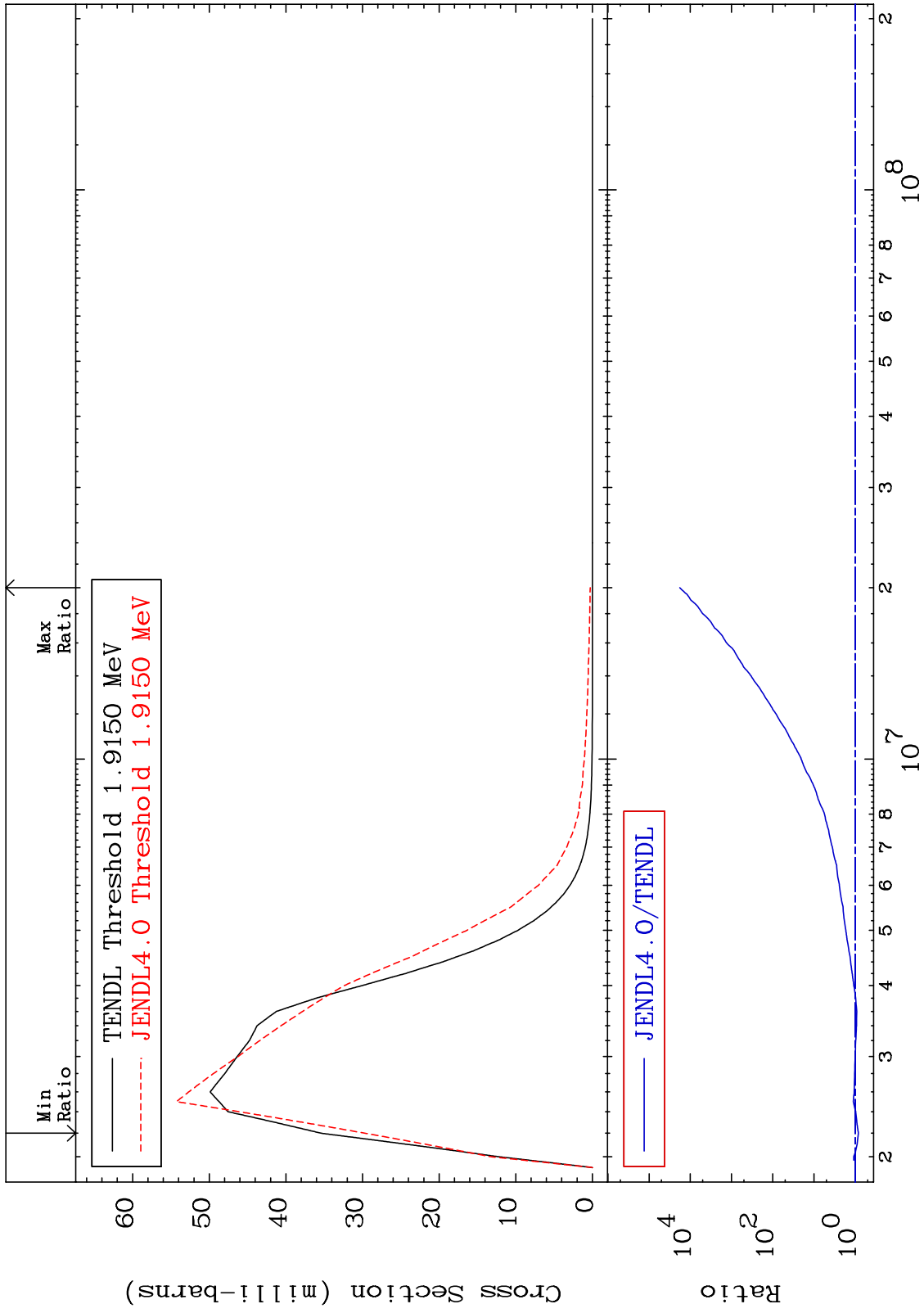
37-Rb-87
17.27 To 2598. %



MAT 3731

MT= 59 (n,n') Level
Cross Section

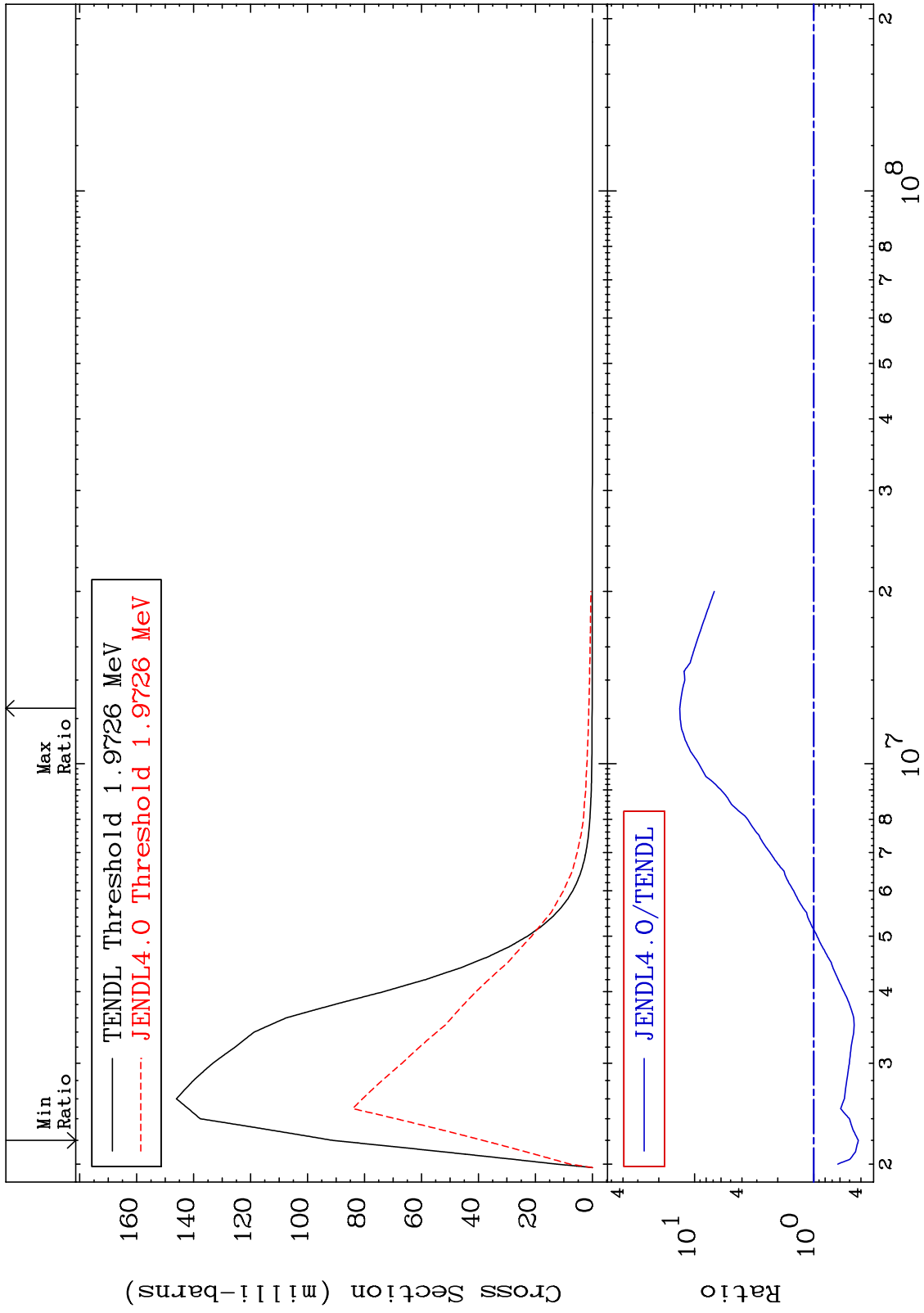
37-Rb-87
-16.25 To 9999. %



MAT 3731

MT= 60 (n,n') Level
Cross Section

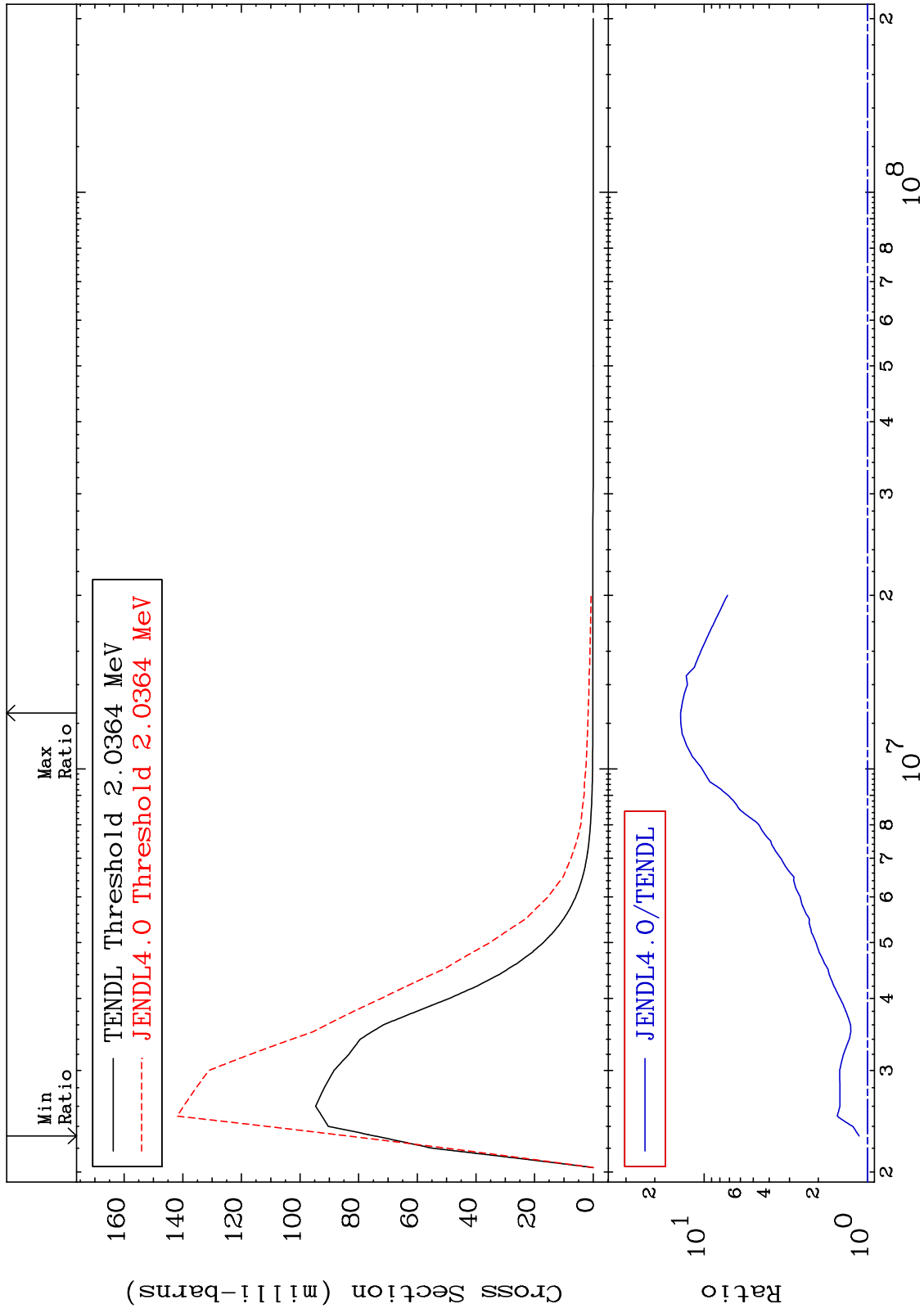
37-Rb-87
-57.88 To 1233. %



MAT 3731

MT= 61 (n,n') Level
Cross Section

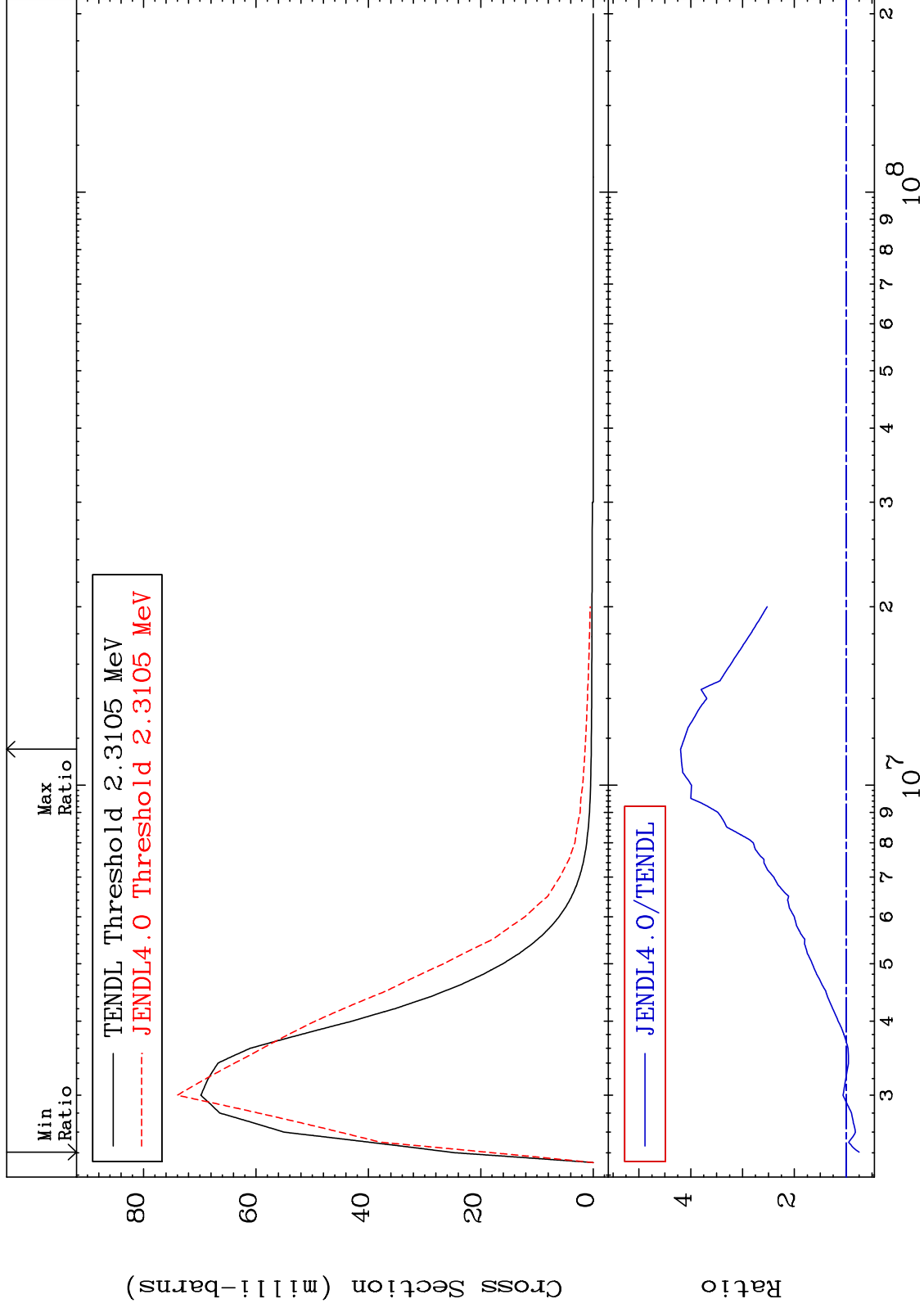
37-Rb-87
12.57 To 1291. %



MAT 3731

MT= 62 (n,n') Level
Cross Section

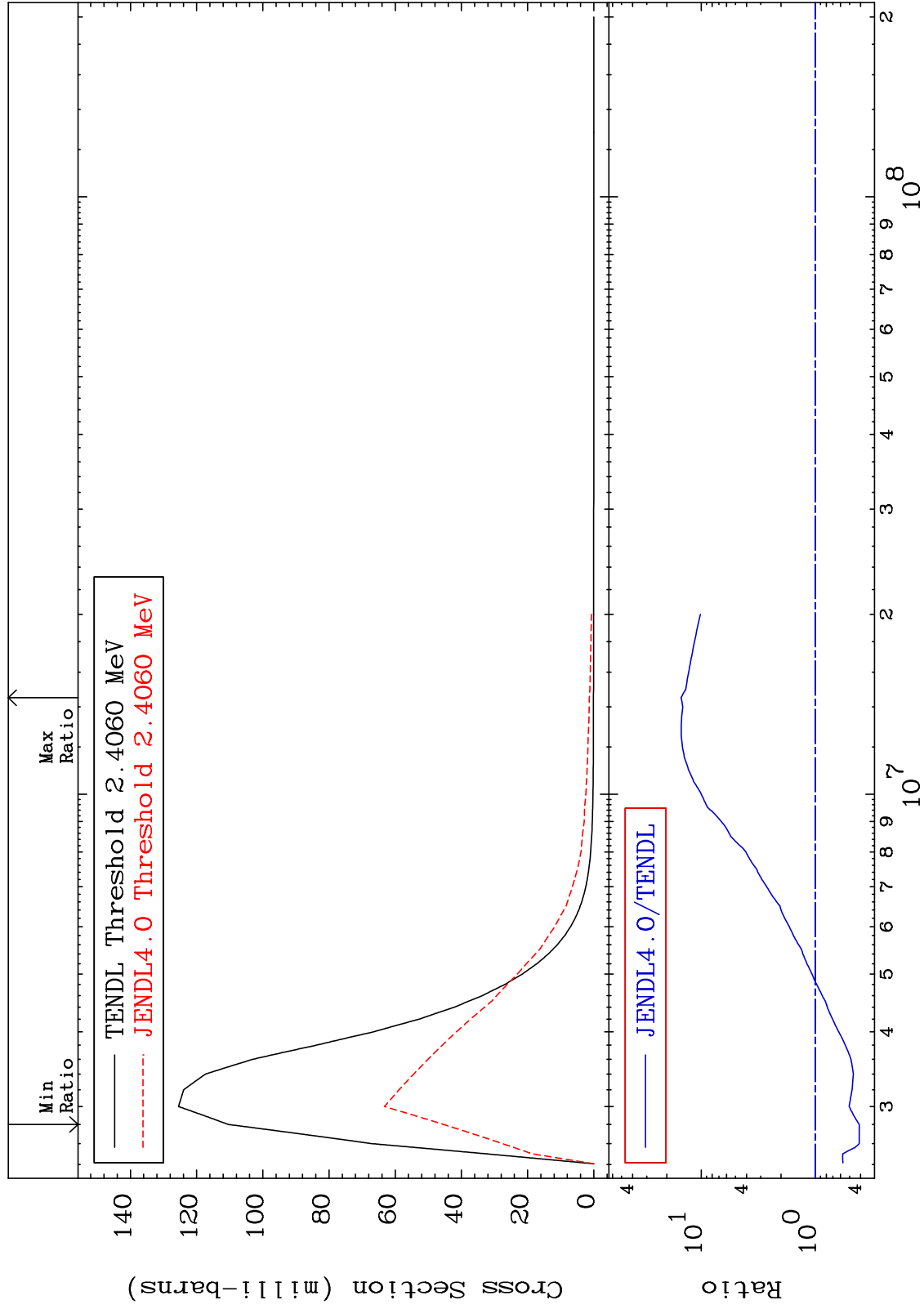
37-Rb-87
-25.14 To 319.6 %



MAT 3731

MT= 63 (n,n') Level
Cross Section

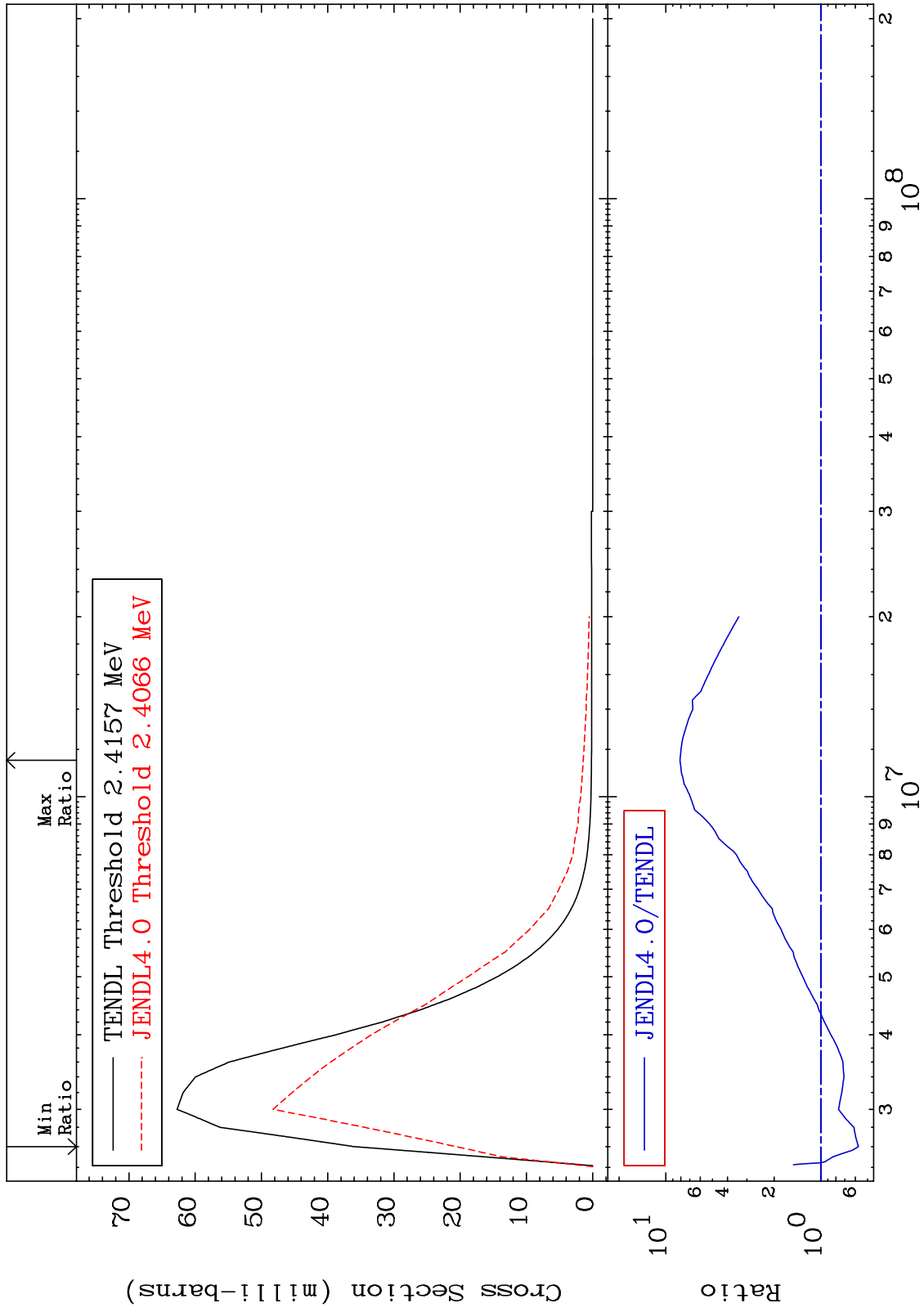
37-Rb-87
-58.90 To 1402. %



MAT 3731

MT= 64 (n,n') Level
Cross Section

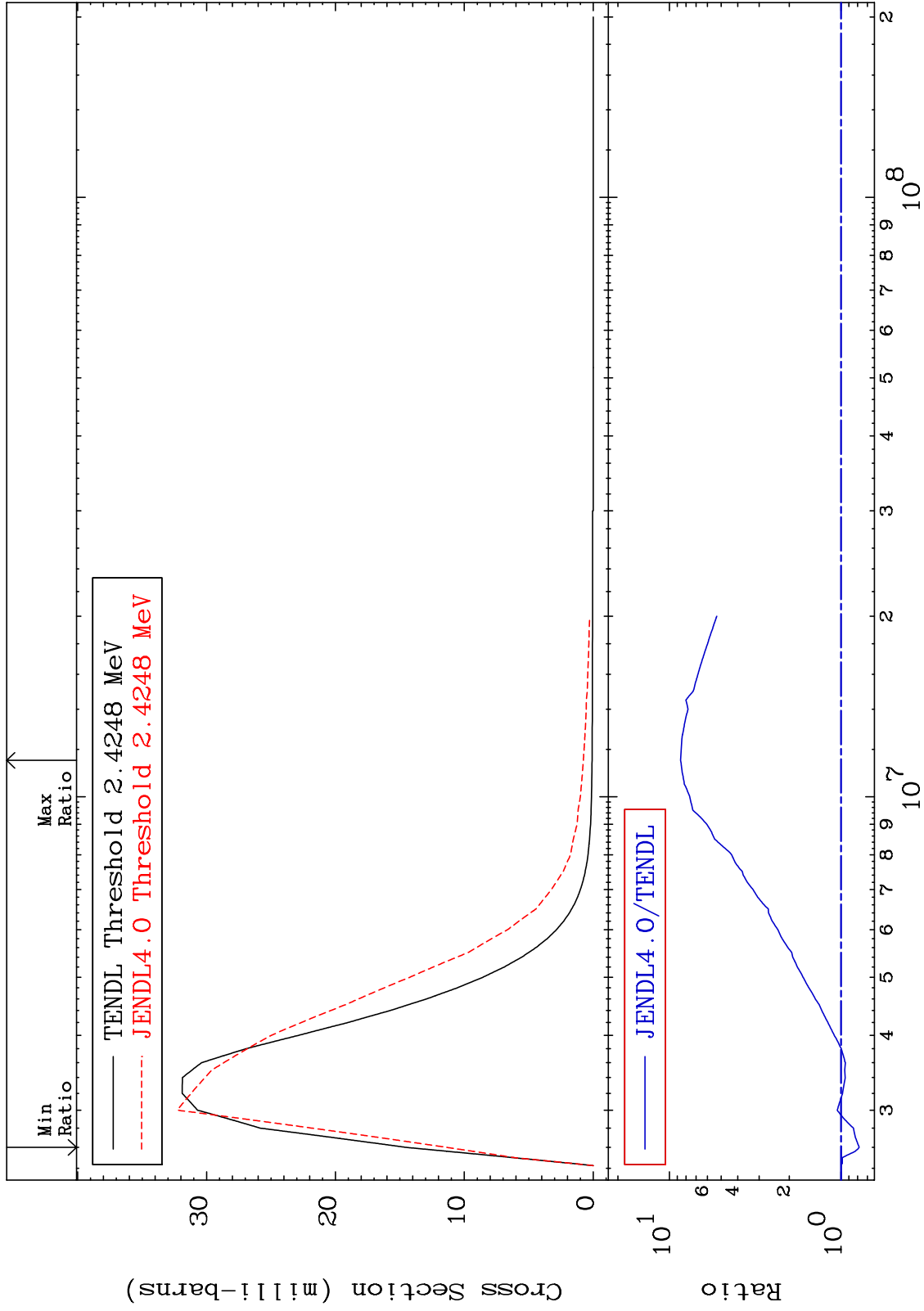
37-Rb-87
-42.75 To 708.8 %



MAT 3731

MT= 65 (n,n') Level
Cross Section

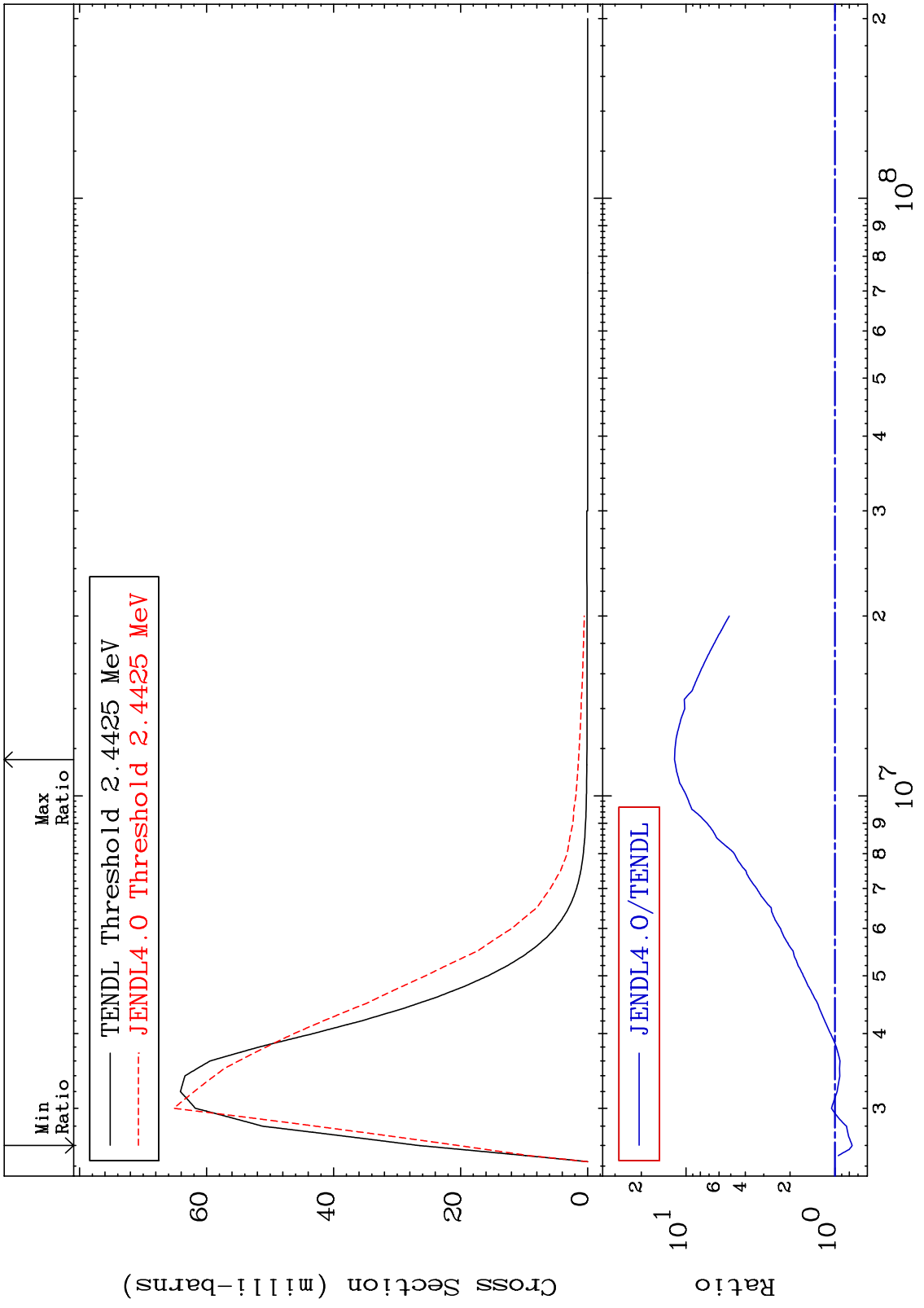
37-Rb-87
-21.72 To 760.7 %



MAT 3731

MT= 66 (n,n') Level
Cross Section

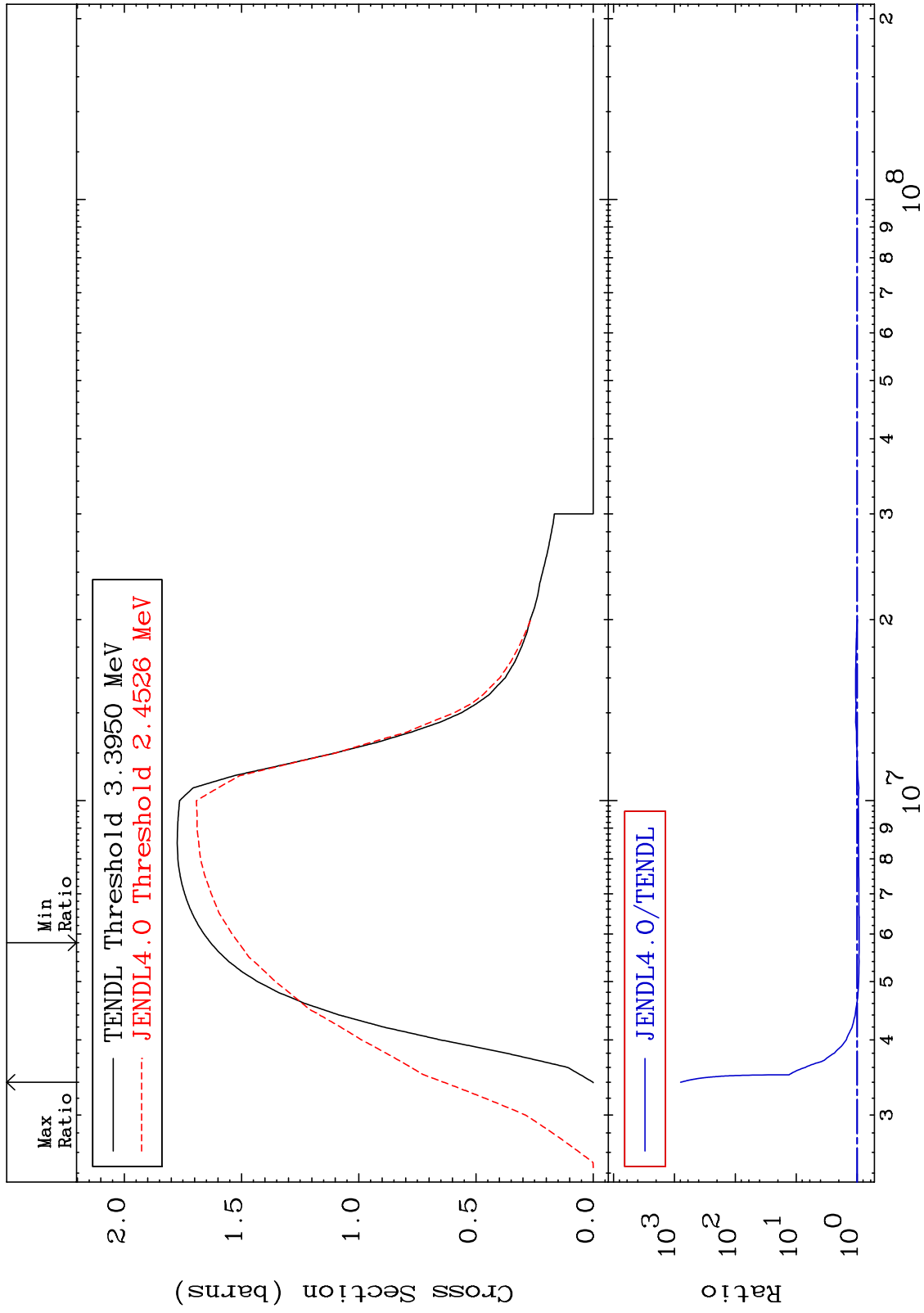
37-Rb-87
-23.49 To 1094. %



MAT 3731

(n, n') Continuum
Cross Section

37-Rb-87
-7.343 To 9999. %



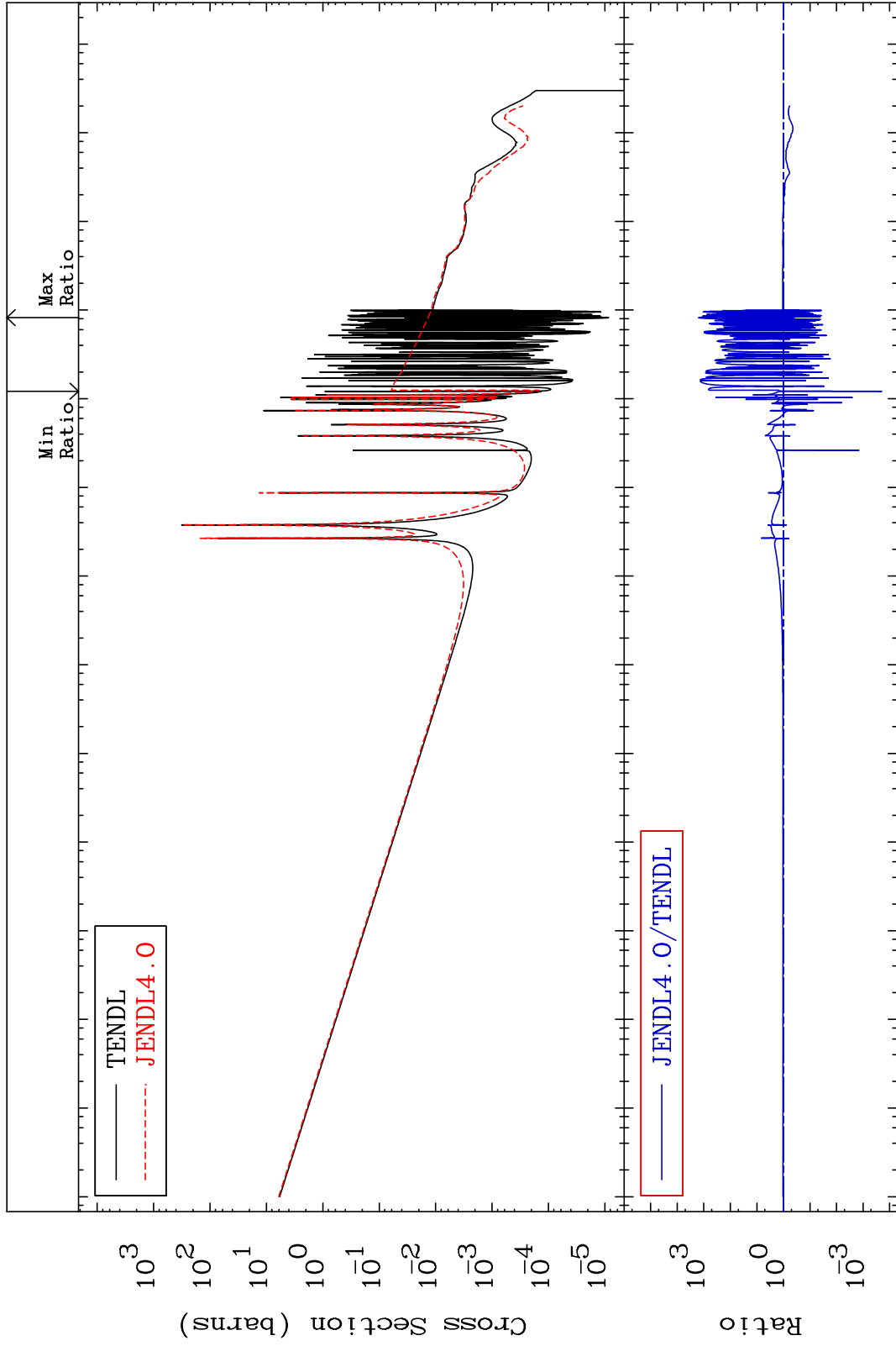
MAT 3731

(n, γ)

37-Rb-87

Cross Section

-99.98 To 9999. %



25

Incident Energy (eV)

37-Rb-87

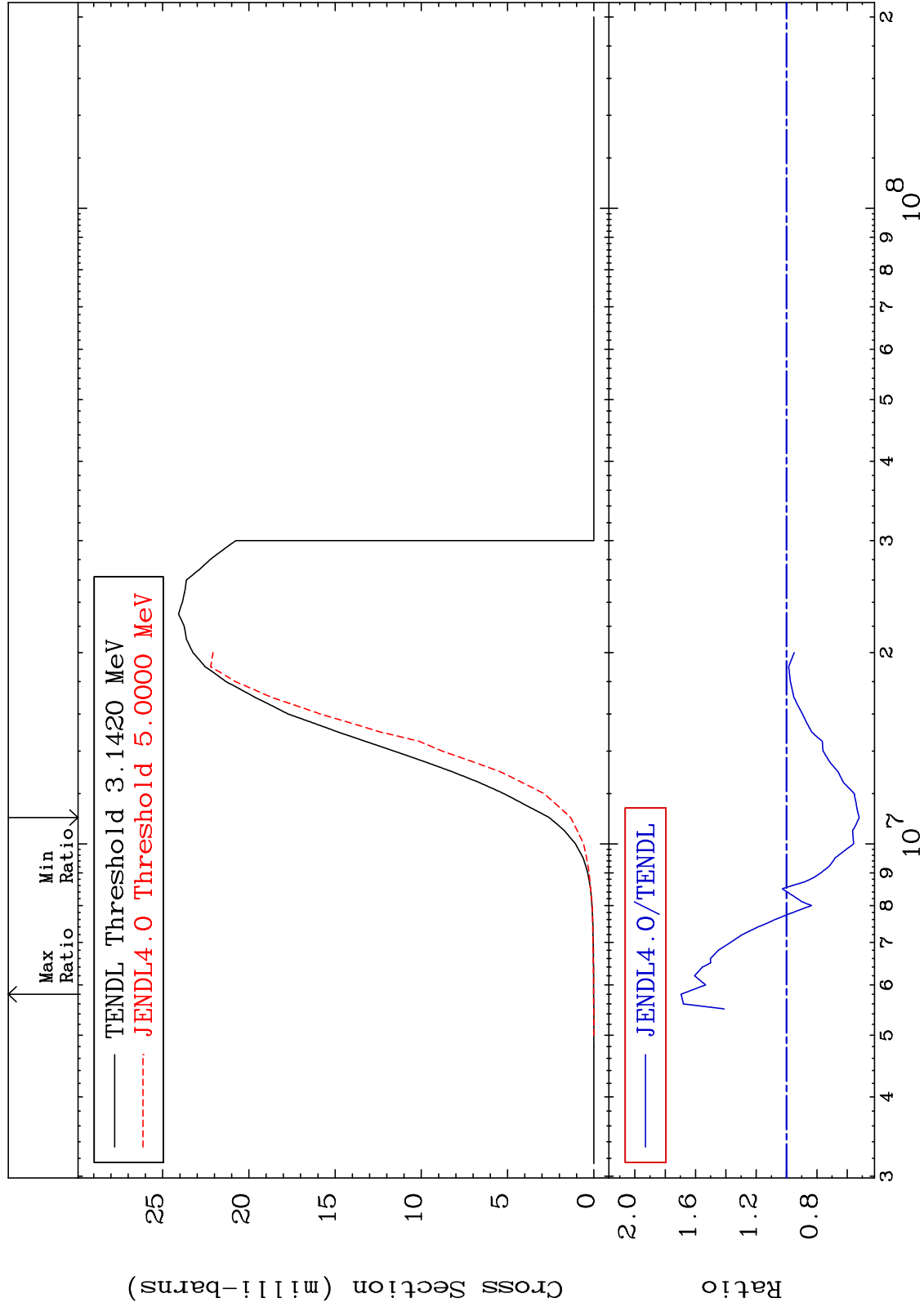
MAT 3731

(n,p)

37-Rb-87

Cross Section

-47.97 To 69.55 %



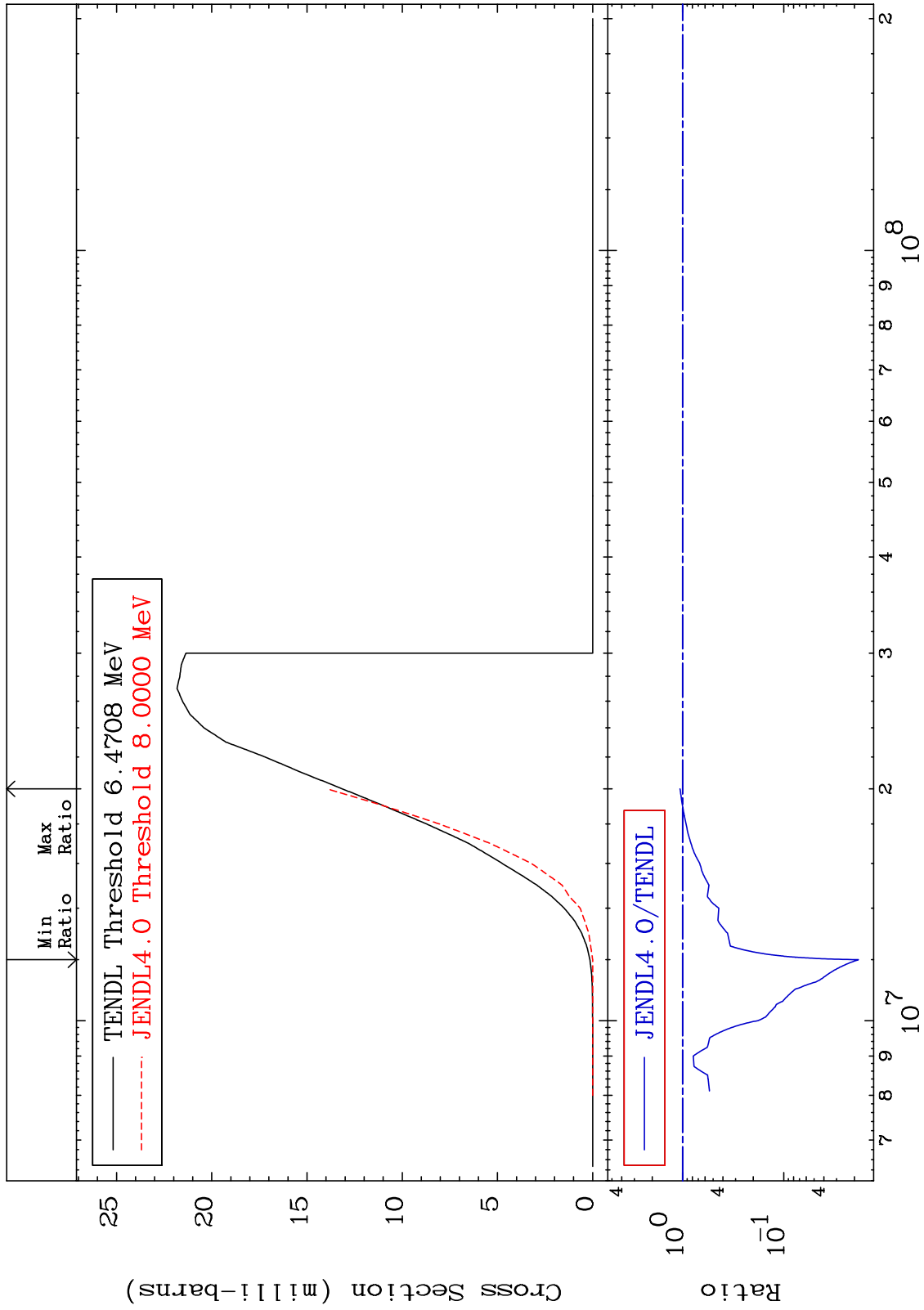
MAT 3731

(n, d)

37-Rb-87

Cross Section

-98.18 To 6.132 %



27

Incident Energy (eV)

37-Rb-87

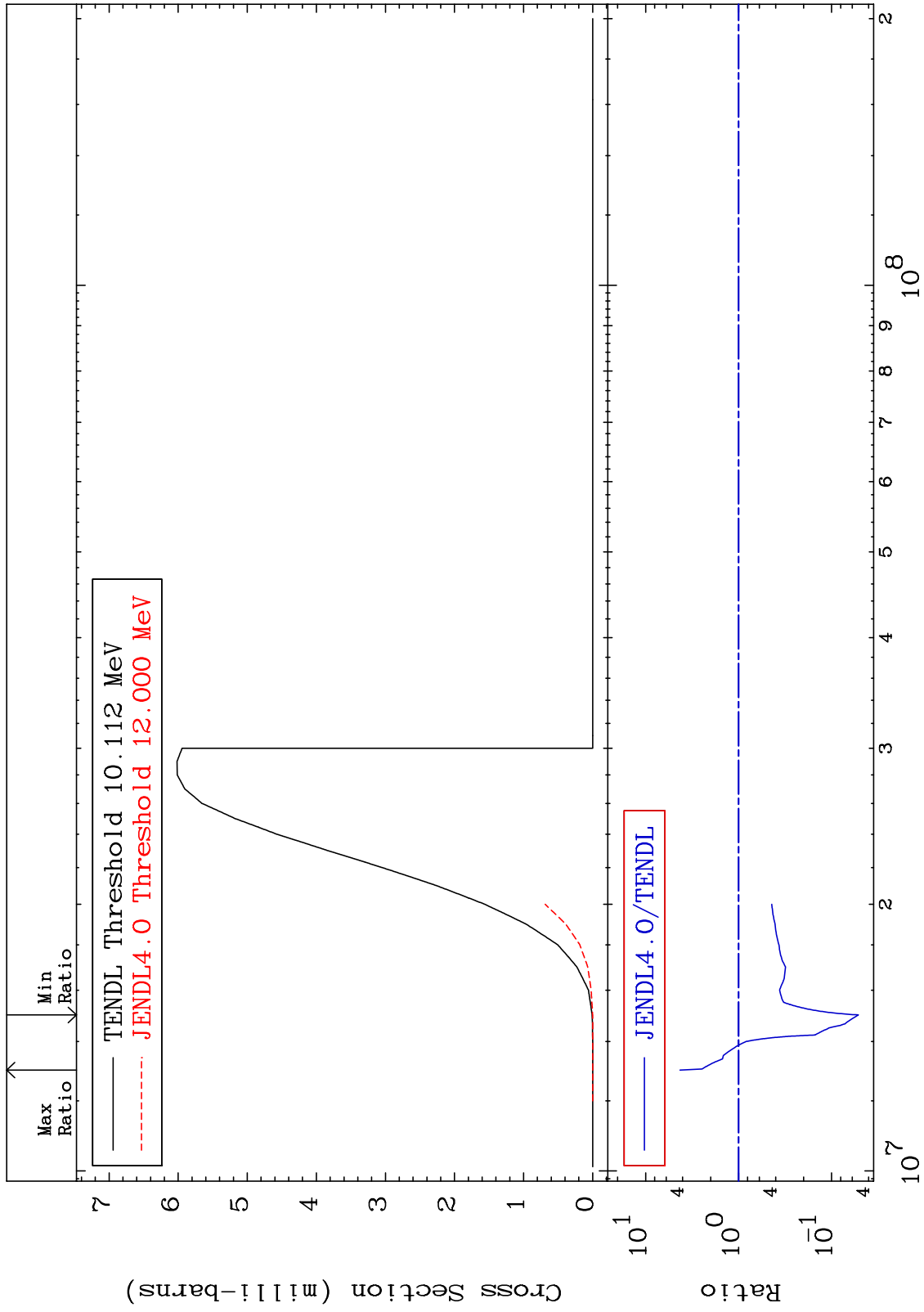
MAT 3731

(n, t)

37-Rb-87

Cross Section

-94.85 To 326.6 %



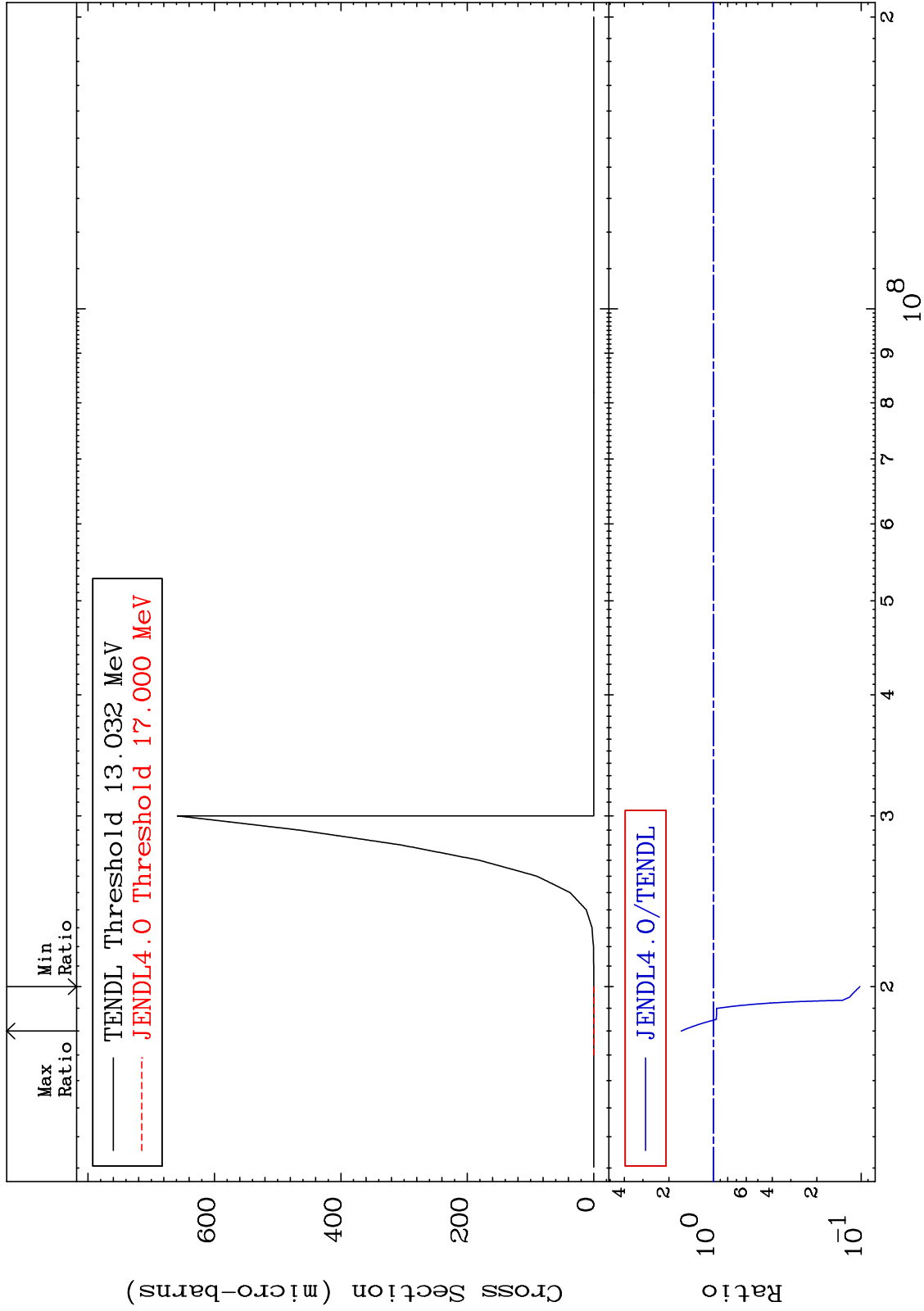
Incident Energy (eV)

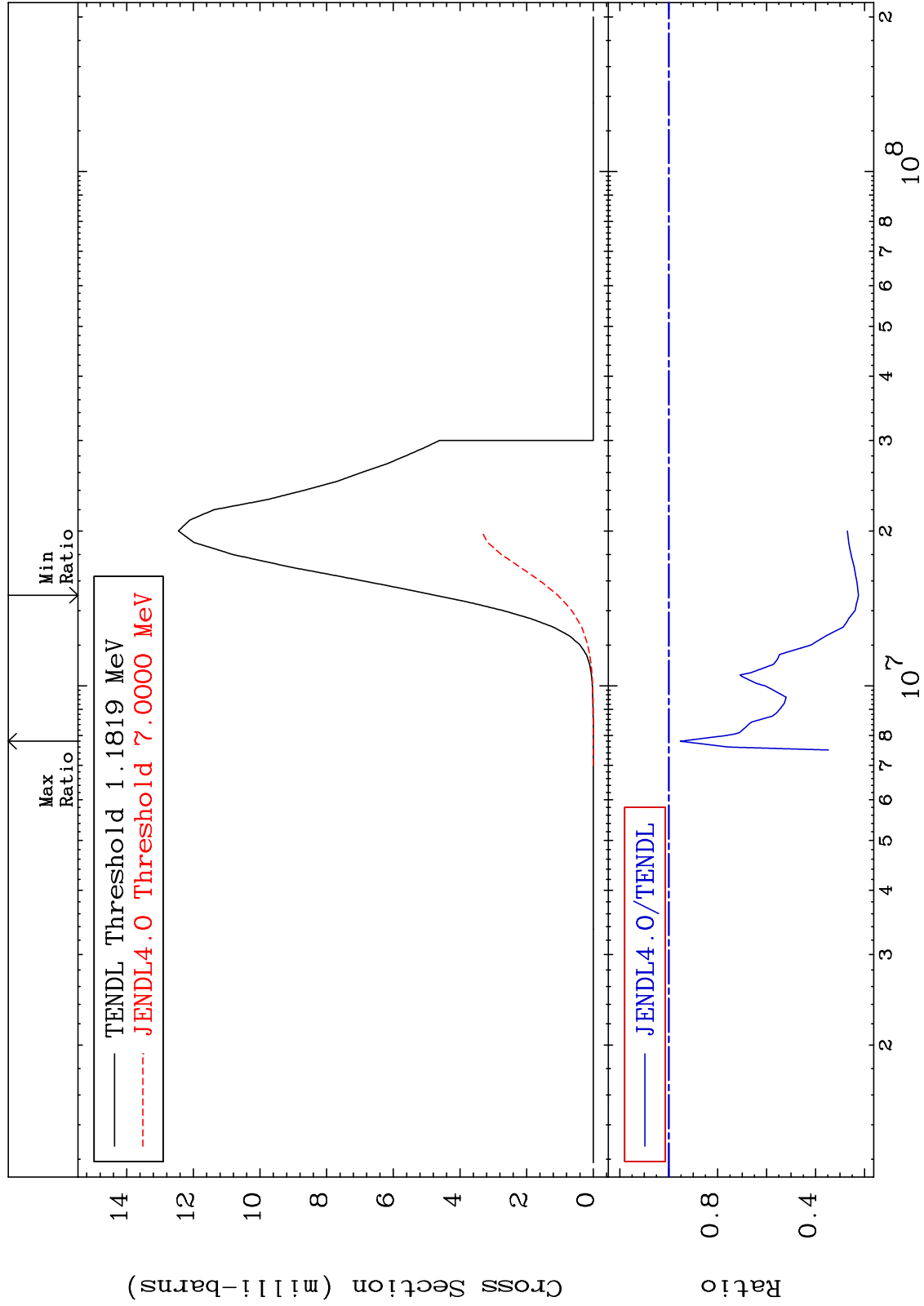
37-Rb-87

28

Cross Section

-89.79 To 65.18 %

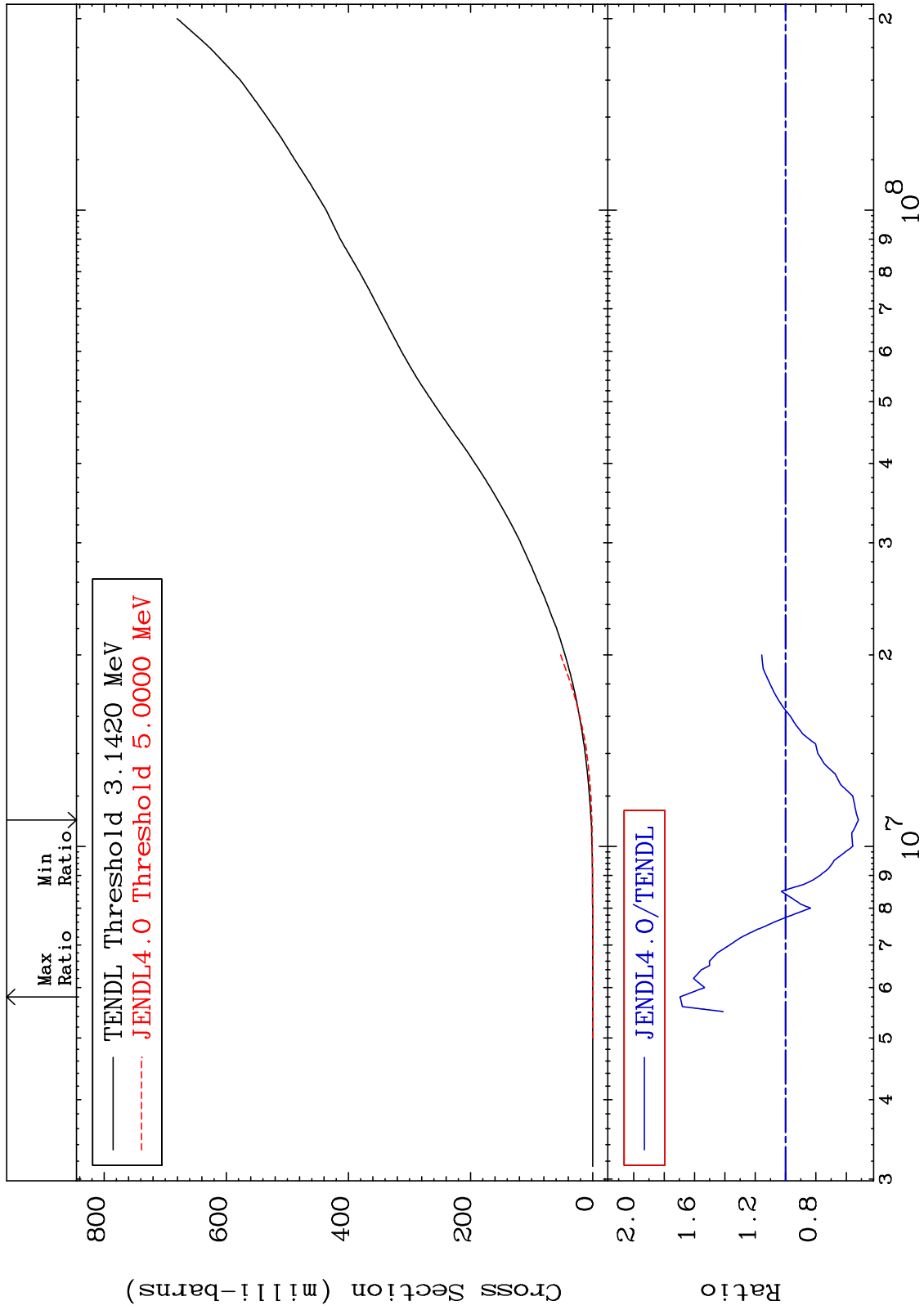




MAT 3731

Hydrogen Production
Cross Section

37-Rb-87
-47.98 To 69.55 %



31

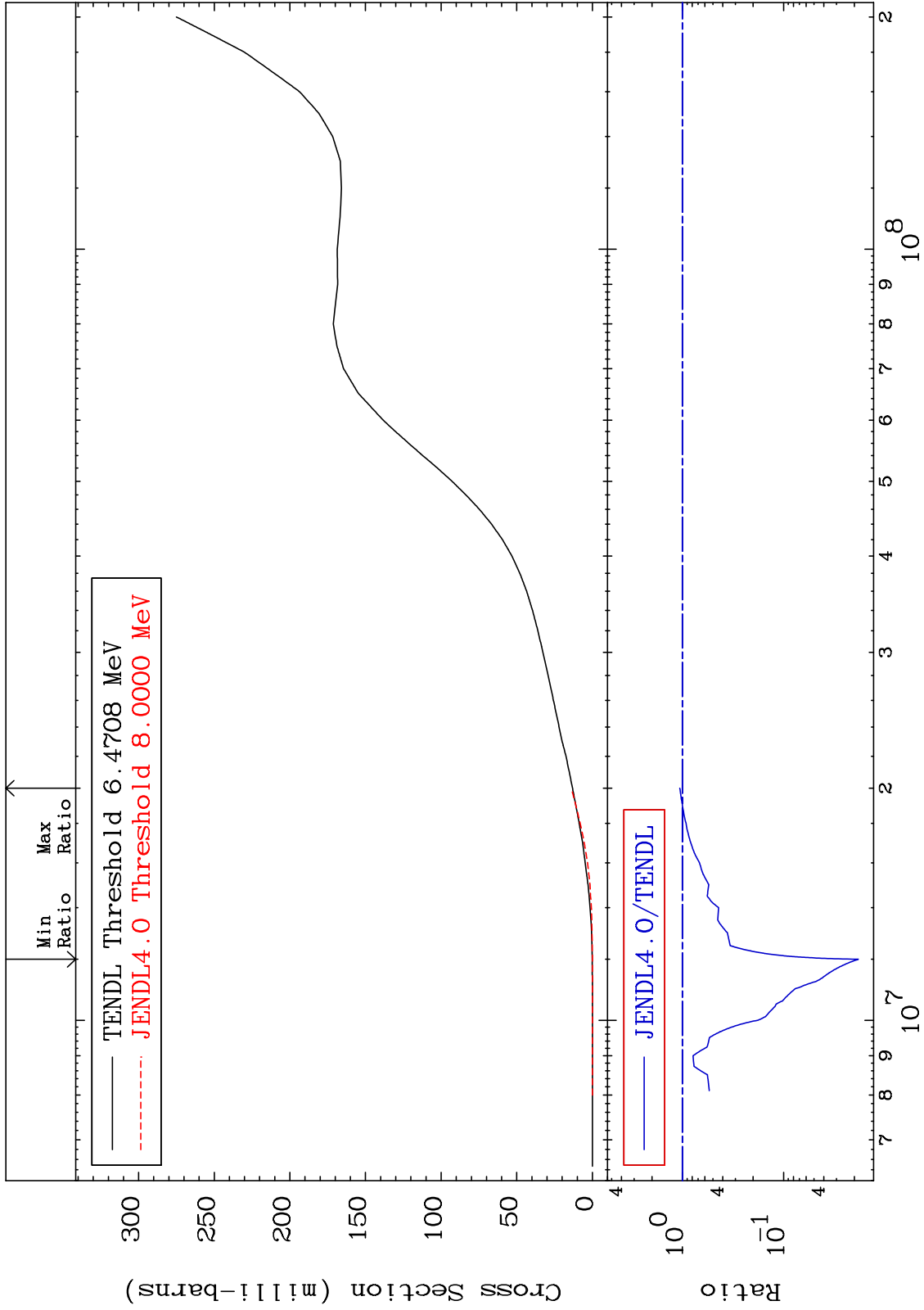
Incident Energy (eV)

37-Rb-87

MAT 3731

Deuterium Production
Cross Section

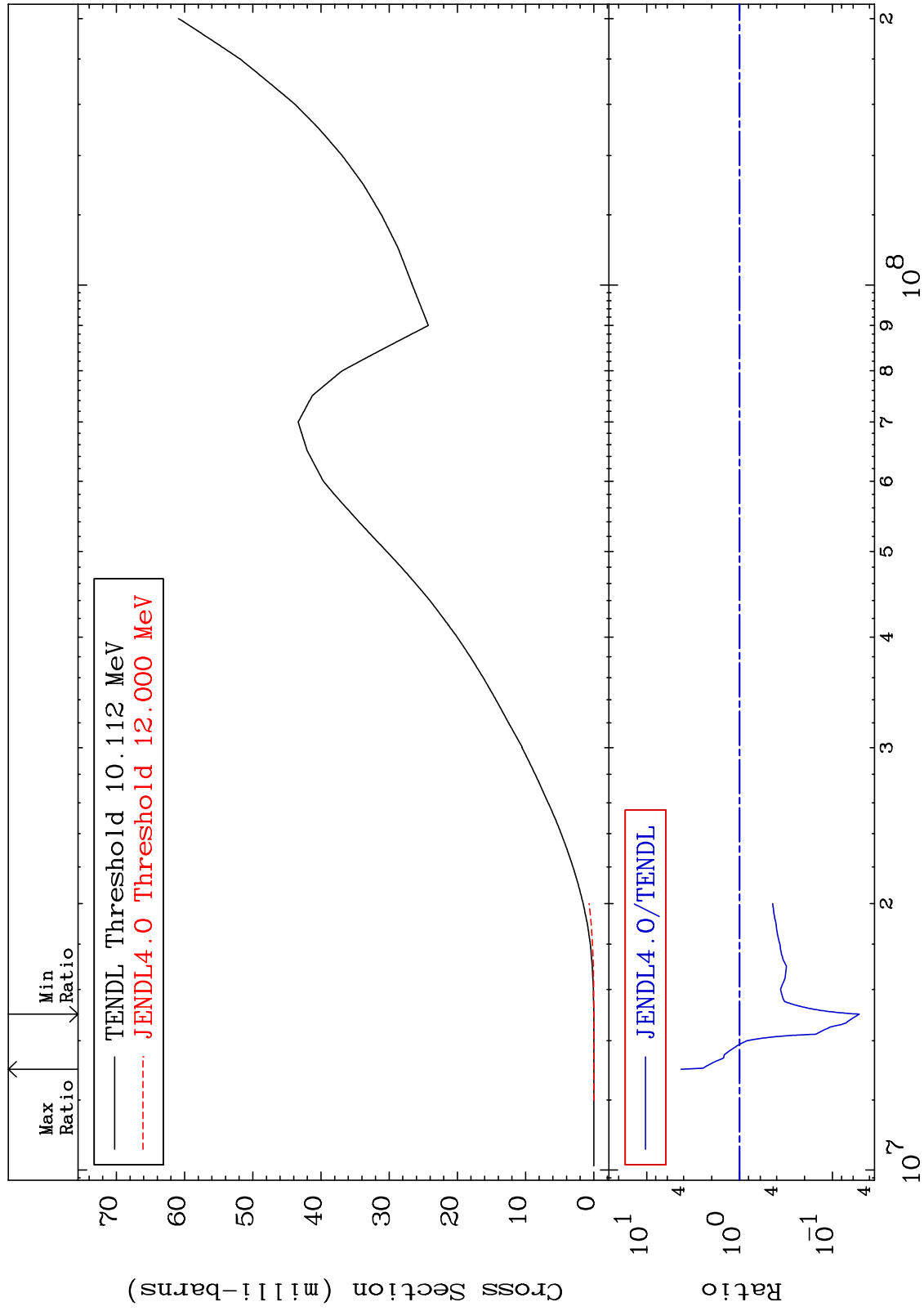
³⁷Rb-87
-98.18 To 6.169 %



MAT 3731

Tritium Production
Cross Section

³⁷Rb-87
-94.85 To 326.6 %



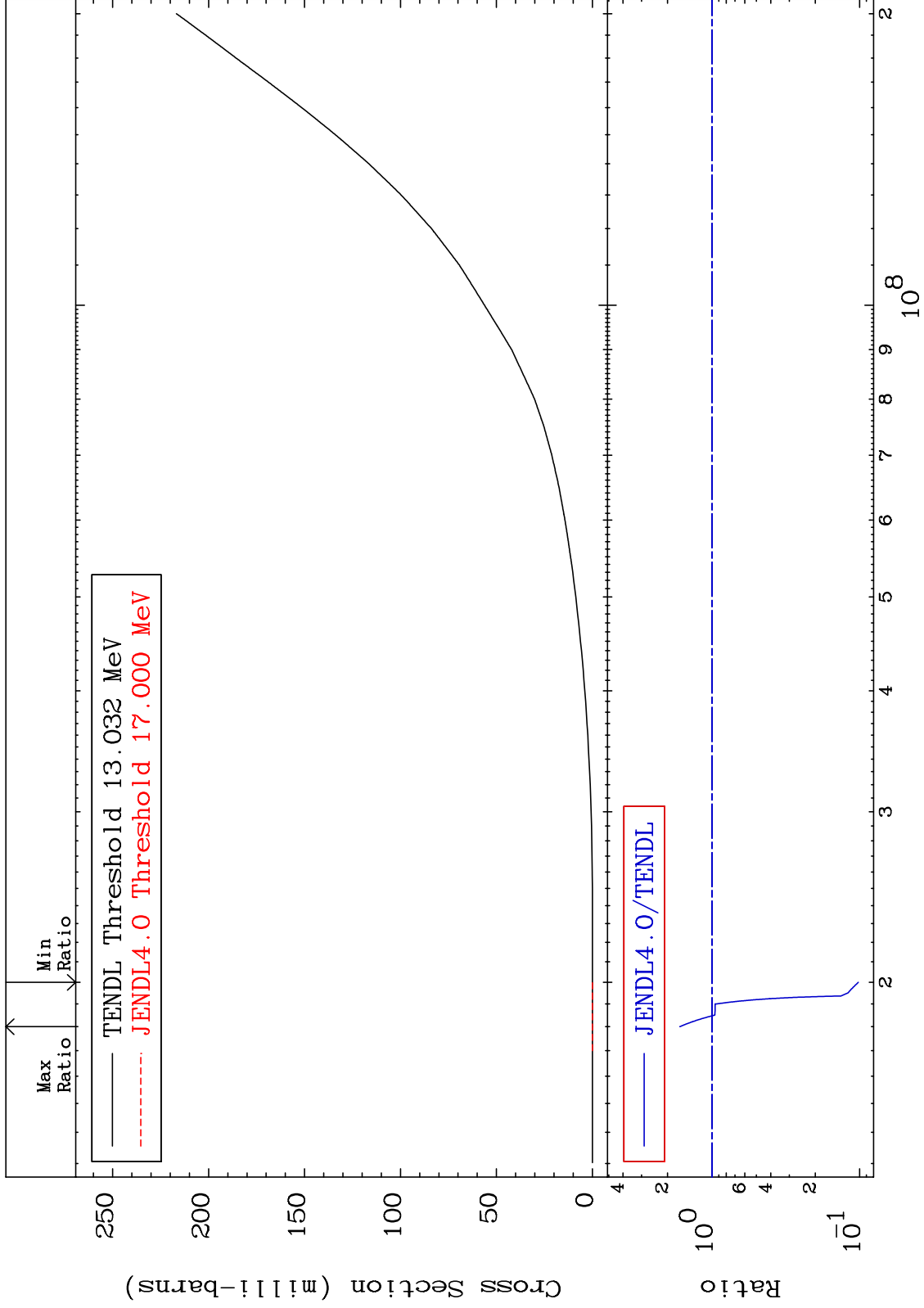
33

³⁷Rb-87

MAT 3731

He-3 Production
Cross Section

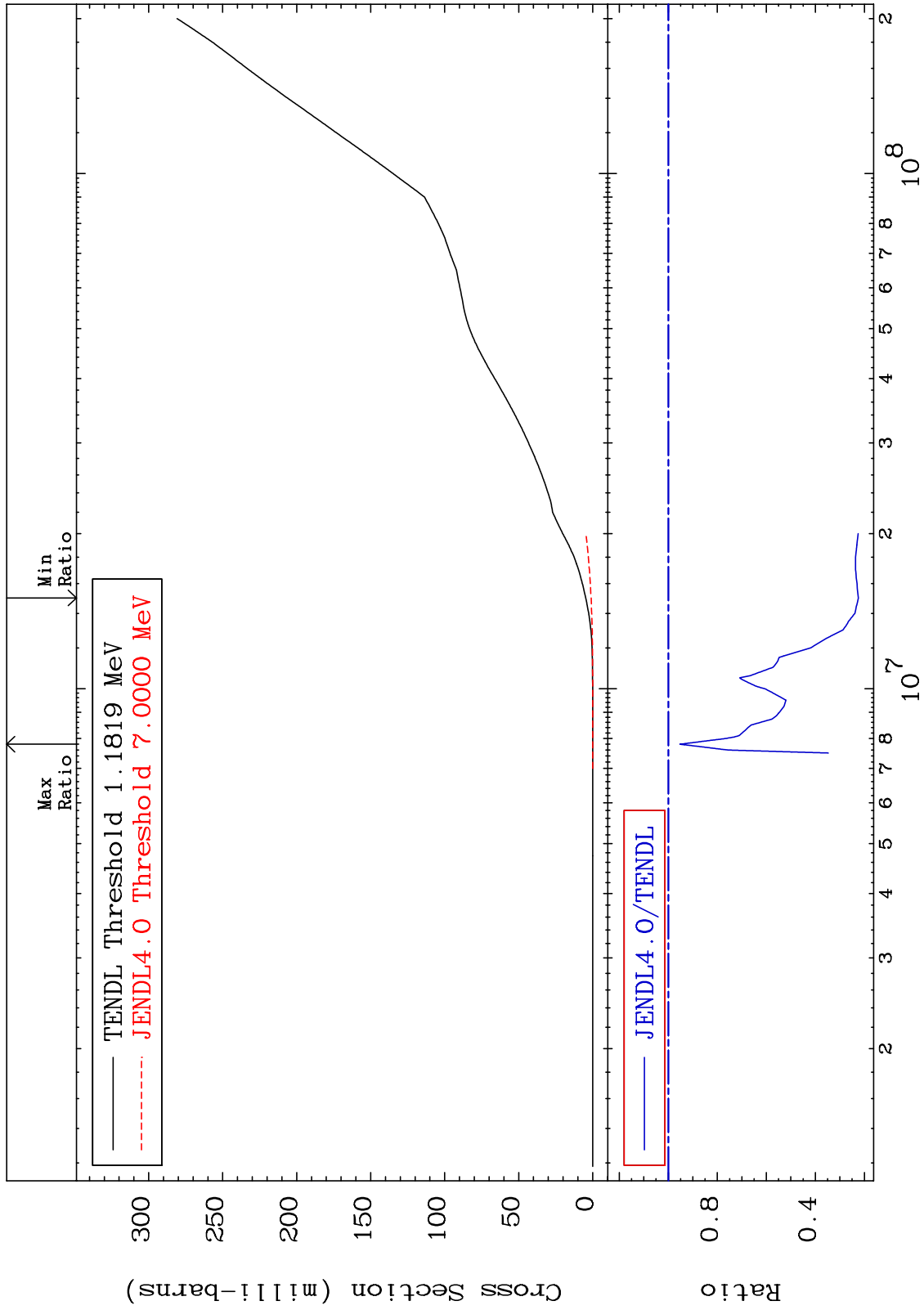
37-Rb-87
-89.79 To 65.18 %



MAT 3731

He-4 Production
Cross Section

37-Rb-87
-77.57 To -4.774%



35

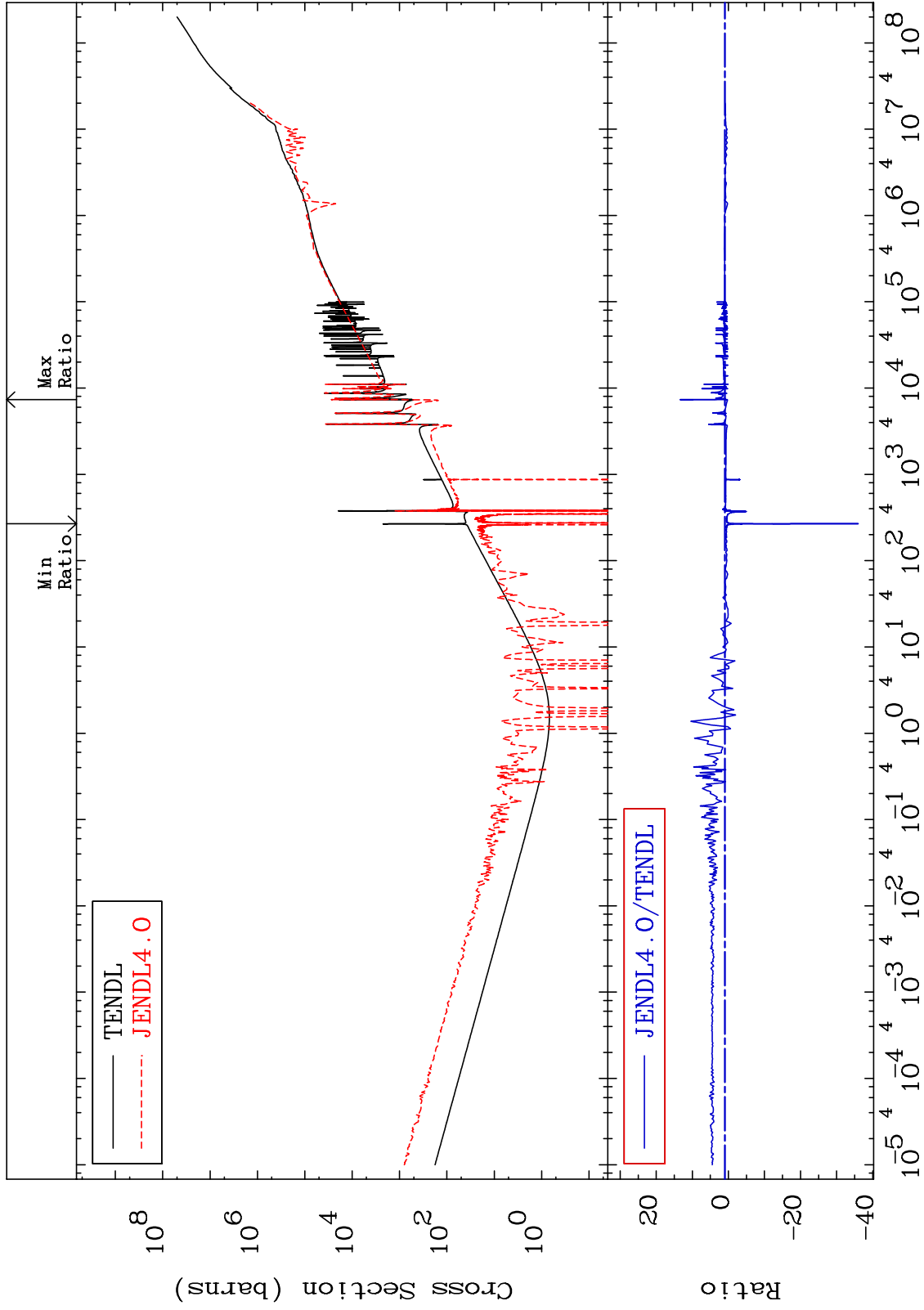
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma total (eV-barns)
Cross Section

37-Rb-87
-3704. To 1241. %



36

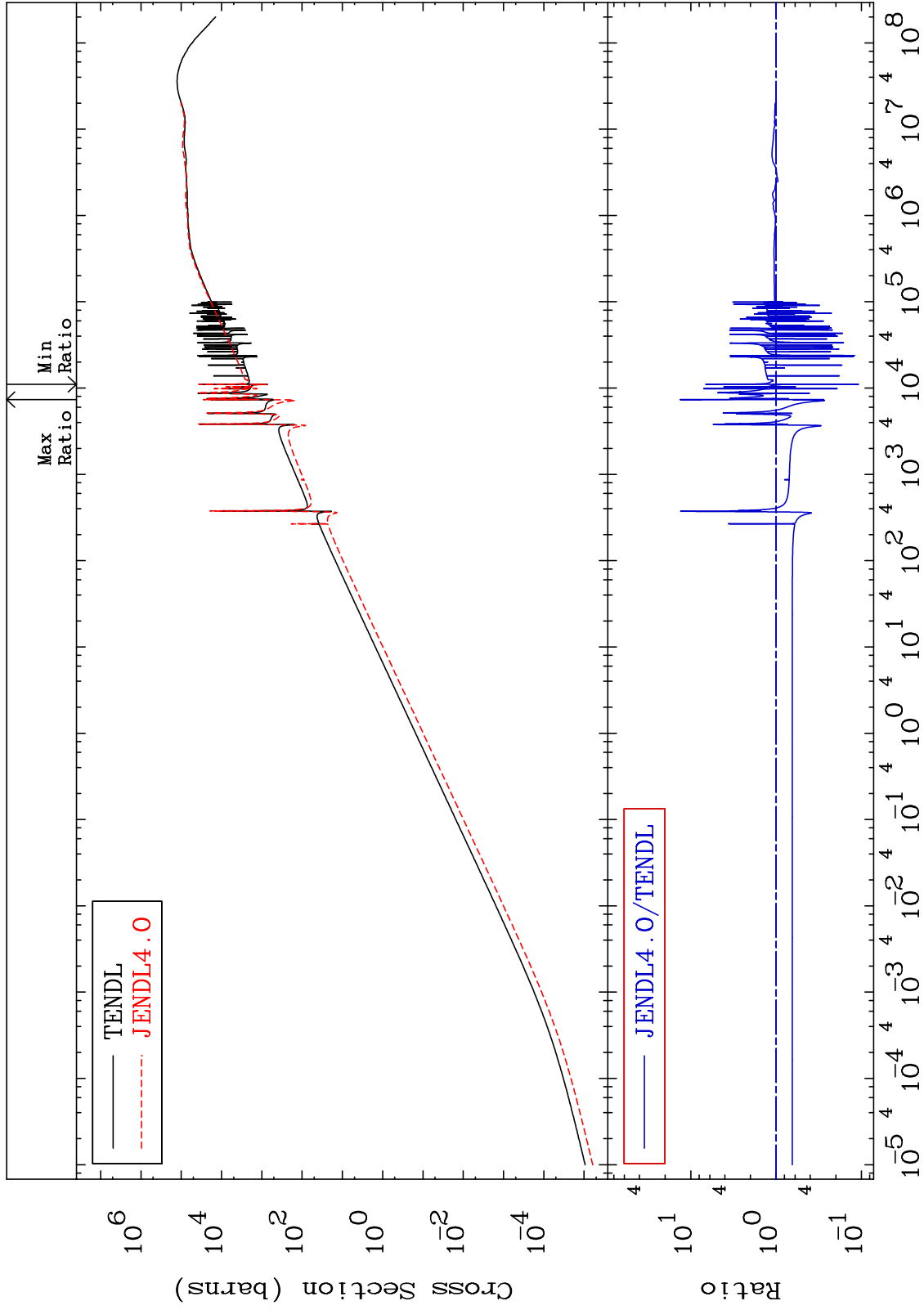
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma elastic
Cross Section

37-Rb-87
-89.13 To 1239. %



37

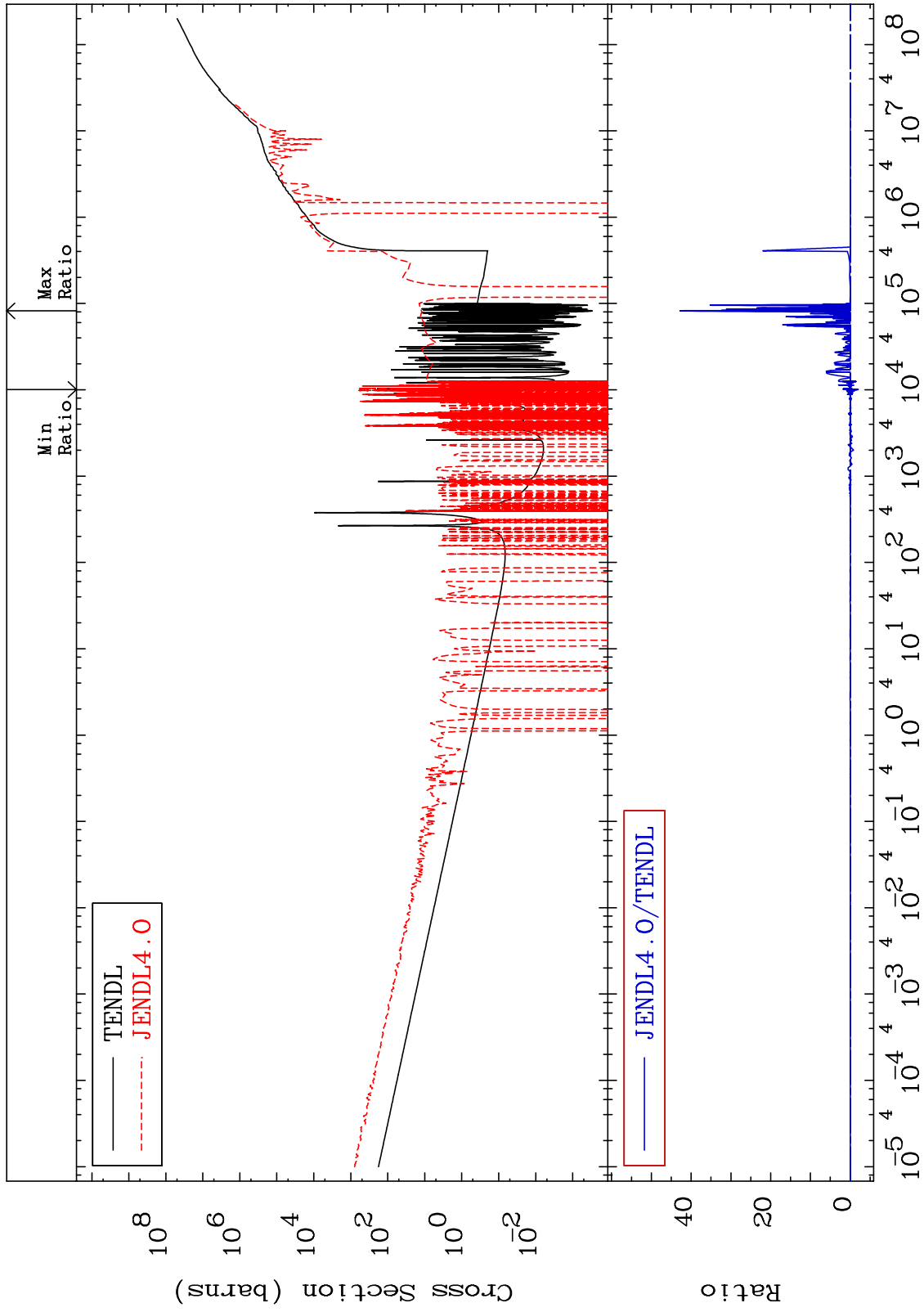
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma non-elastic (all but mt2)
Cross Section

37-Rb-87
-9999. To 9999. %



38

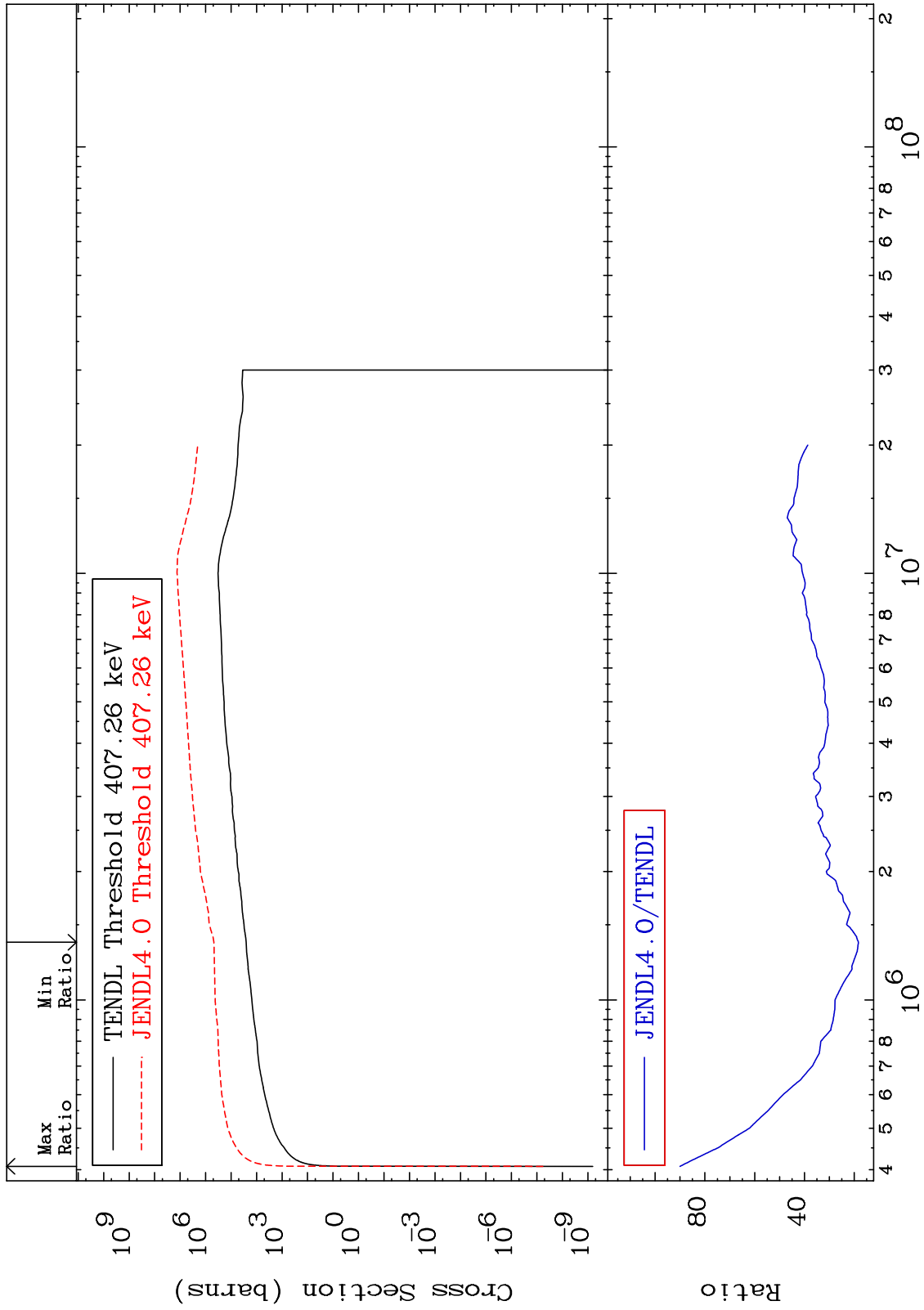
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma inelastic (mt51-91)
Cross Section

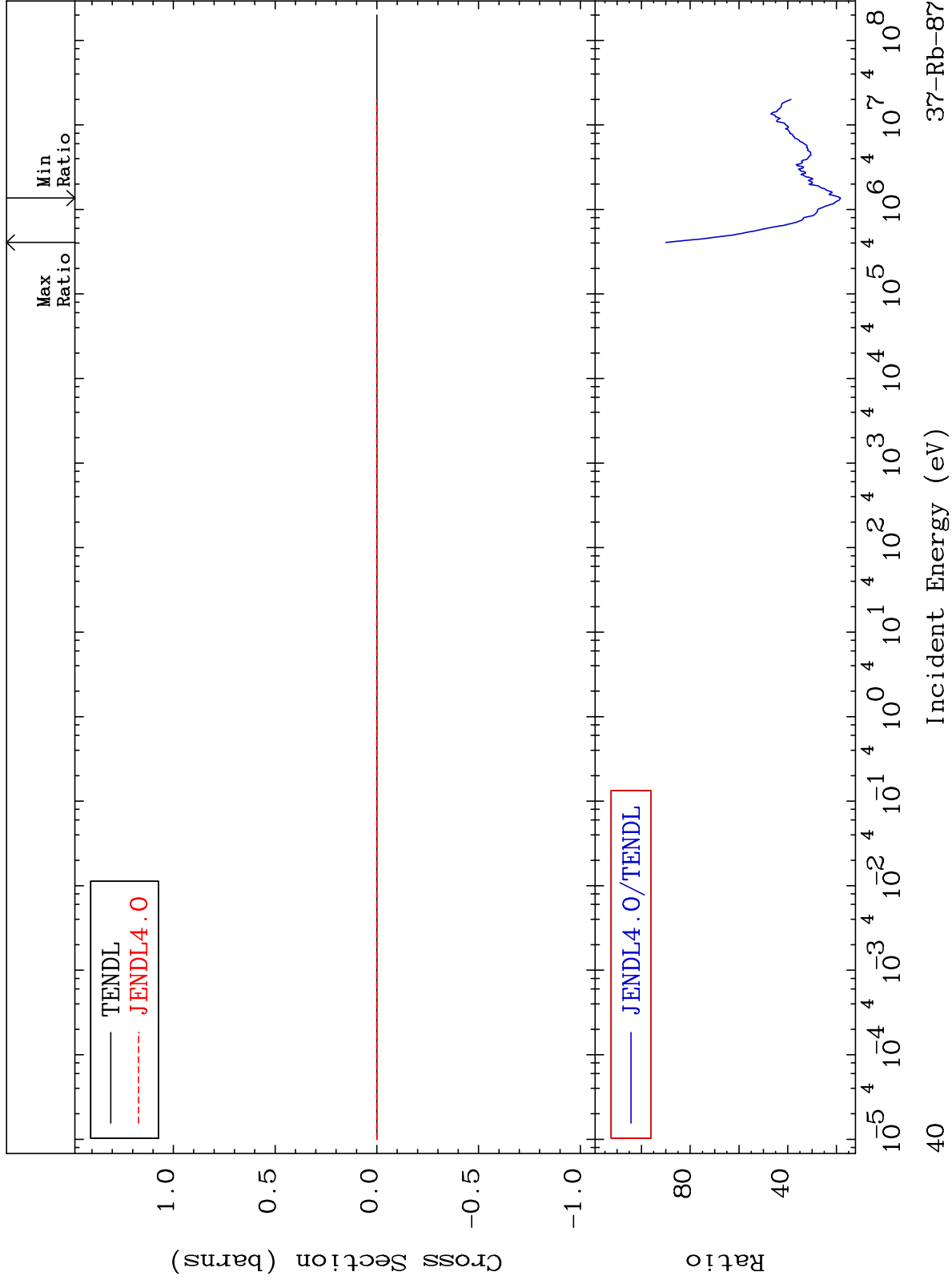
37-Rb-87
1732. To 8901. %



MAT 3731

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

37-Rb-87
1732. To 8901. %



37-Rb-87

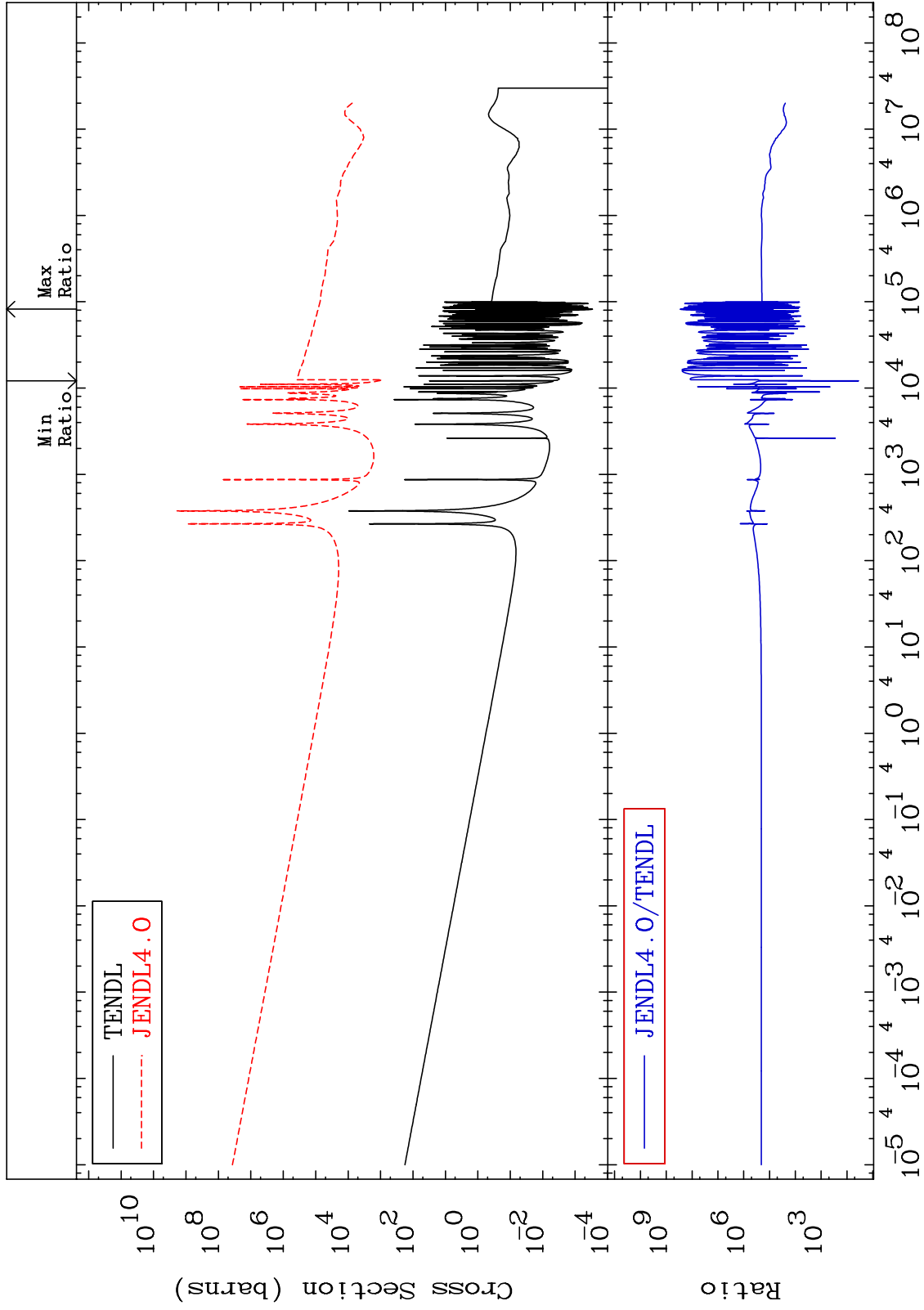
Incident Energy (eV)

40

MAT 3731

Kerma capture (mt102)
Cross Section

37-Rb-87
3498. To 9999. %



41

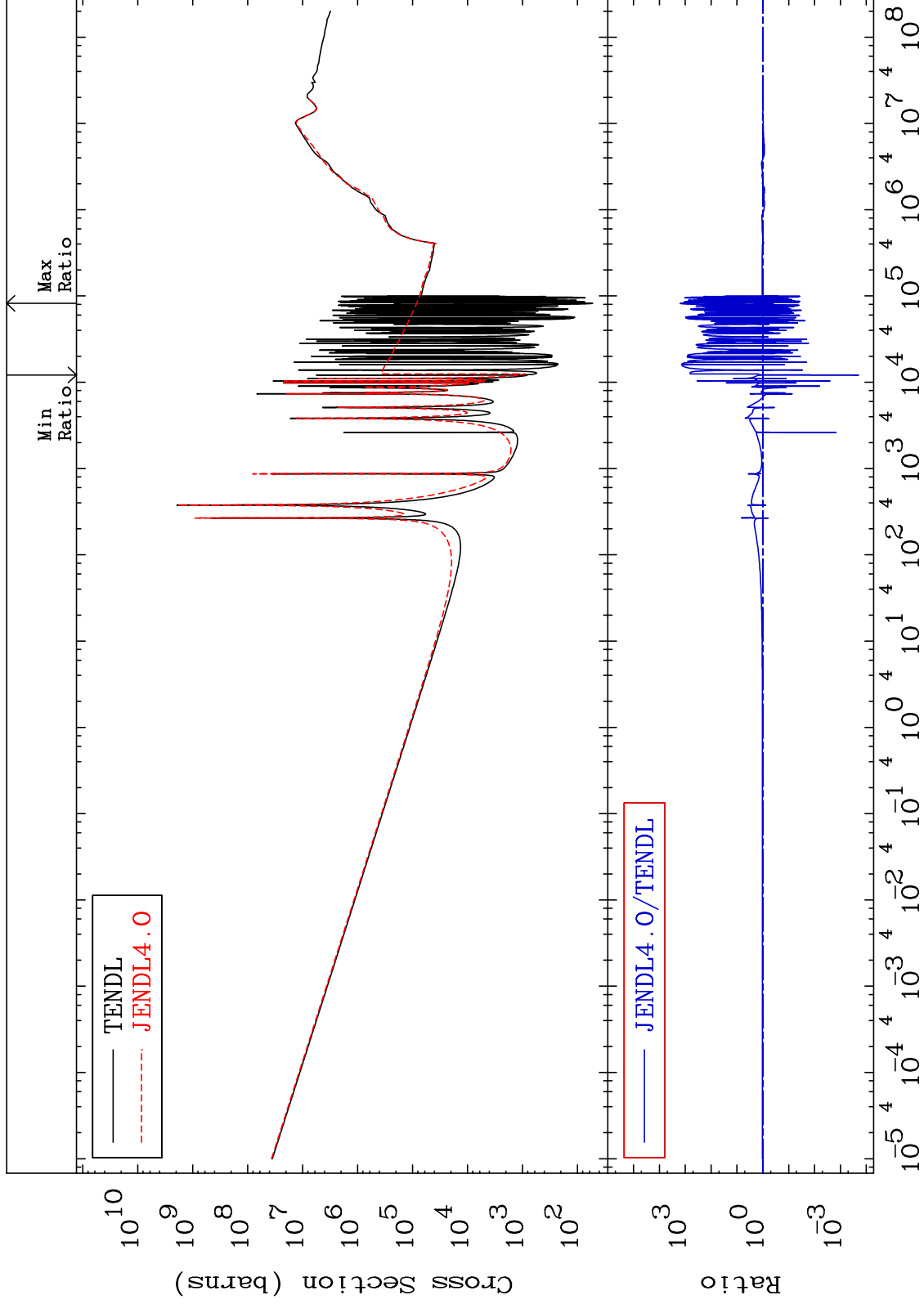
Incident Energy (eV)

37-Rb-87

MAT 3731

Total photon (eV-barns)
Cross Section

37-Rb-87
-99.98 To 9999. %



42

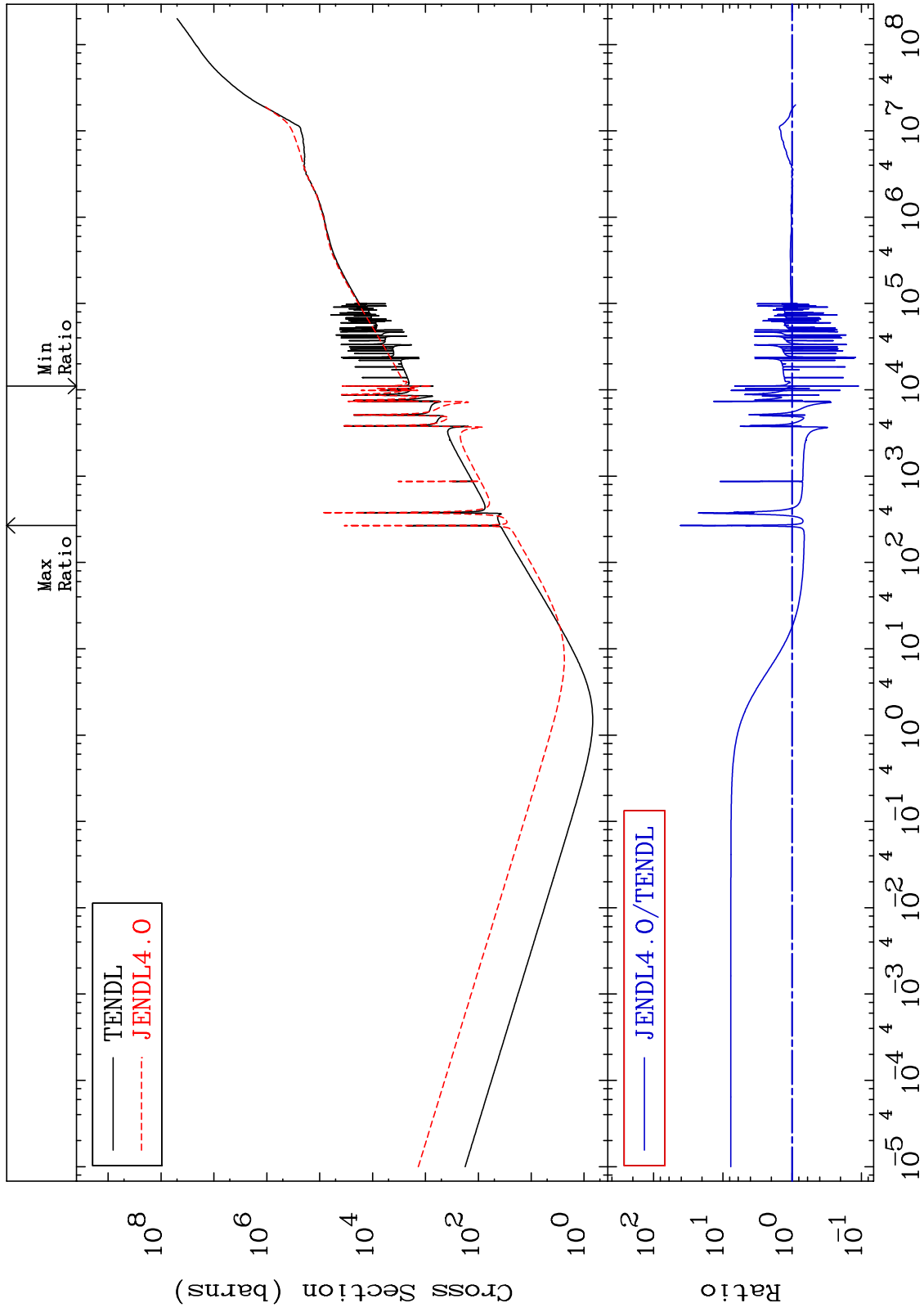
Incident Energy (eV)

37-Rb-87

MAT 3731

Total kinematic kerma (high limit)
Cross Section

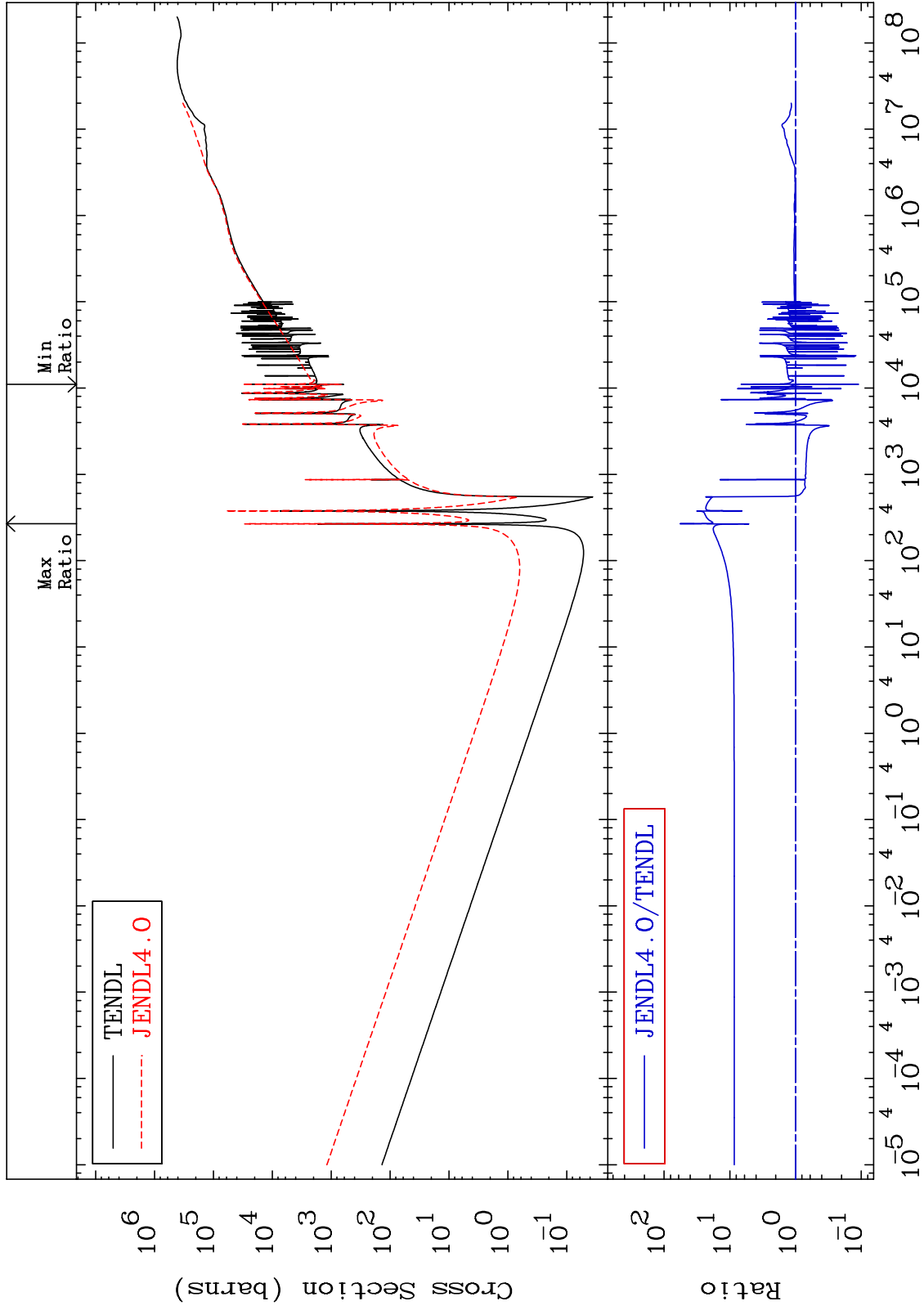
37-Rb-87
-88.94 To 4058. %



MAT 3731

Dpa total (eV-barns)
Cross Section

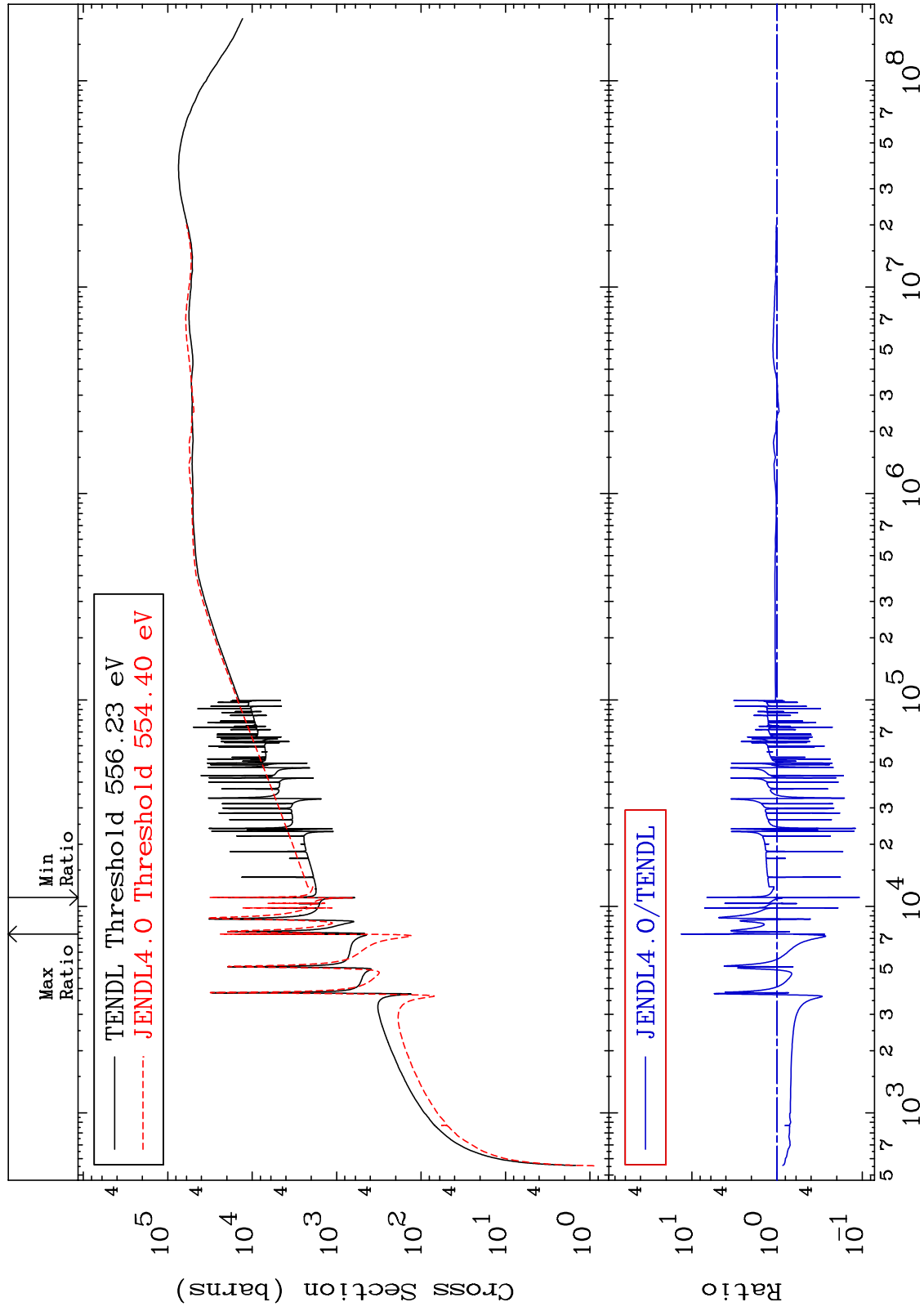
37-Rb-87
-88.94 To 5632. %



MAT 3731

Dpa elastic (mt2)
Cross Section

37-Rb-87
-89.13 To 1239. %



45

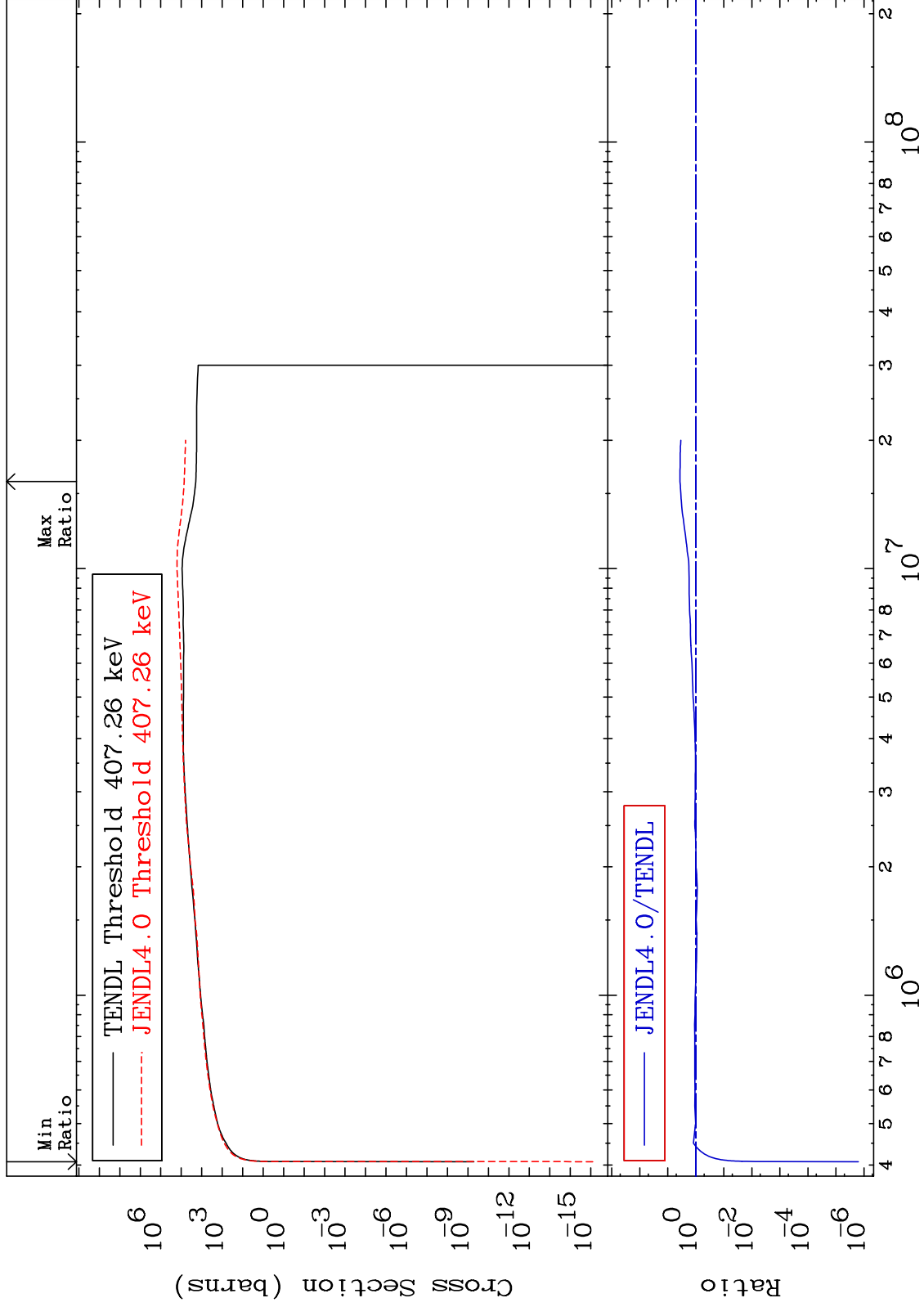
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa inelastic (mt51-91)
Cross Section

37-Rb-87
-100.0 To 266.7 %



46

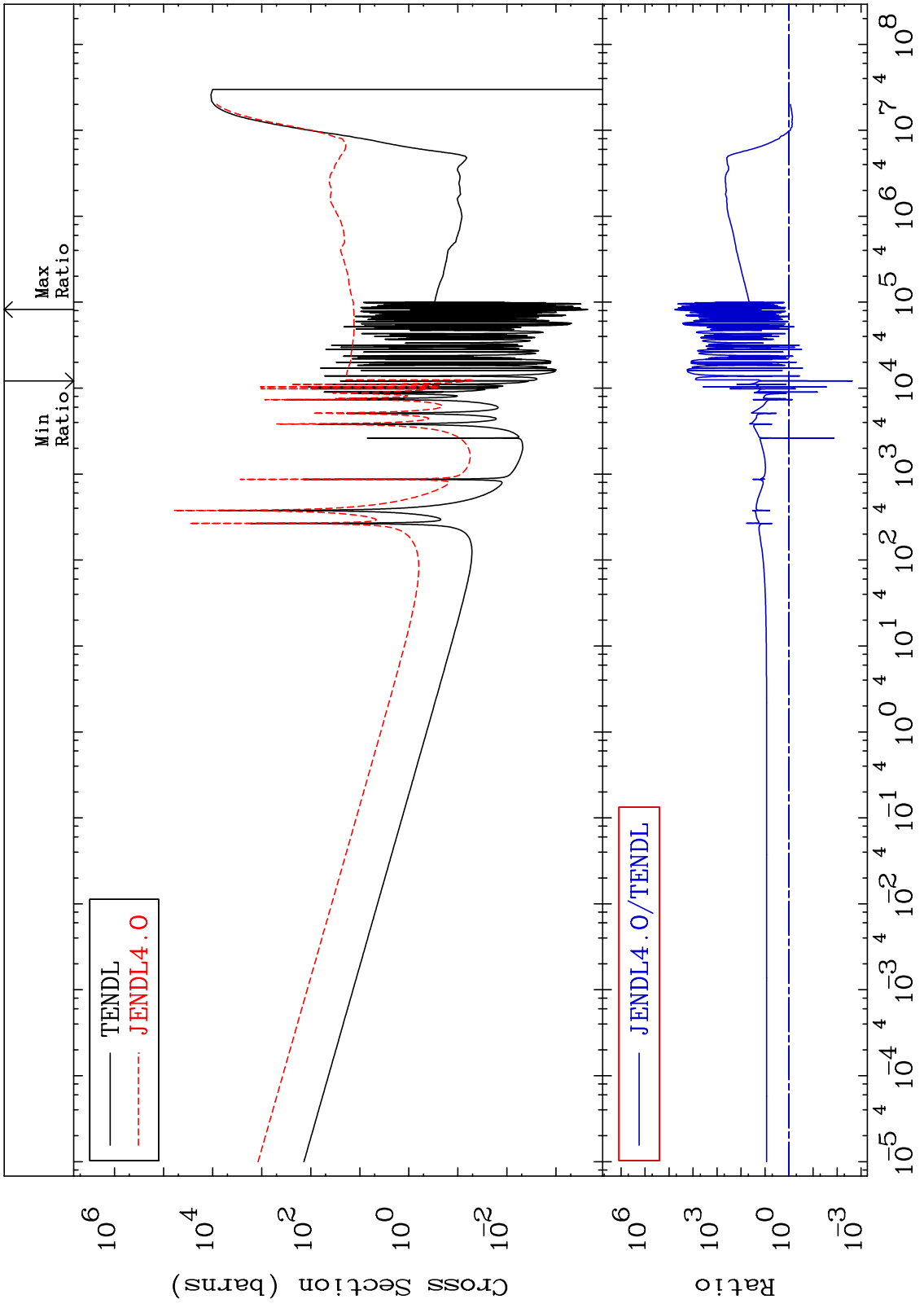
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa disappearance (mt102 -120)
Cross Section

37-Rb-87
-99.77 To 9999. %



47

Incident Energy (eV)

37-Rb-87

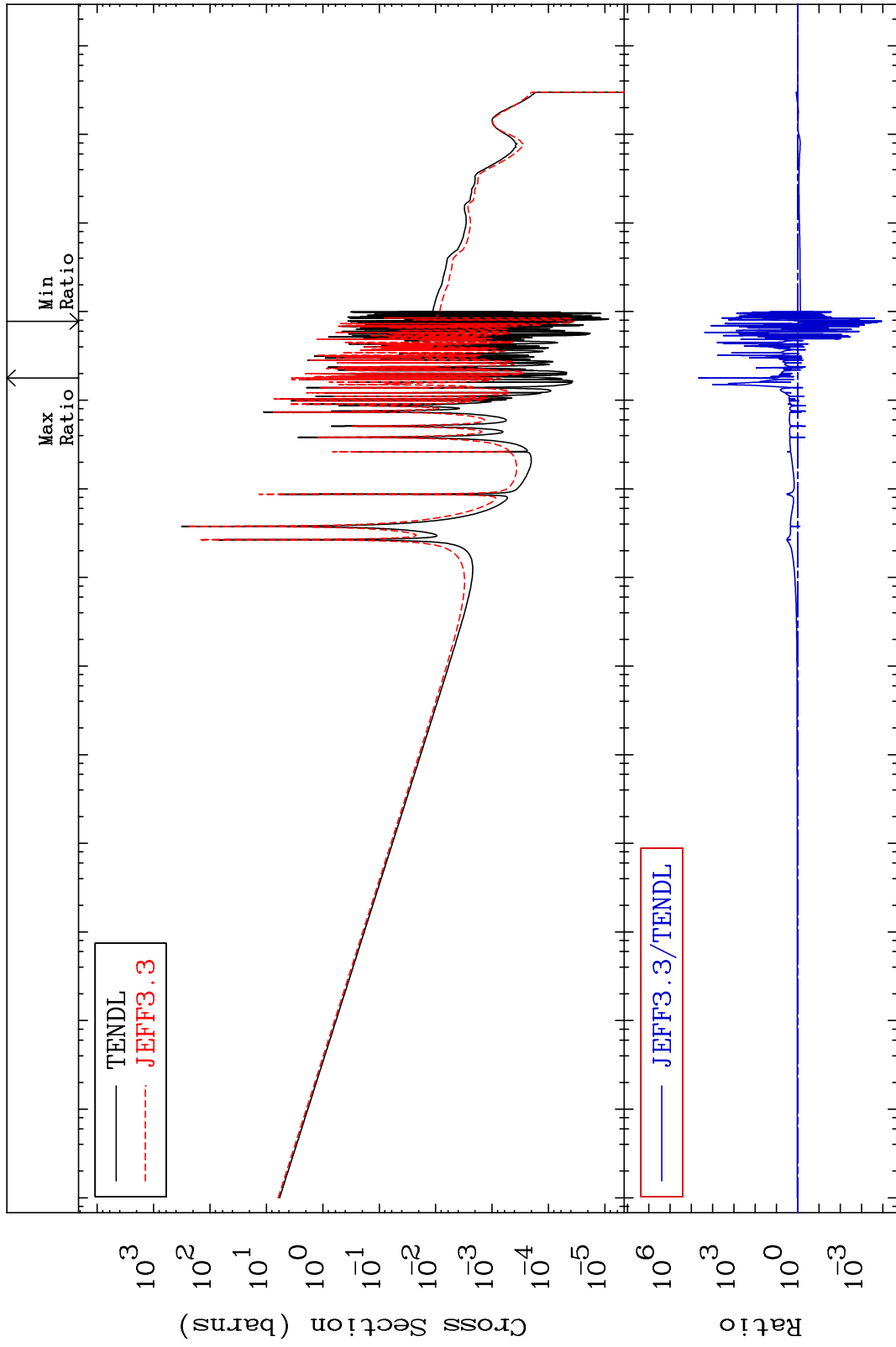
MAT 3731

(n, γ)

37-Rb-87

Cross Section

-99.99 To 9999. %



Incident Energy (eV)

48

37-Rb-87

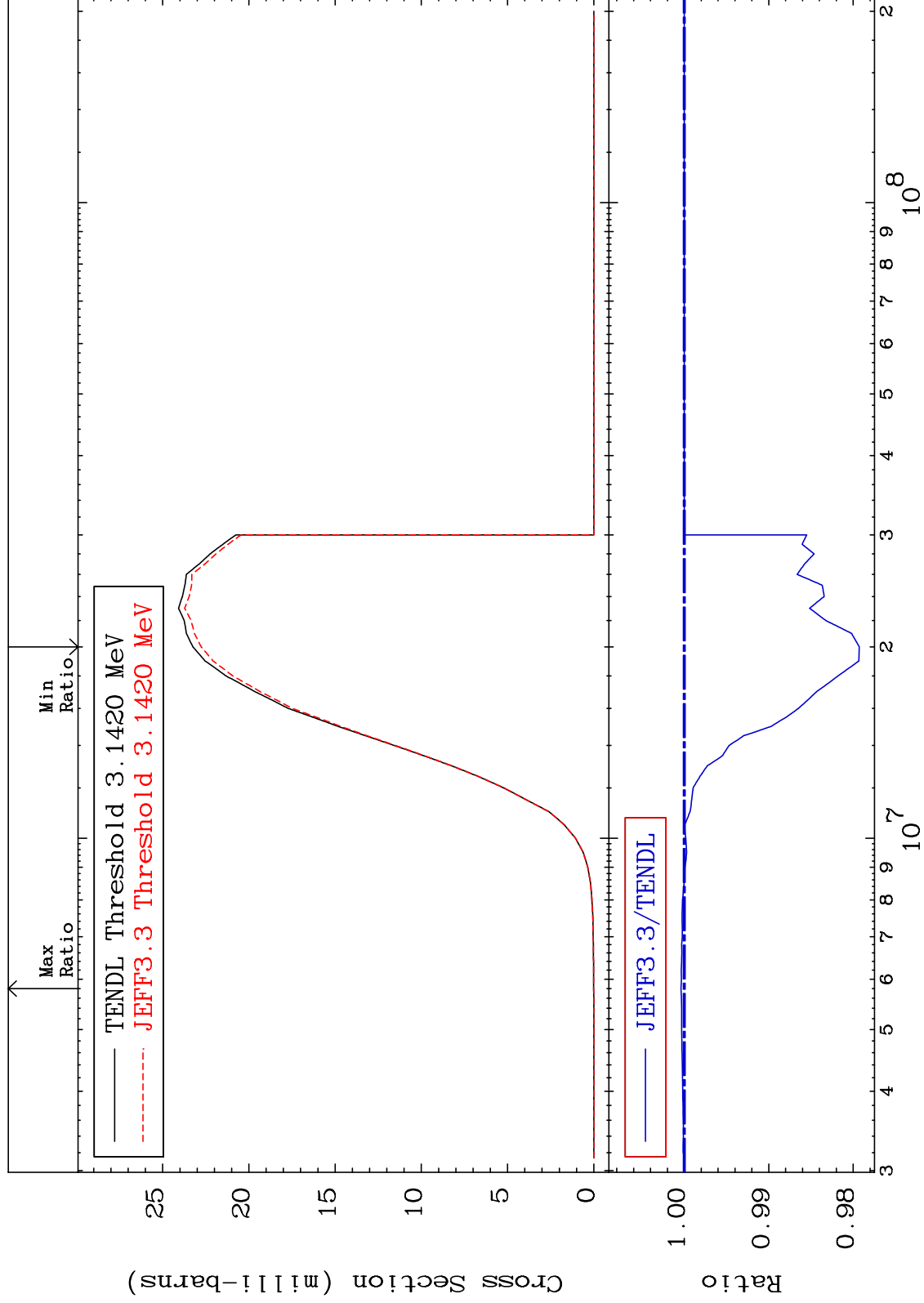
MAT 3731

(n, p)

³⁷Rb-87

Cross Section

-2.072 To 0.039 %



49

Incident Energy (eV)

³⁷Rb-87

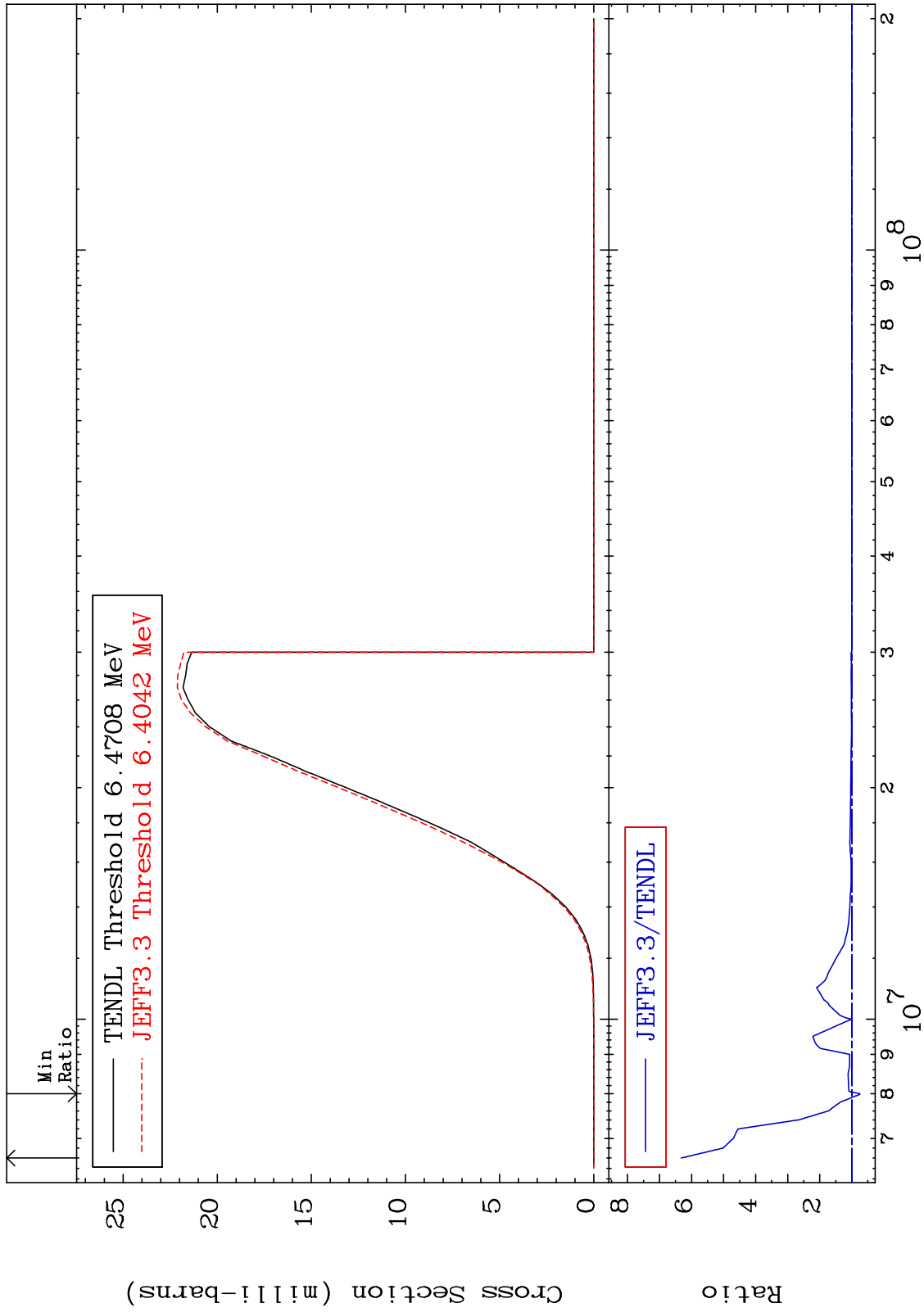
MAT 3731

(n, d)

37-Rb-87

Cross Section

-25.36 To 532.2 %



50

Incident Energy (eV)

37-Rb-87

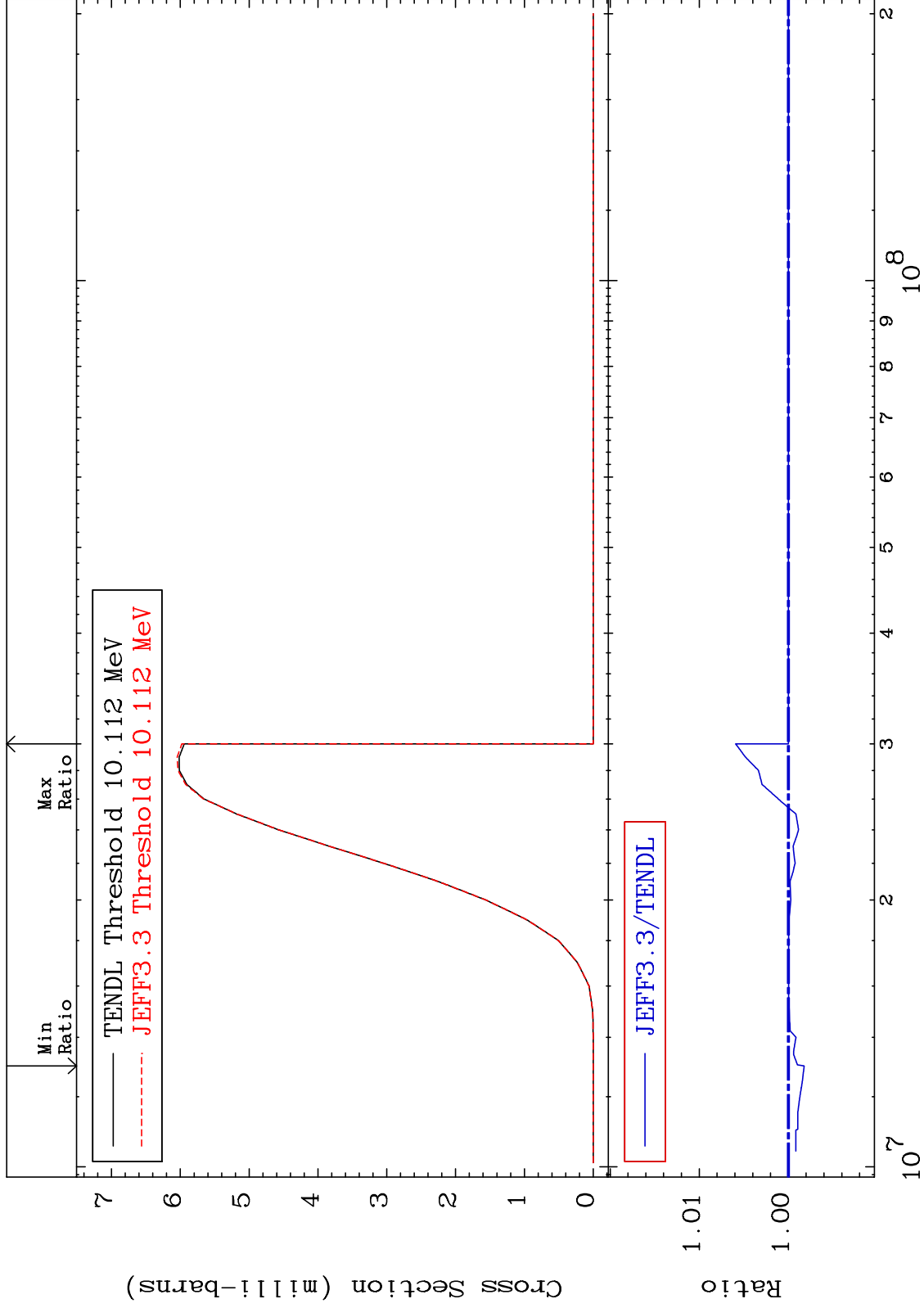
MAT 3731

(n, t)

37-Rb-87

Cross Section

-0.178 To 0.592 %



Incident Energy (eV)

37-Rb-87

51

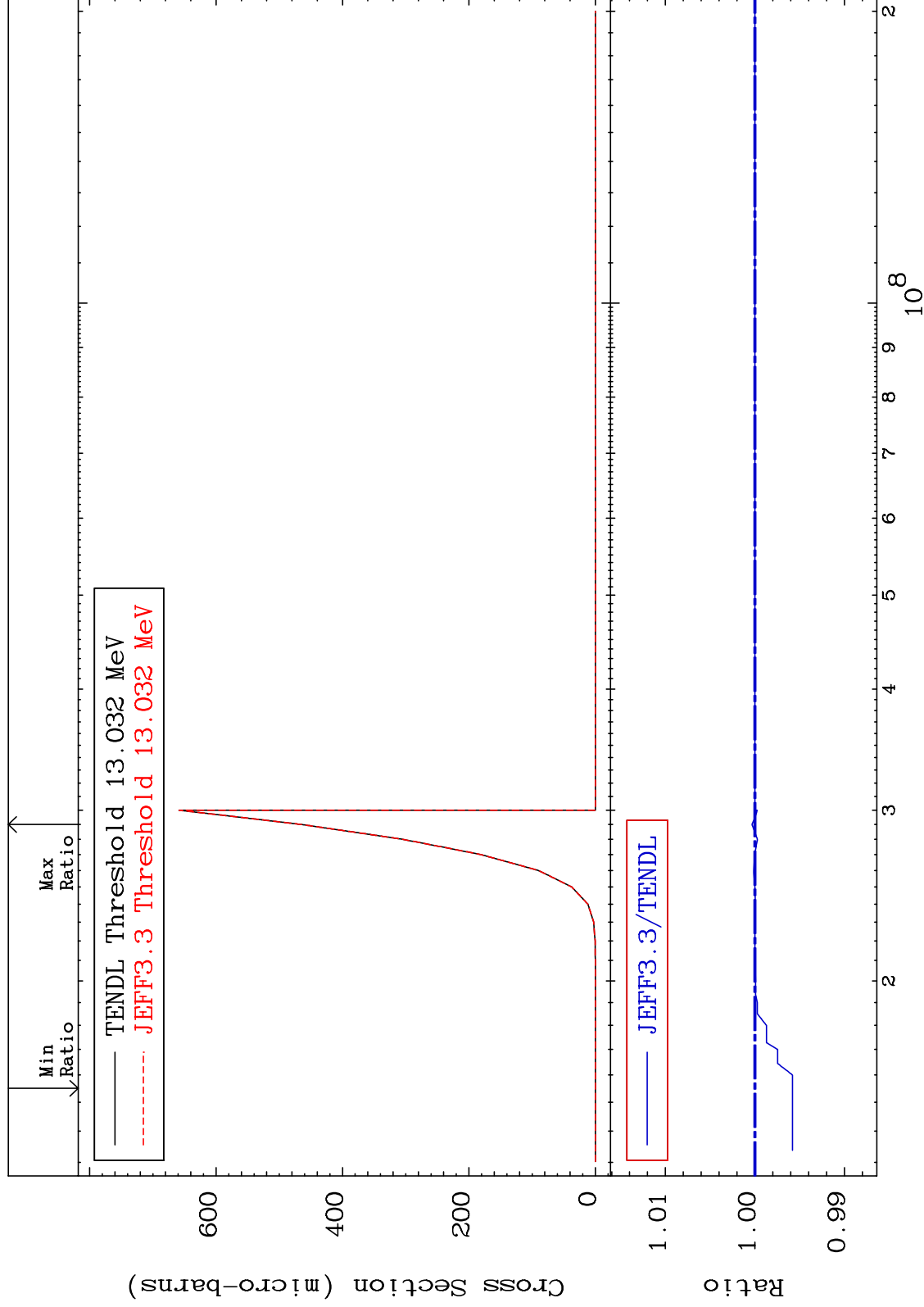
MAT 3731

(n, He-3)

37-Rb-87

Cross Section

-0.419 To 0.033 %



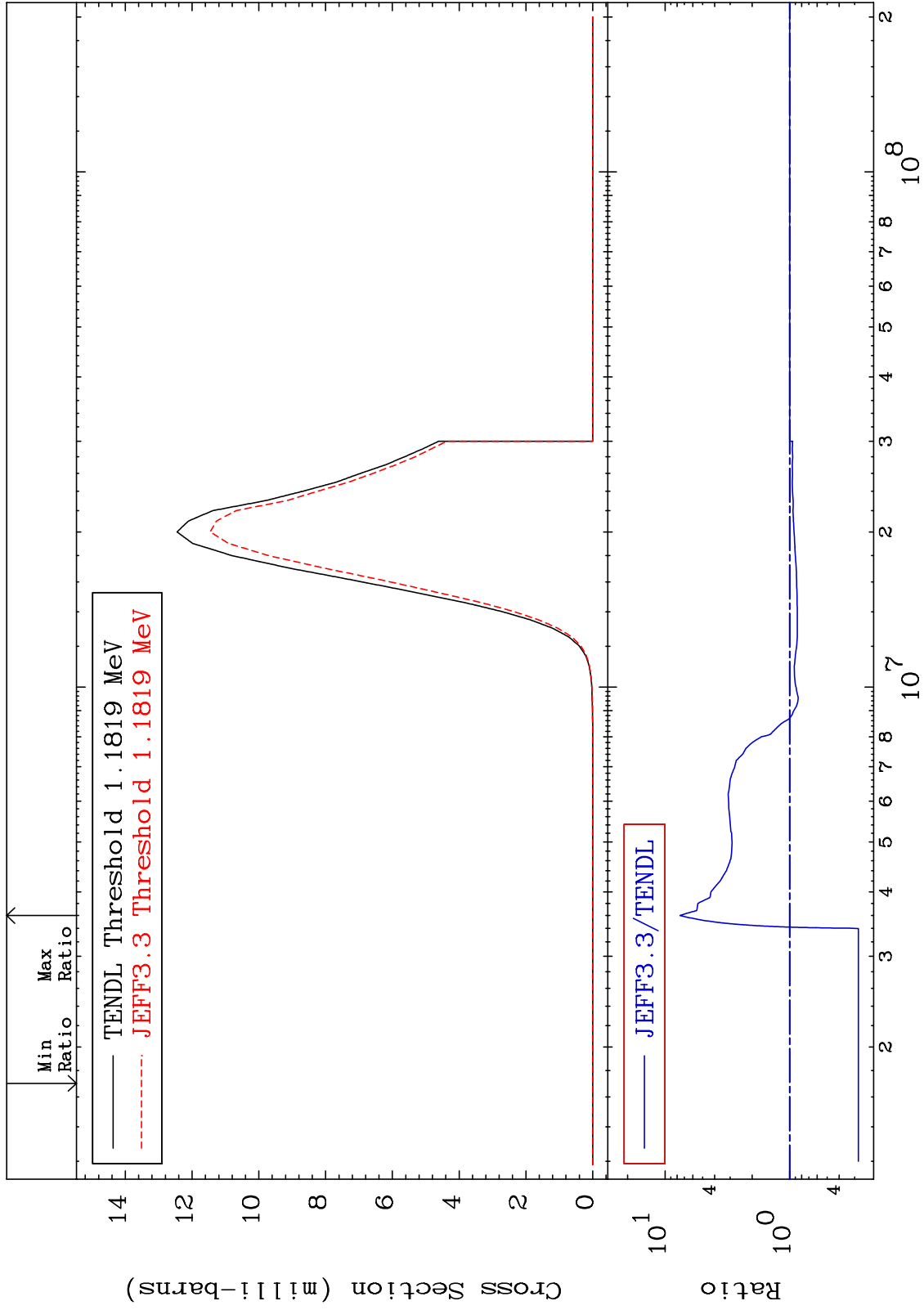
MAT 3731

(n, α)

37-Rb-87

Cross Section

-72.00 To 659.0 %



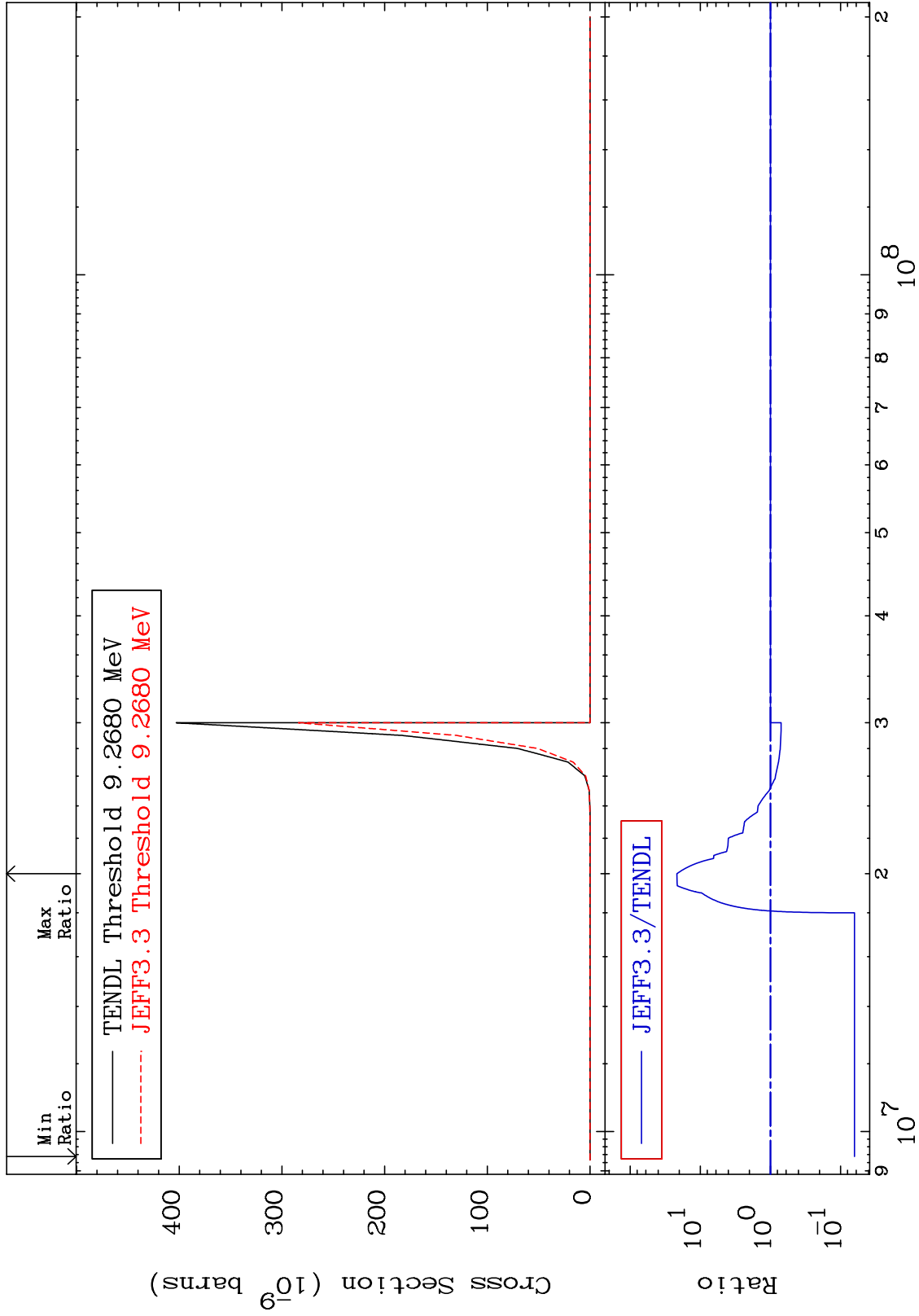
MAT 3731

(n, 2α)

37-Rb-87

Cross Section

-93.65 To 2059. %



54

Incident Energy (eV)

37-Rb-87

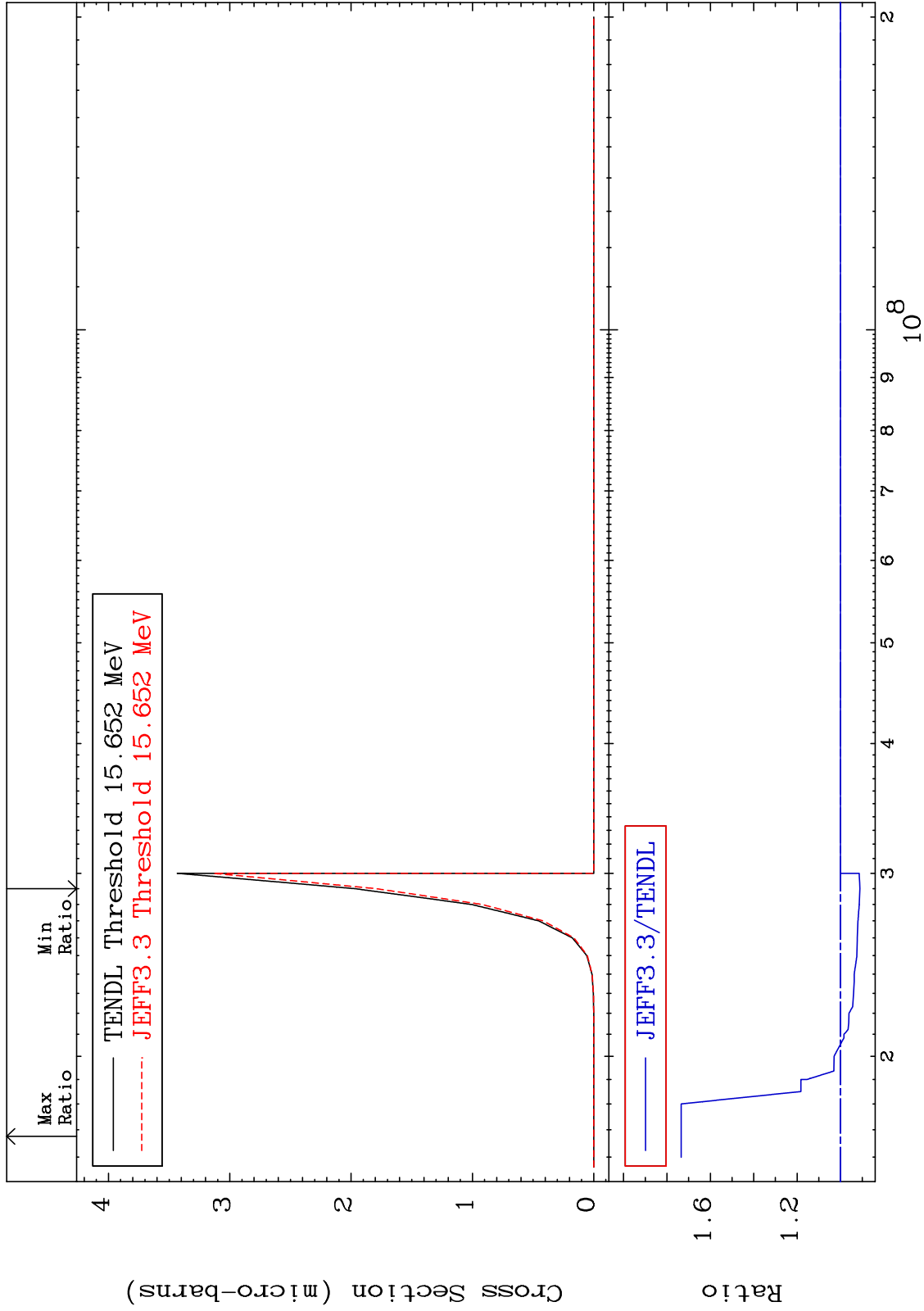
MAT 3731

(n,2p)

37-Rb-87

Cross Section

-8.950 To 73.42 %



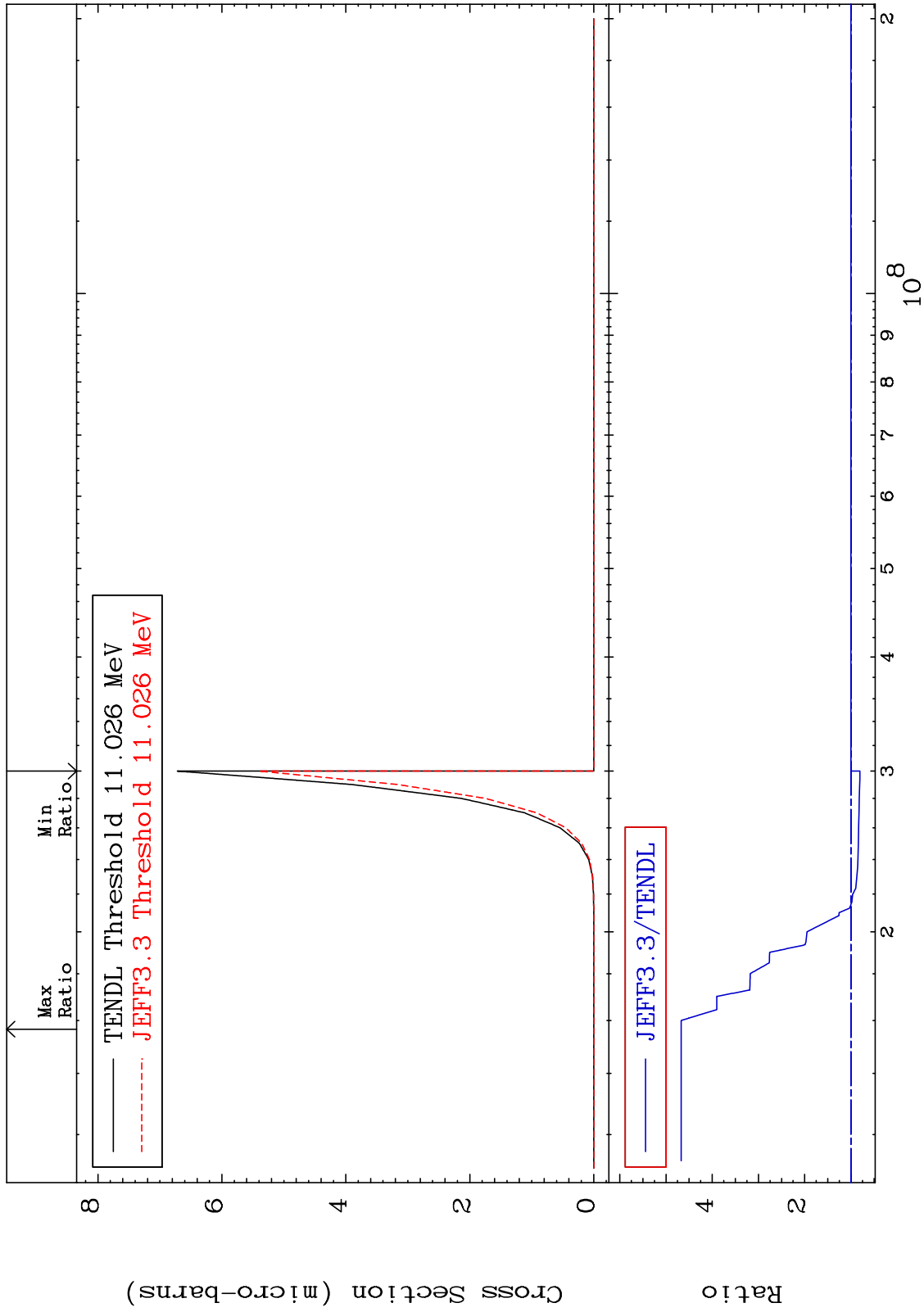
MAT 3731

(n,p) α

37-Rb-87

Cross Section

-19.53 To 367.0 %



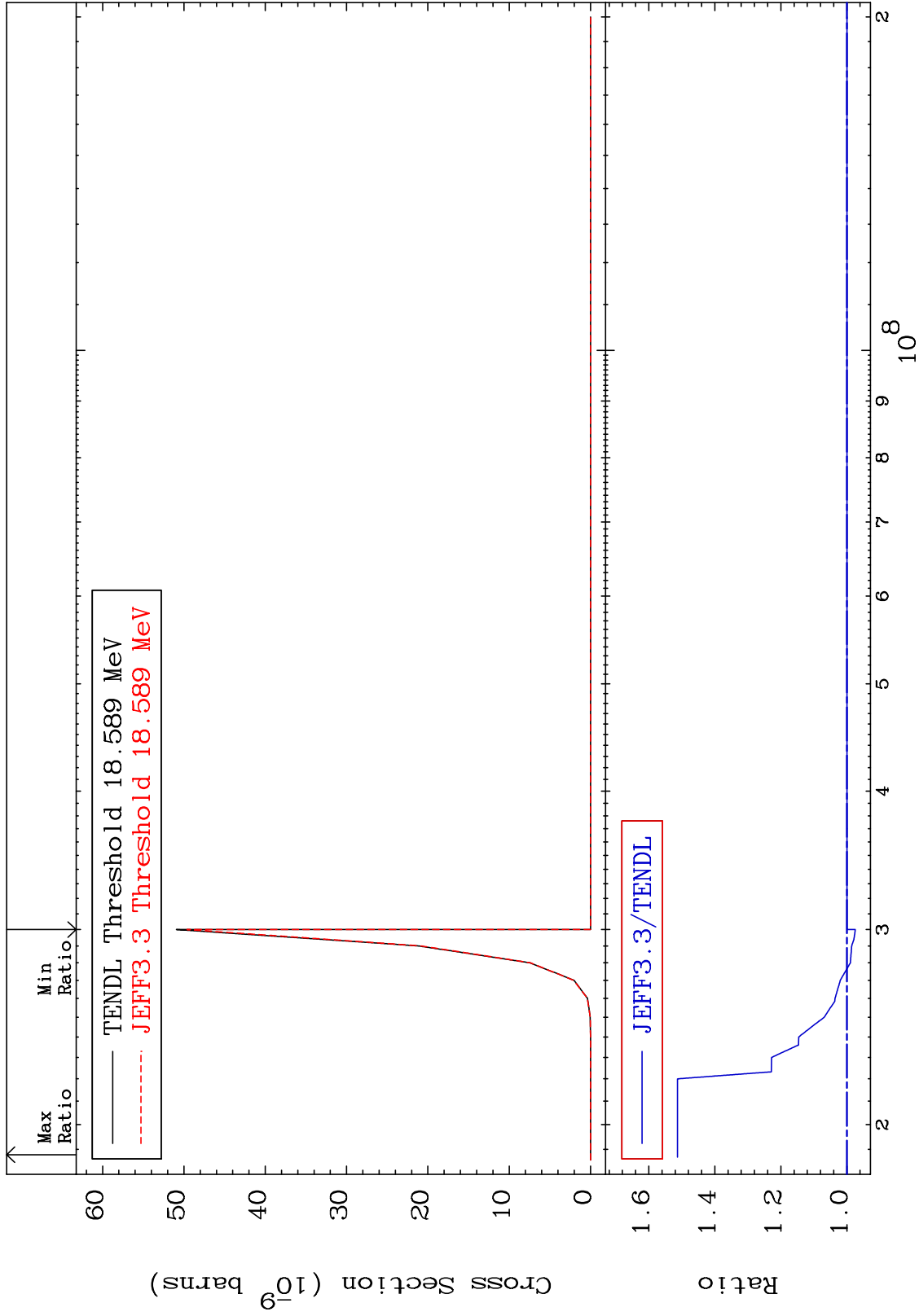
MAT 3731

(n,p) d

37-Rb-87

Cross Section

-2.539 To 51.29 %



57

Incident Energy (eV)

37-Rb-87

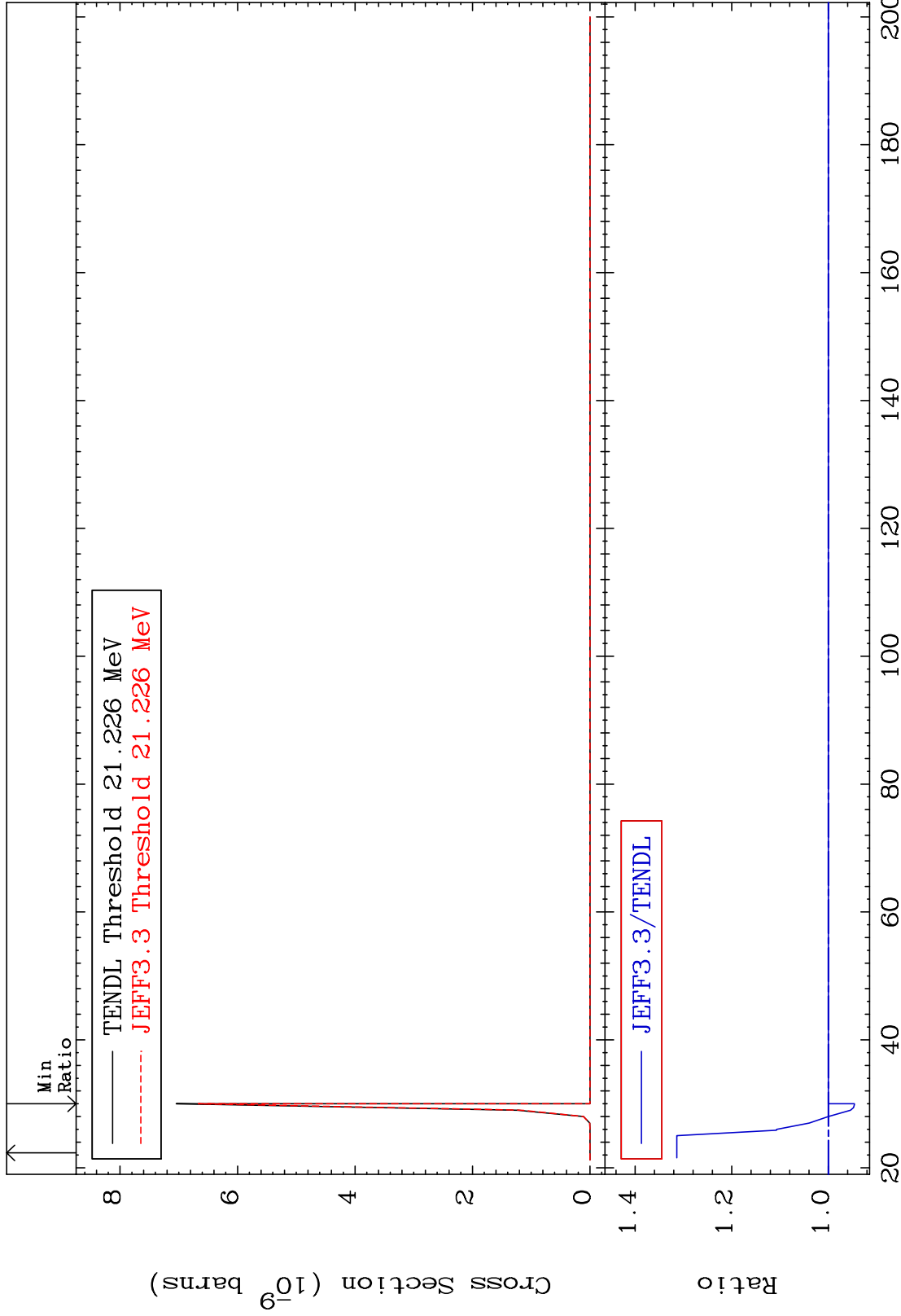
MAT 3731

(n,p) t

³⁷Rb-87

Cross Section

-5.400 To 31.38 %



³⁷Rb-87

Incident Energy (MeV)

58

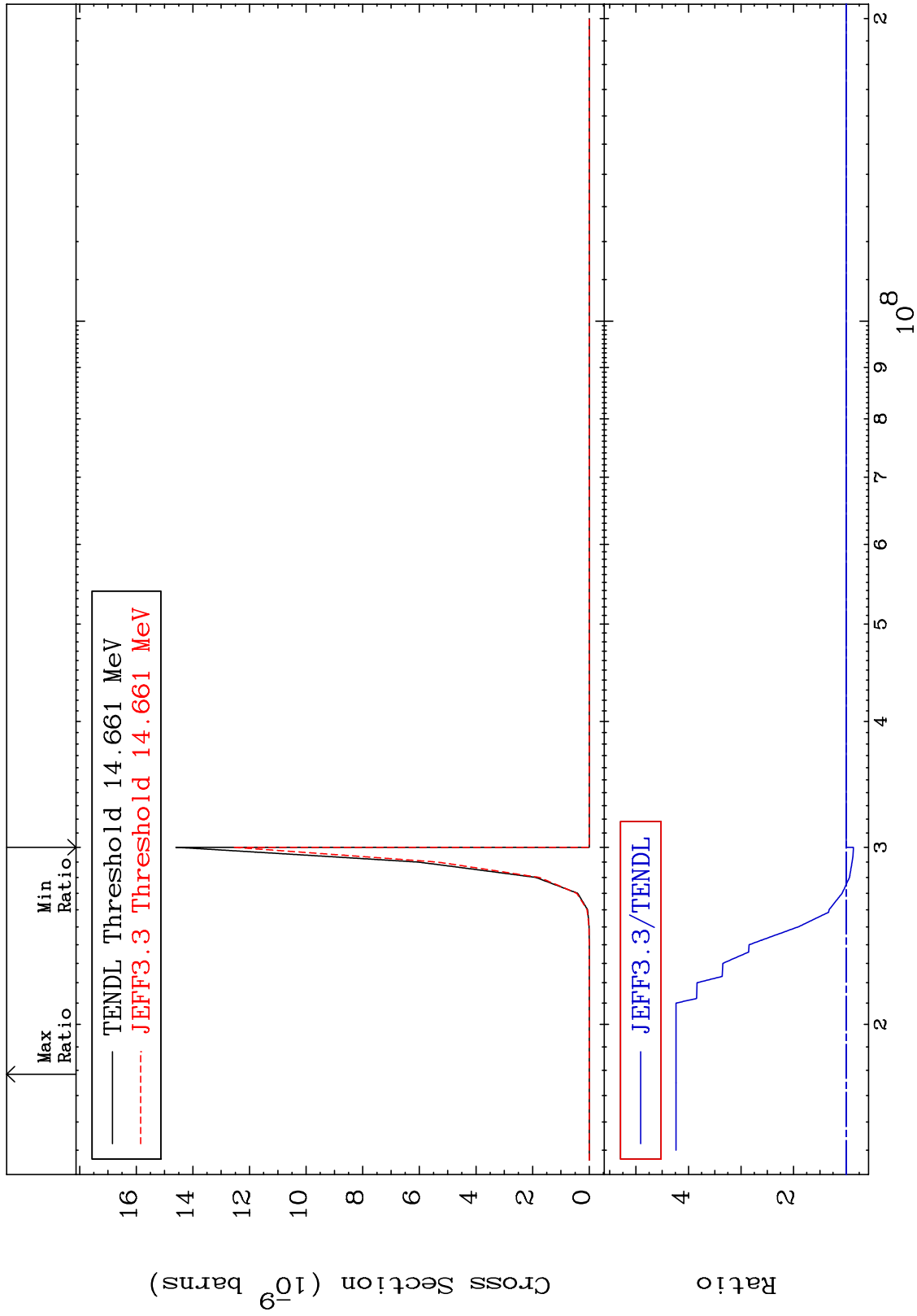
MAT 3731

(n,d) α

37-Rb-87

Cross Section

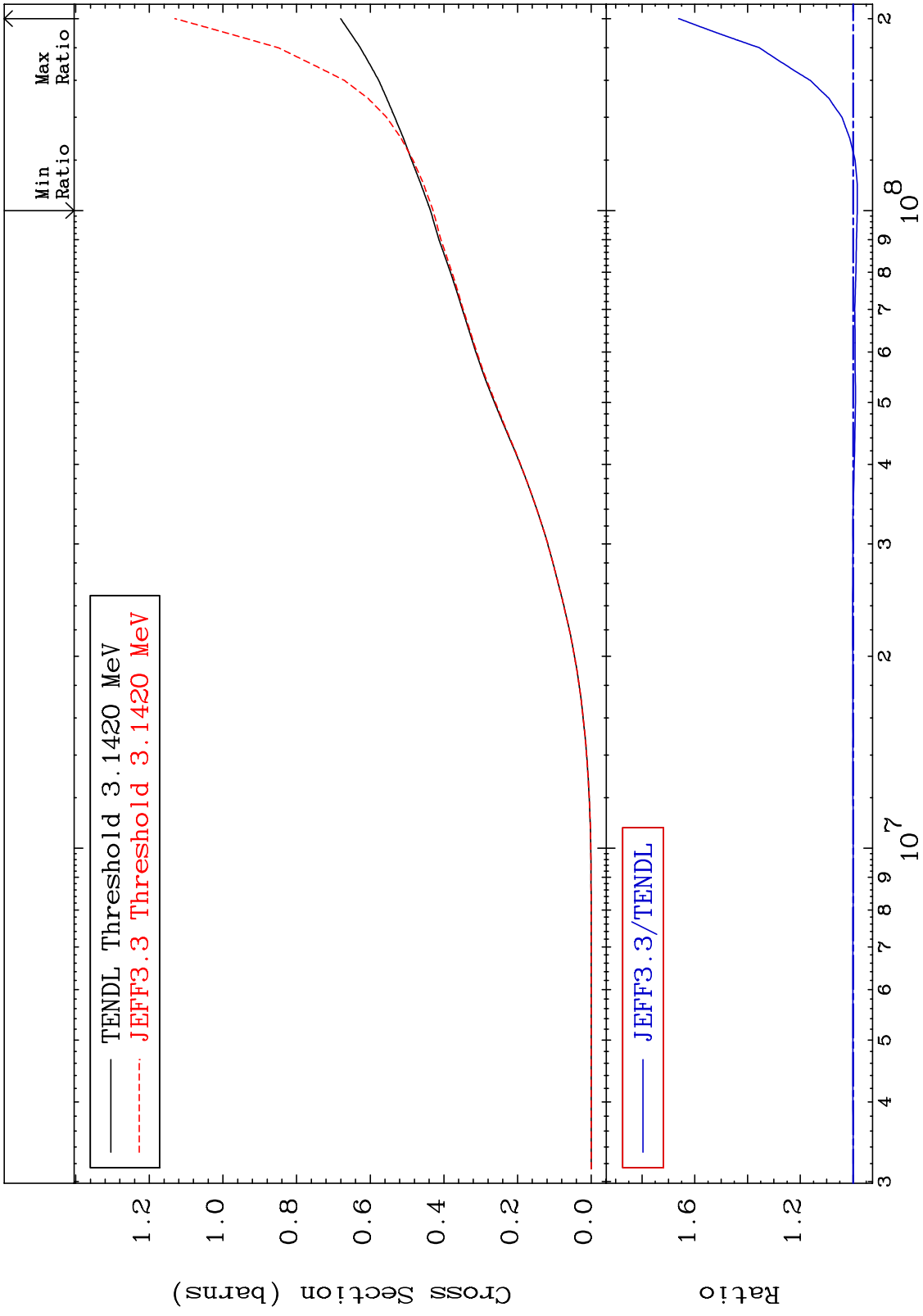
-13.84 To 323.6 %



MAT 3731

Hydrogen Production
Cross Section

37-Rb-87
-1.617 To 66.13 %



60

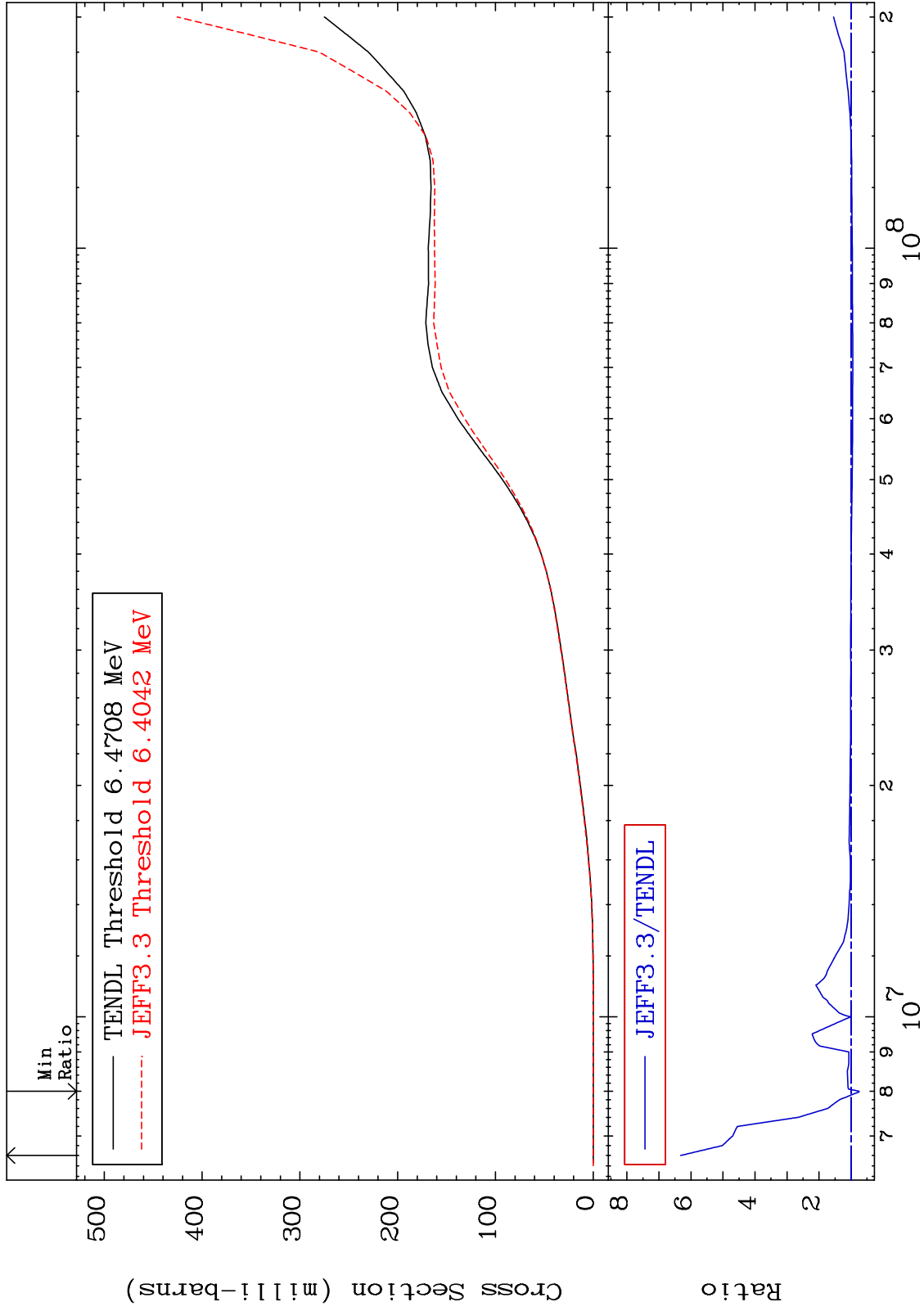
Incident Energy (eV)

37-Rb-87

MAT 3731

Deuterium Production
Cross Section

³⁷Rb-87
-25.36 To 532.2 %



61

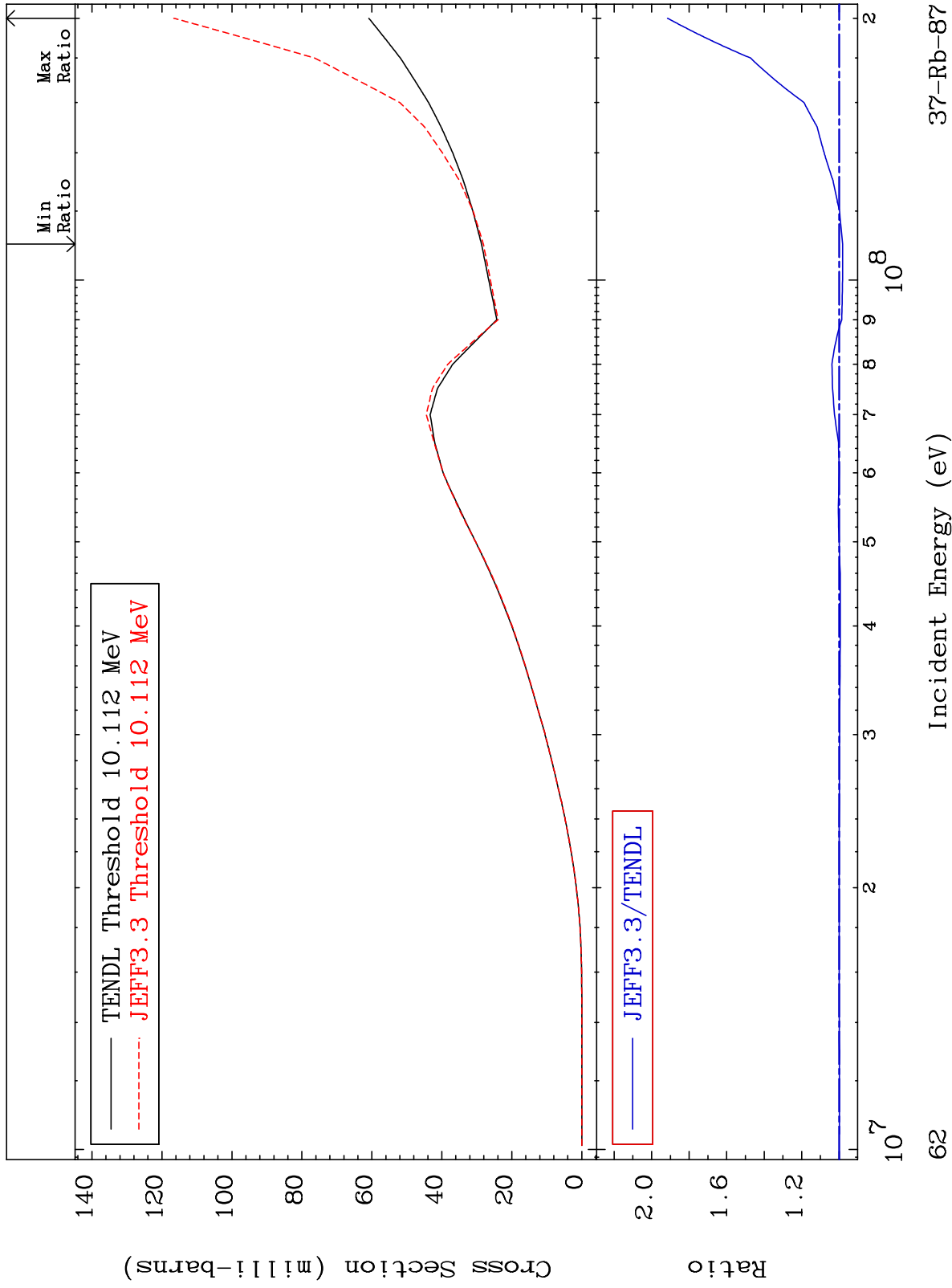
Incident Energy (eV)

³⁷Rb-87

MAT 3731

Tritium Production
Cross Section

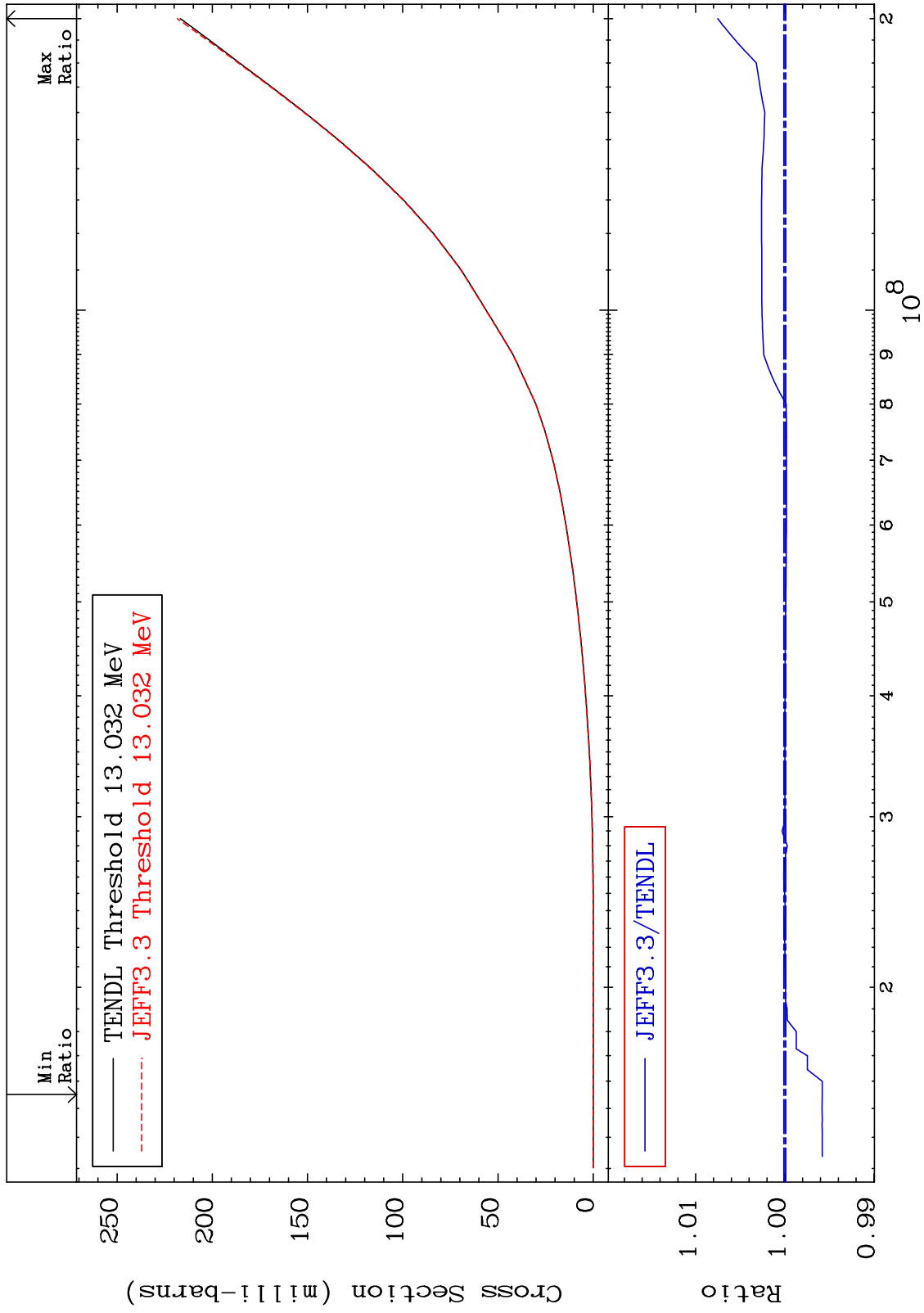
$^{37}\text{Rb-87}$
-1.856 To 91.51 %



MAT 3731

He-3 Production
Cross Section

37-Rb-87
-0.419 To 0.754 %



63

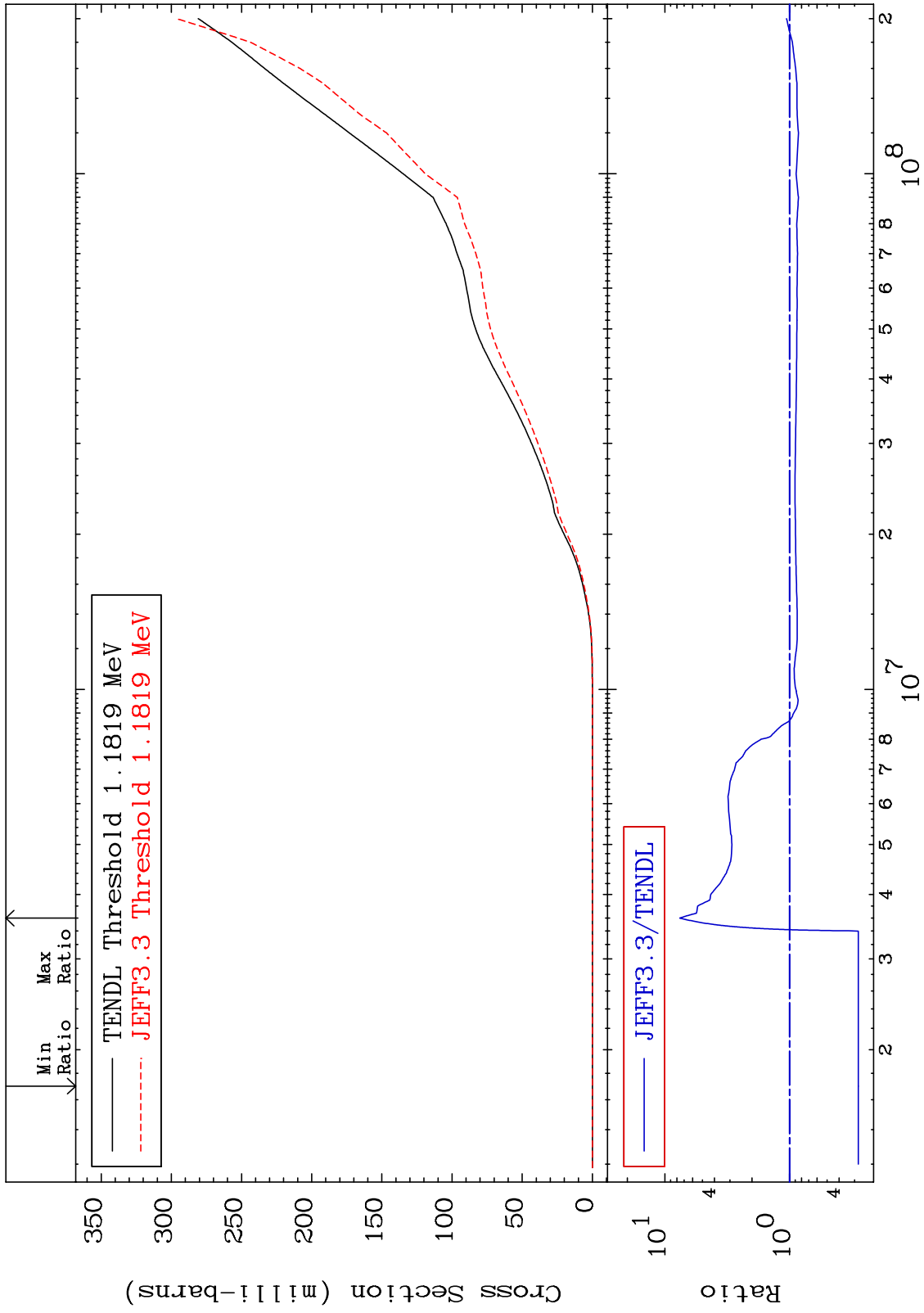
Incident Energy (eV)

37-Rb-87

MAT 3731

He-4 Production
Cross Section

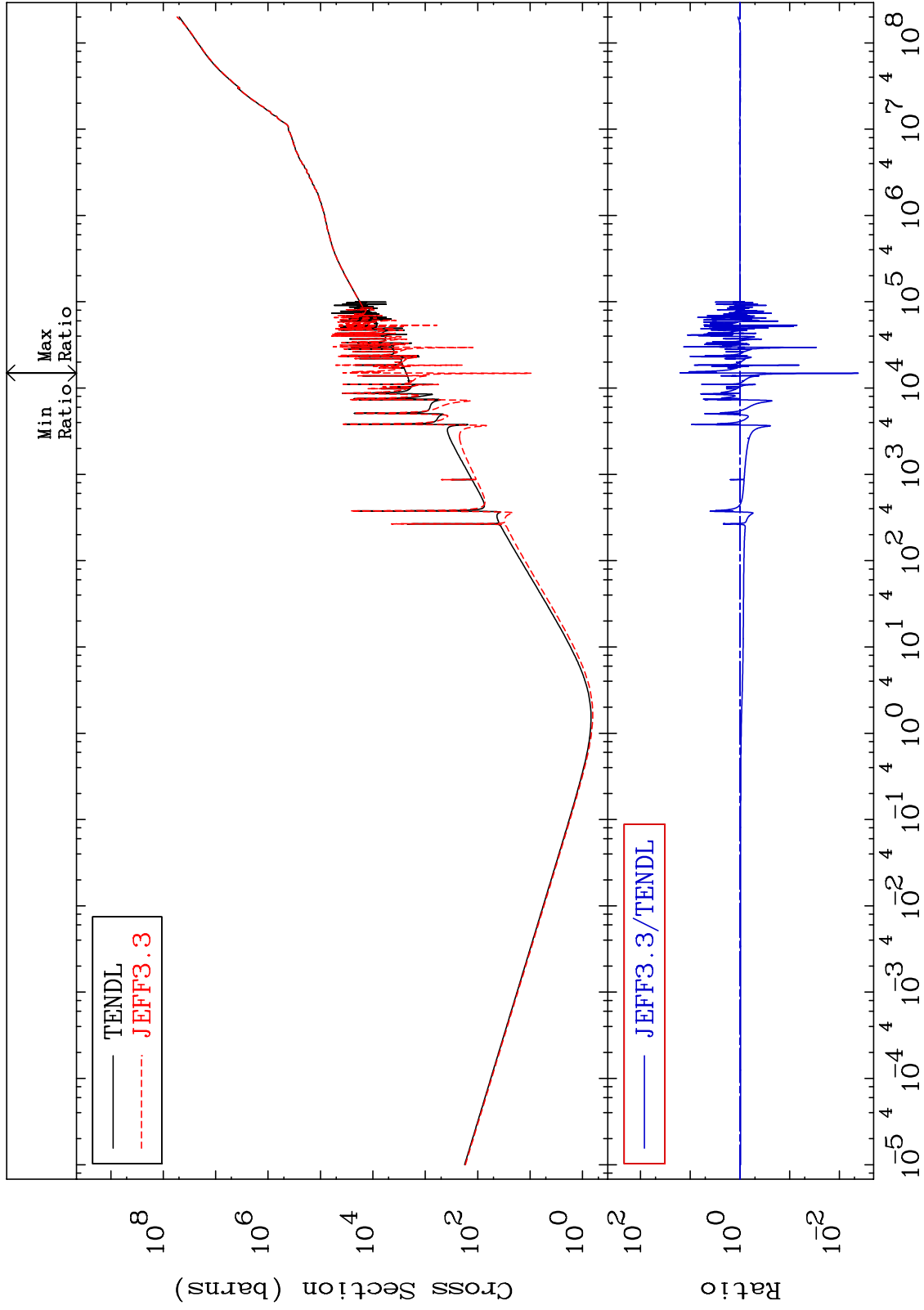
37-Rb-87
-72.00 To 659.0 %



MAT 3731

Kerma total (eV-barns)
Cross Section

37-Rb-87
-99.59 To 1506. %



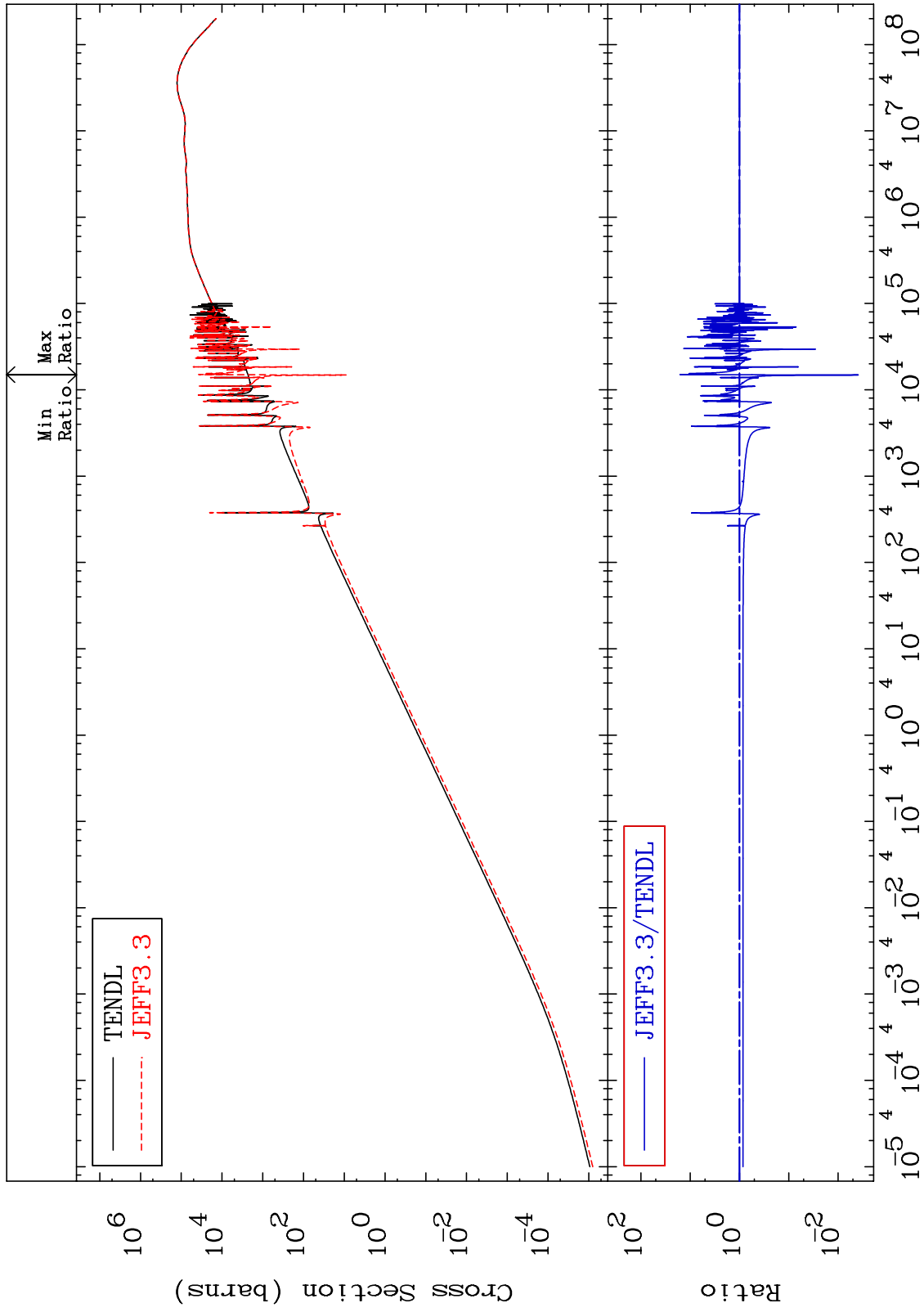
— TENDL
- - - JEFF3.3

— JEFF3.3/TENDL

MAT 3731

Kerma elastic
Cross Section

37-Rb-87
-99.61 To 1505. %



66

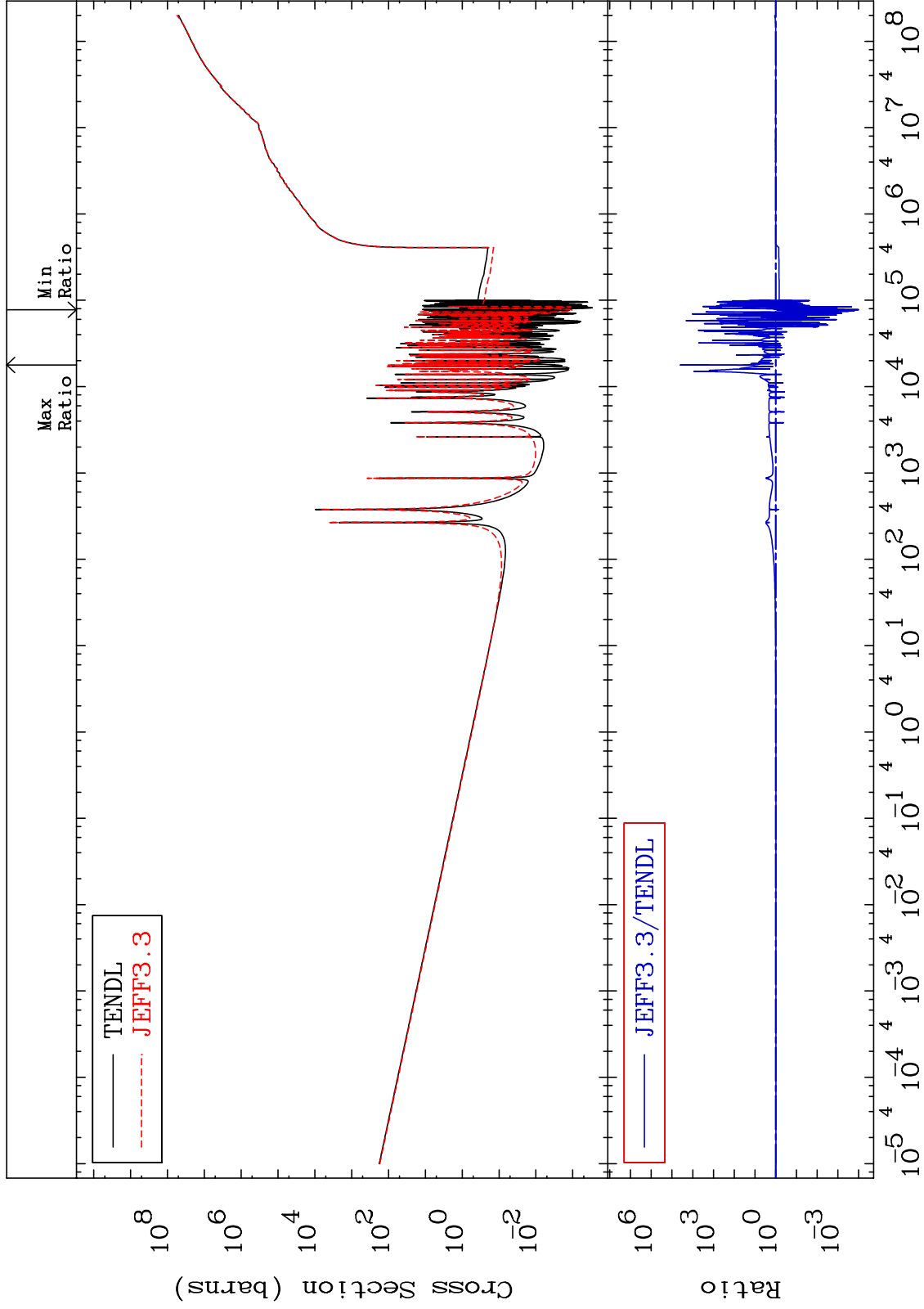
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma non-elastic (all but mt2)
Cross Section

37-Rb-87
-99.99 To 9999. %



67

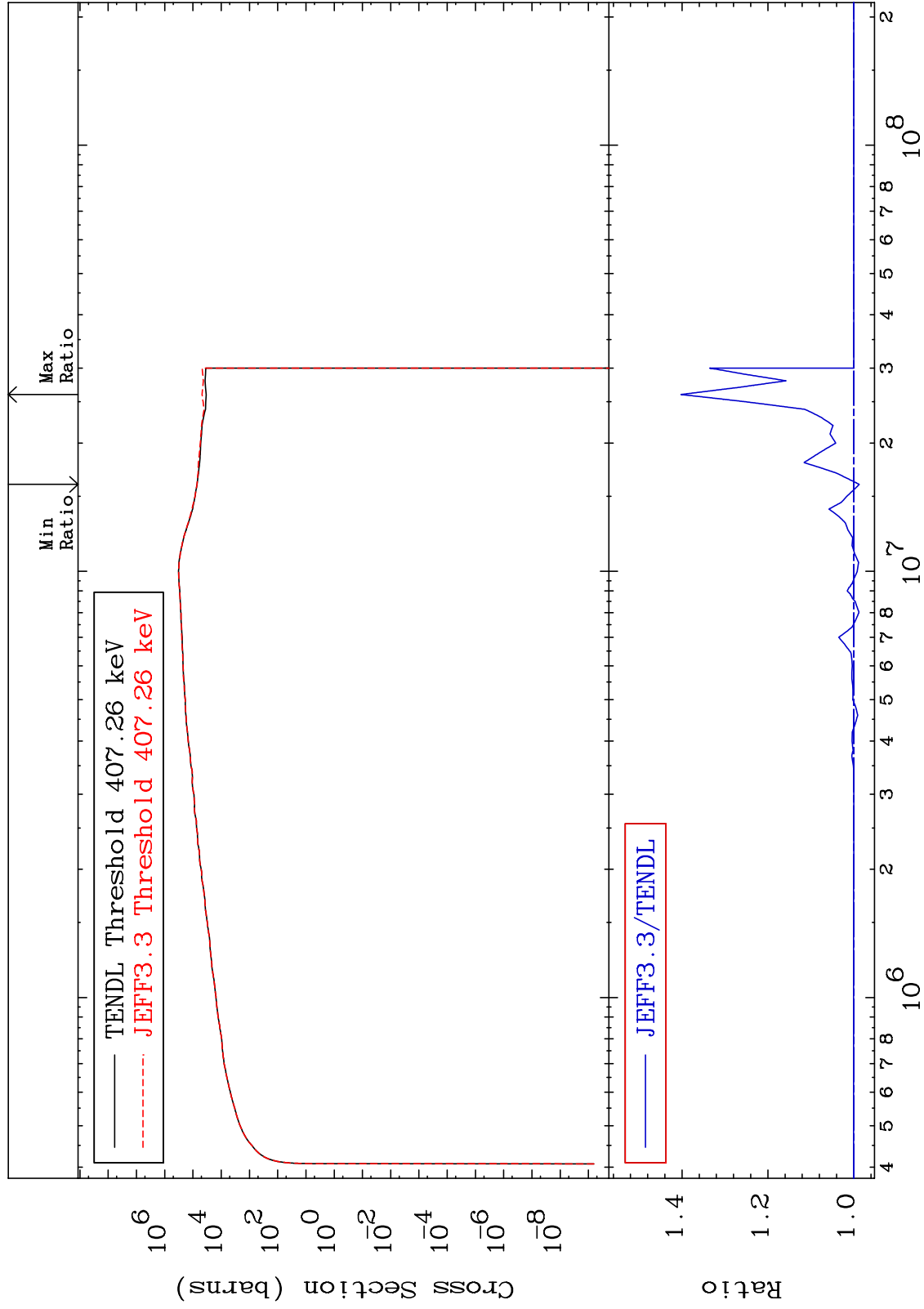
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma inelastic (mt51-91)
Cross Section

37-Rb-87
-1.294 To 40.23 %



68

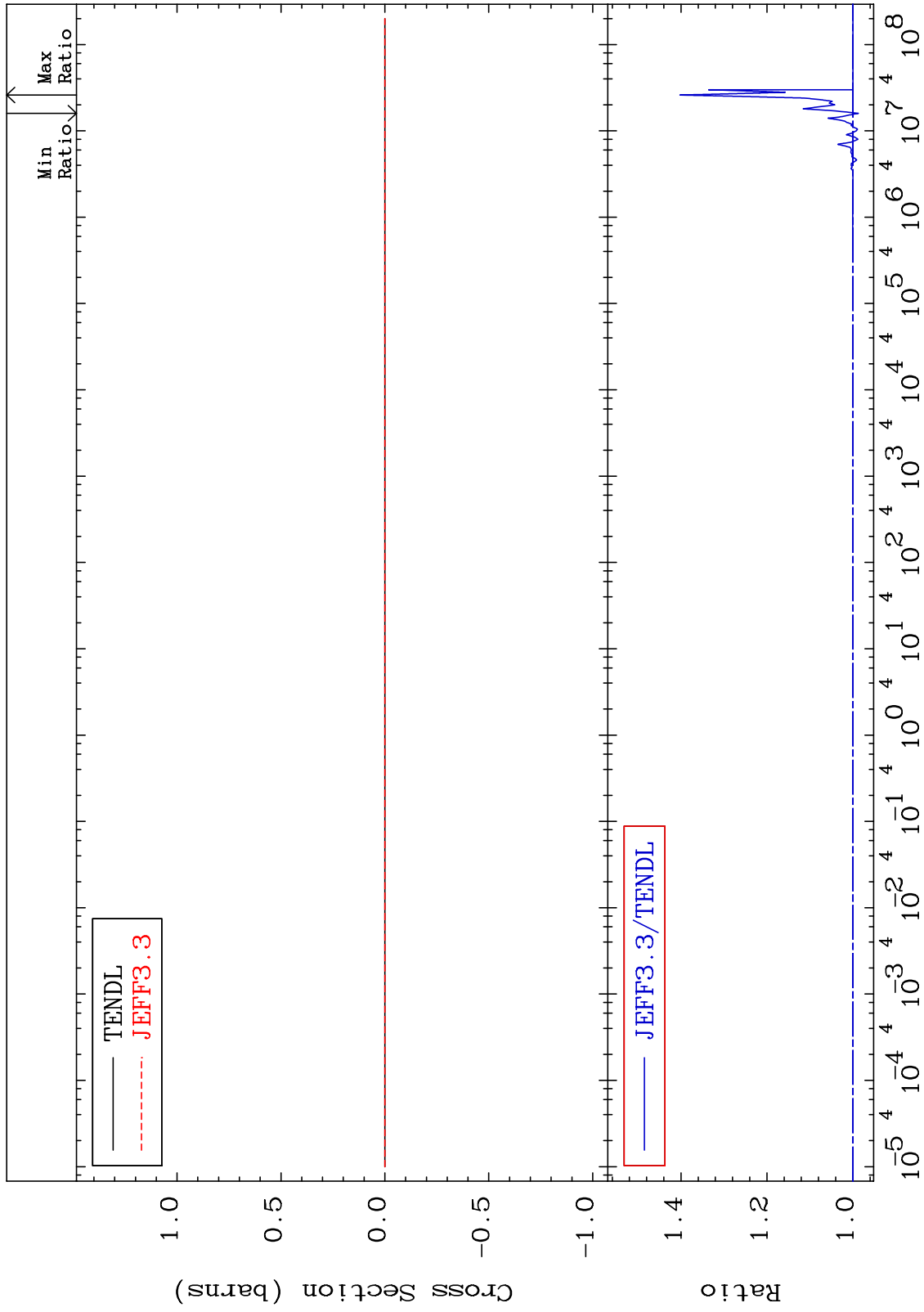
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

37-Rb-87
-1.294 To 40.23 %



69

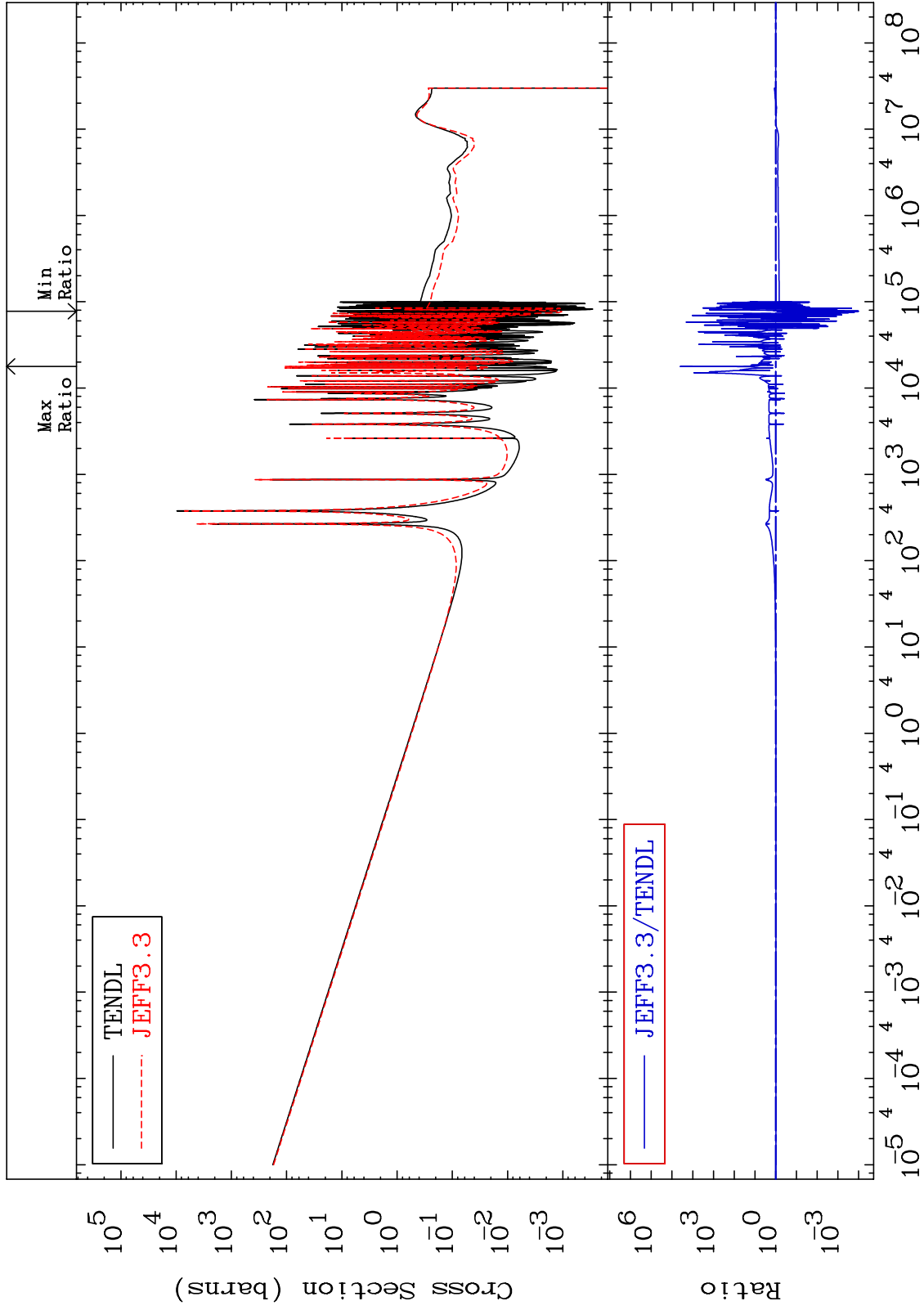
Incident Energy (eV)

37-Rb-87

MAT 3731

Kerma capture (mt102)
Cross Section

37-Rb-87
-99.99 To 9999. %



70

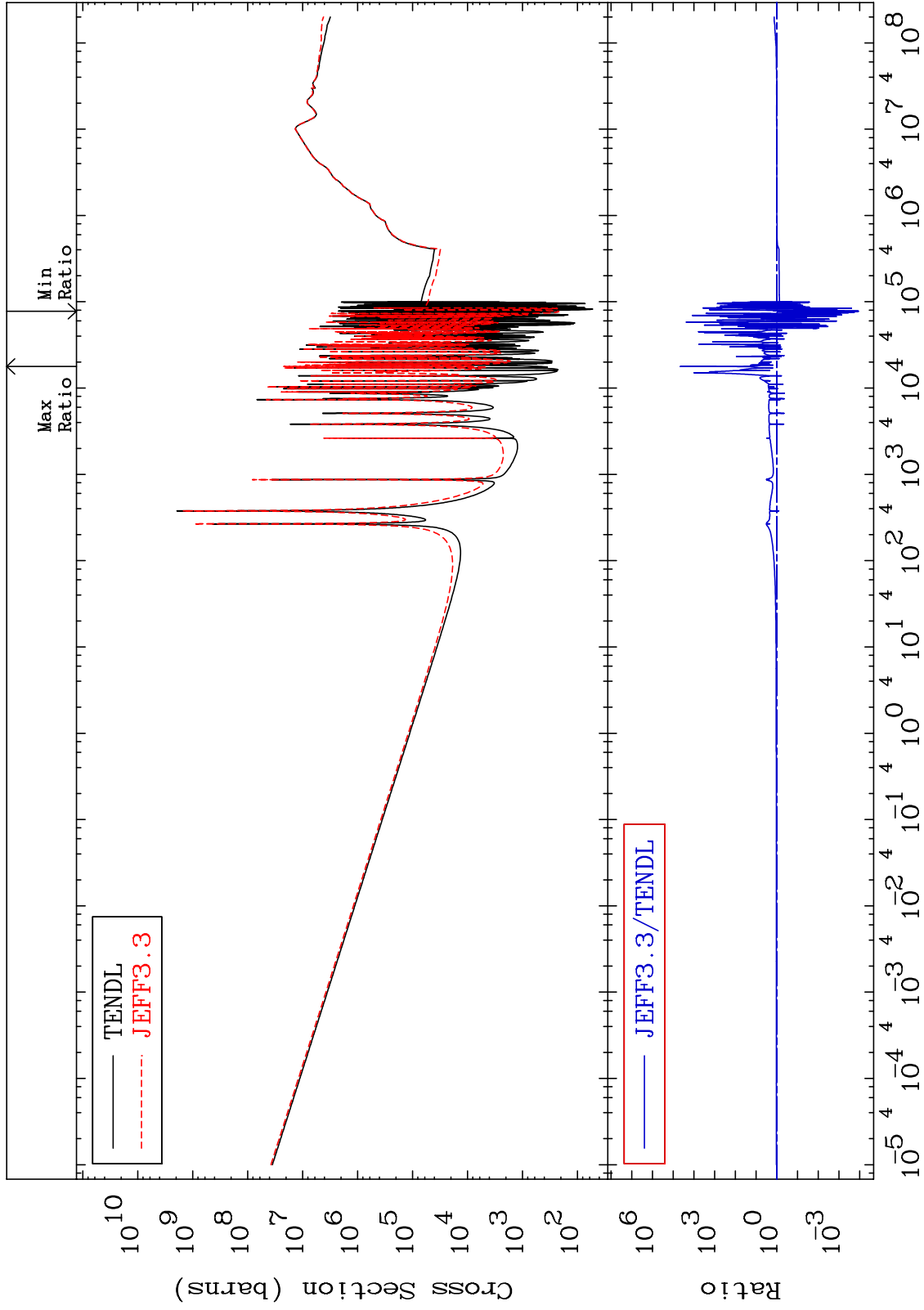
Incident Energy (eV)

37-Rb-87

MAT 3731

Total photon (eV-barns)
Cross Section

37-Rb-87
-99.99 To 9999. %



71

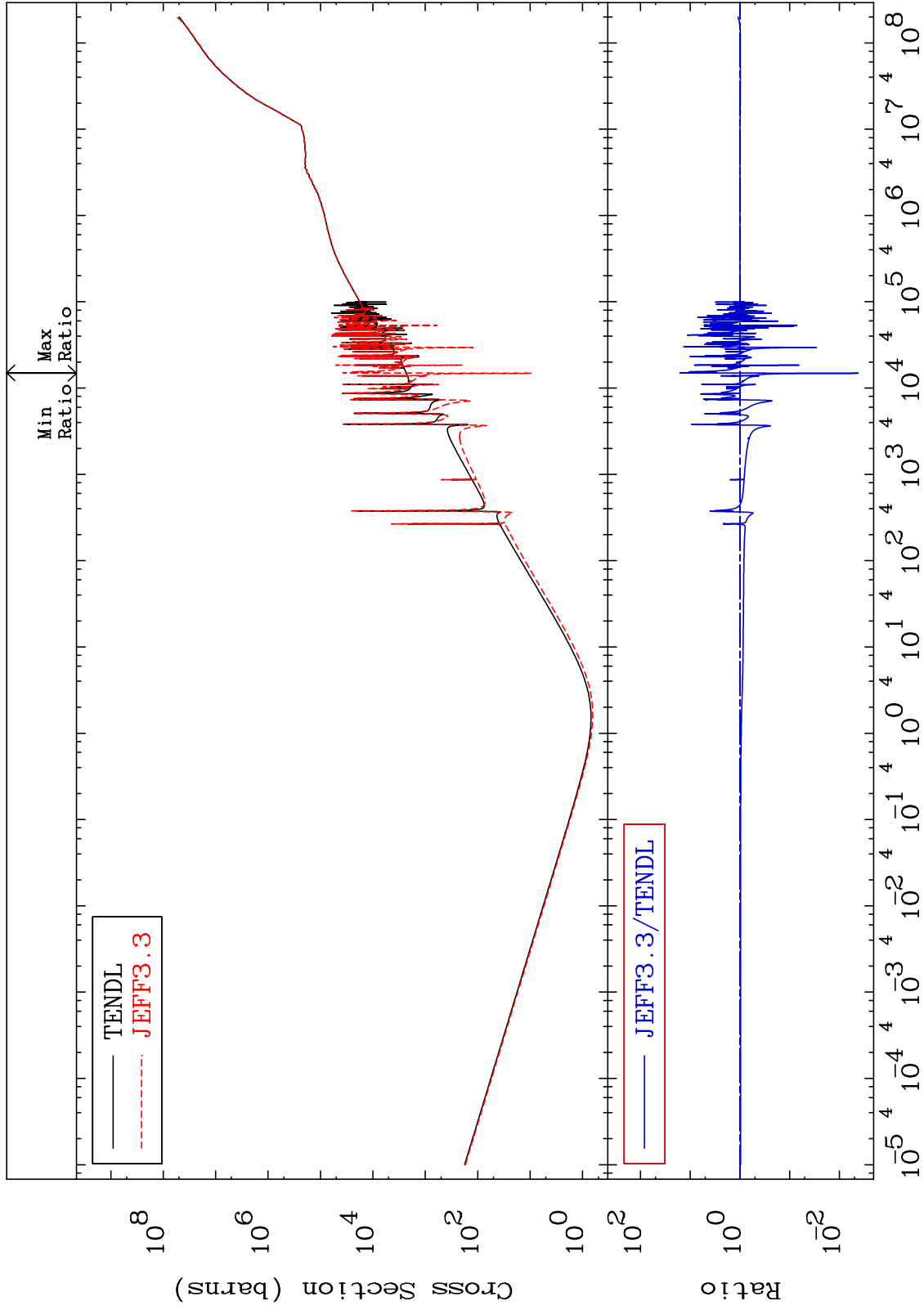
Incident Energy (eV)

37-Rb-87

MAT 3731

Total kinematic kerma (high limit)
Cross Section

37-Rb-87
-99.59 To 1506. %



72

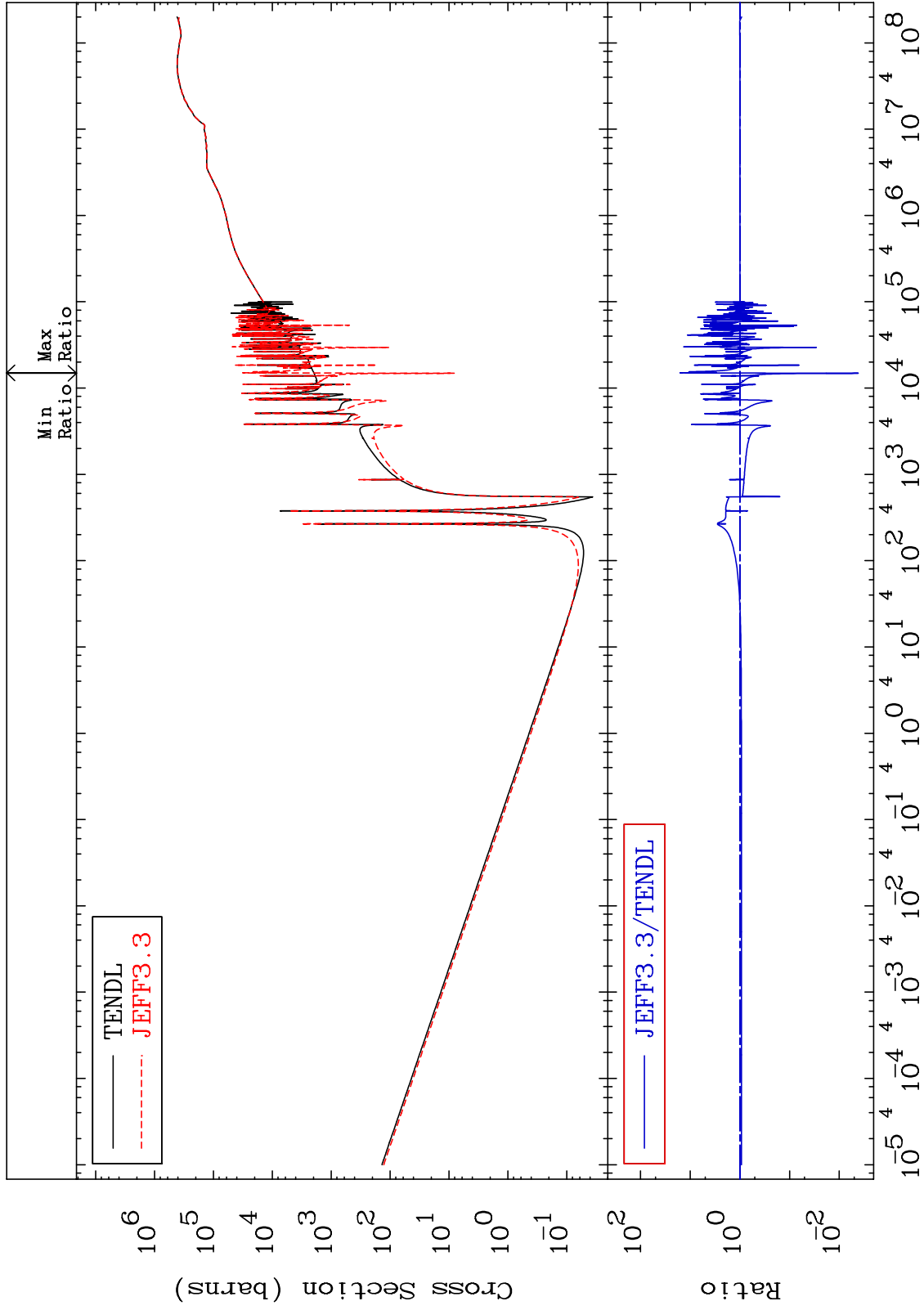
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa total (eV-barns)
Cross Section

37-Rb-87
-99.59 To 1506. %



73

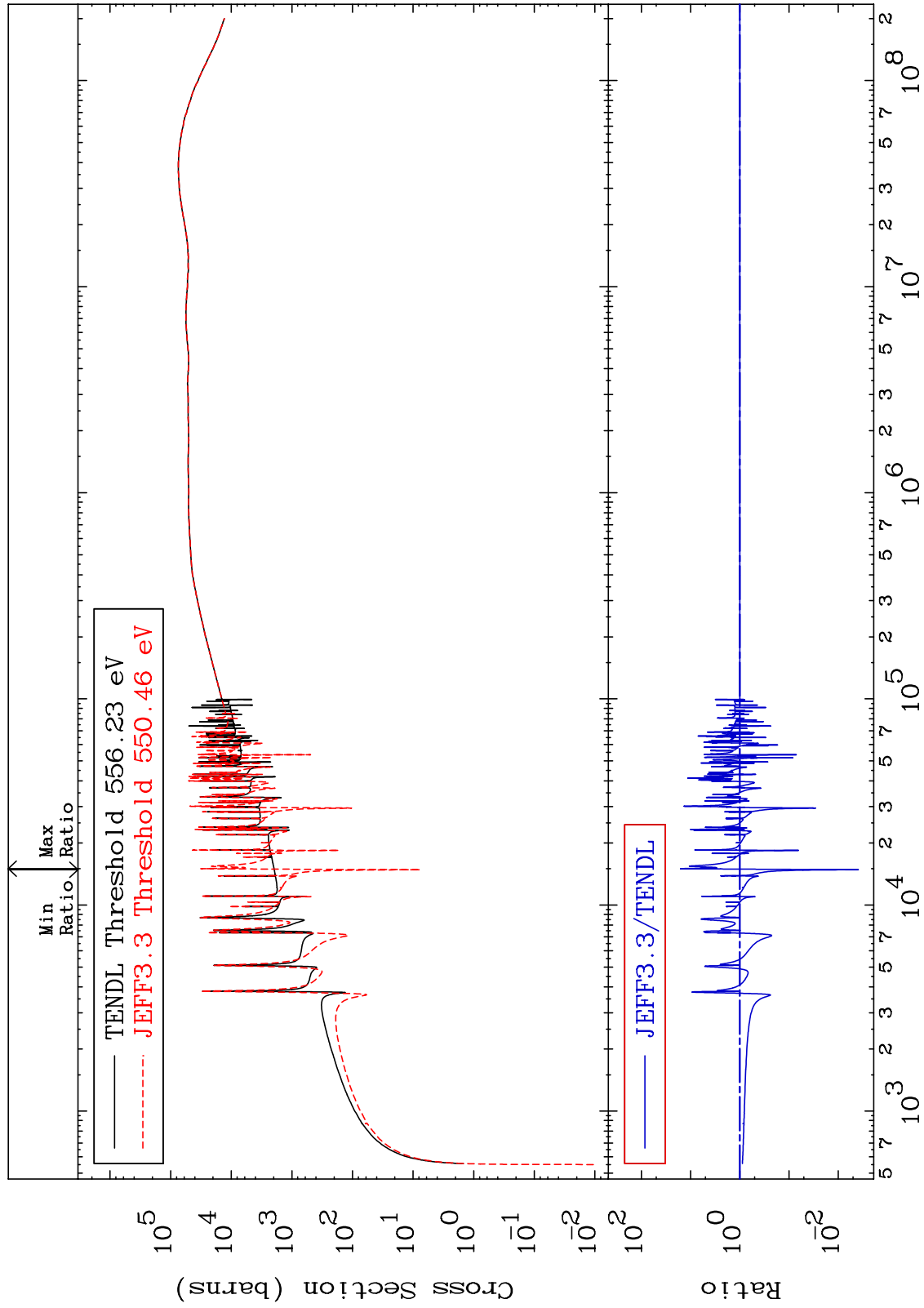
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa elastic (mt2)
Cross Section

37-Rb-87
-99.61 To 1505. %



74

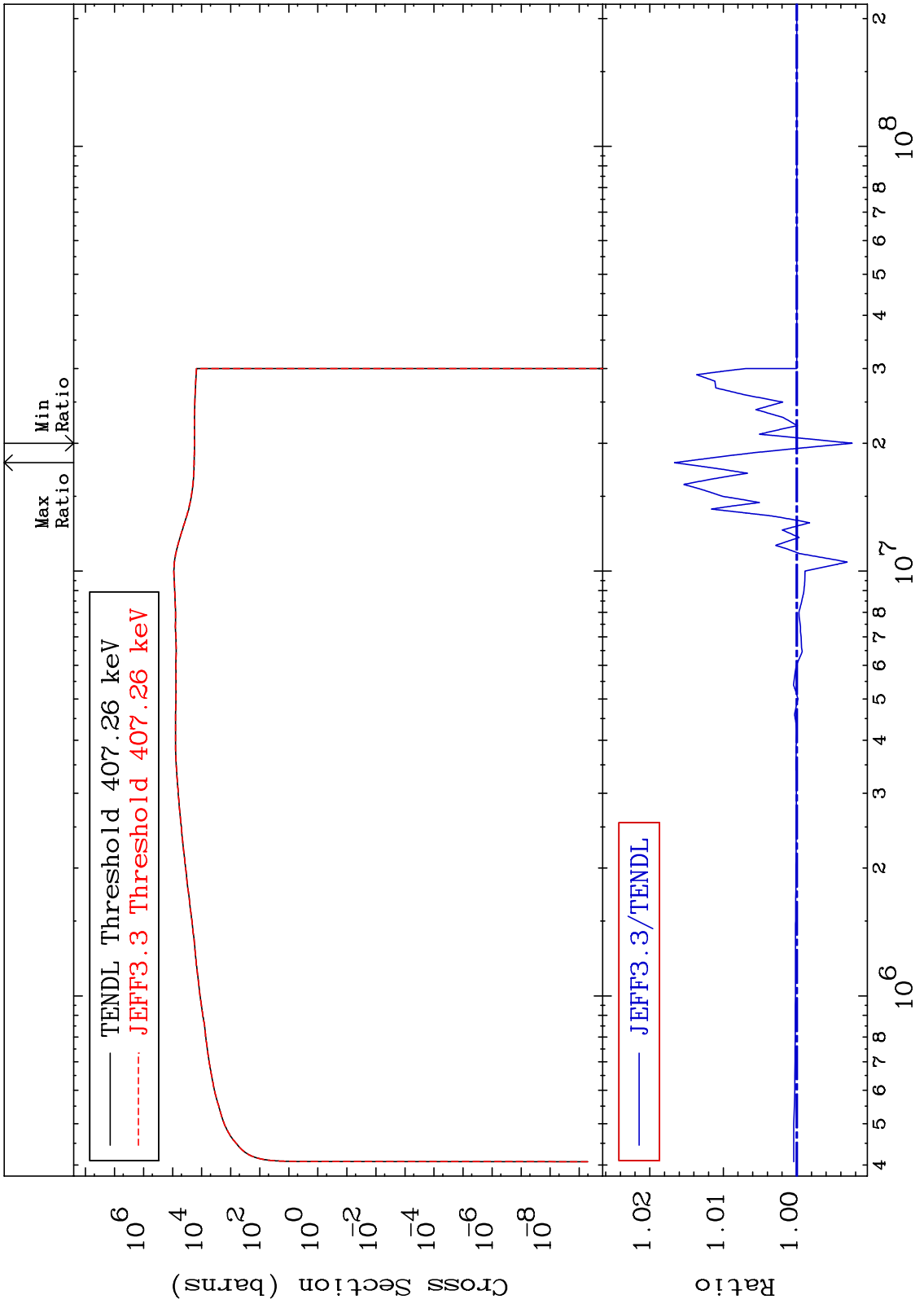
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa inelastic (mt51-91)
Cross Section

37-Rb-87
-0.754 To 1.663 %



75

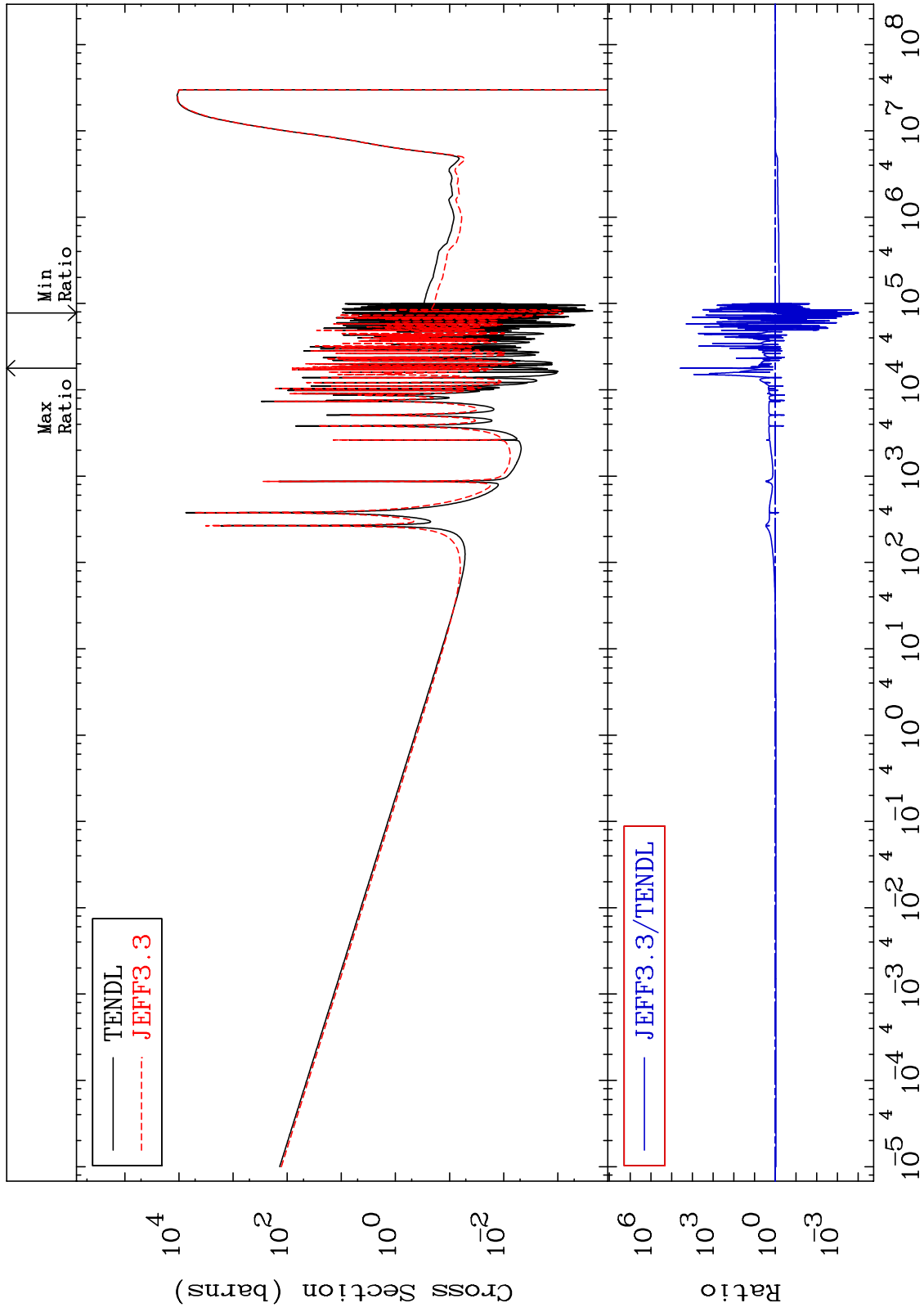
Incident Energy (eV)

37-Rb-87

MAT 3731

Dpa disappearance (mt102 -120)
Cross Section

37-Rb-87
-99.99 To 9999. %



76

Incident Energy (eV)

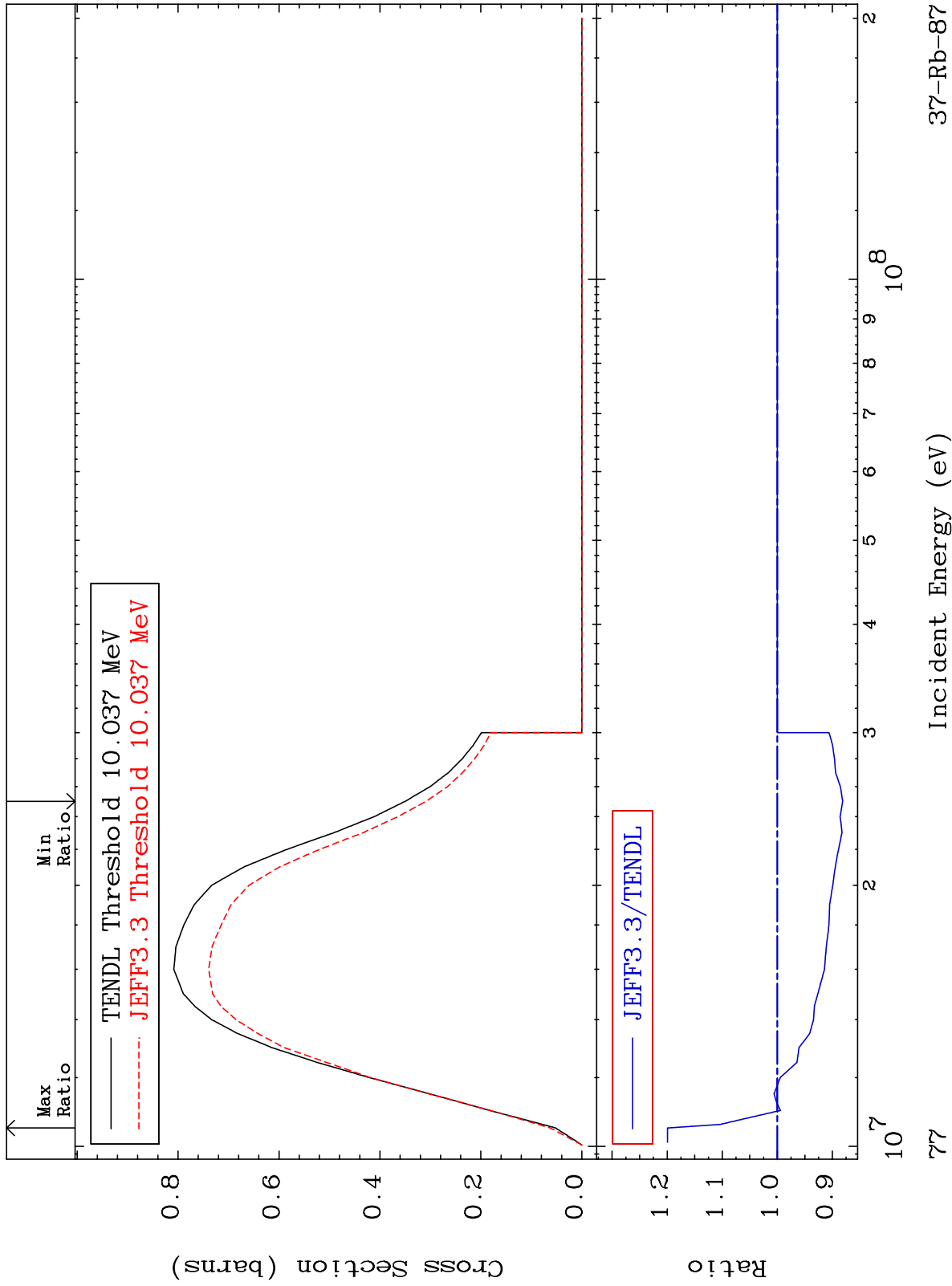
37-Rb-87

MAT 3731

(n,2n) : 37-Rb-86g

37-Rb-87

Radionuclide Production Cross Section -11.87 To 19.93 %

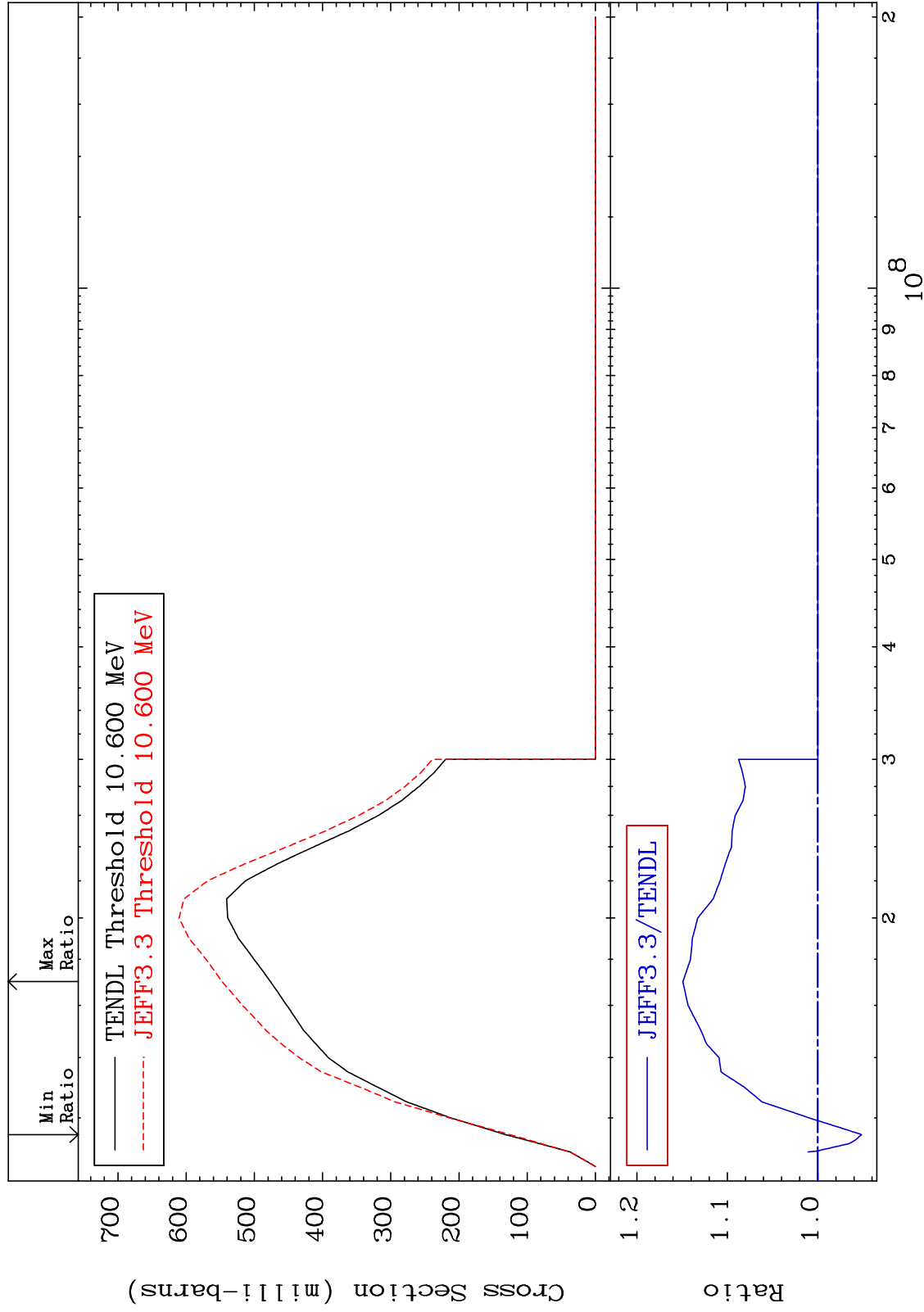


MAT 3731

(n,2n):37-Rb-86m2

37-Rb-87

Radionuclide Production Cross Section -4.837 To 14.91 %



78

Incident Energy (eV)

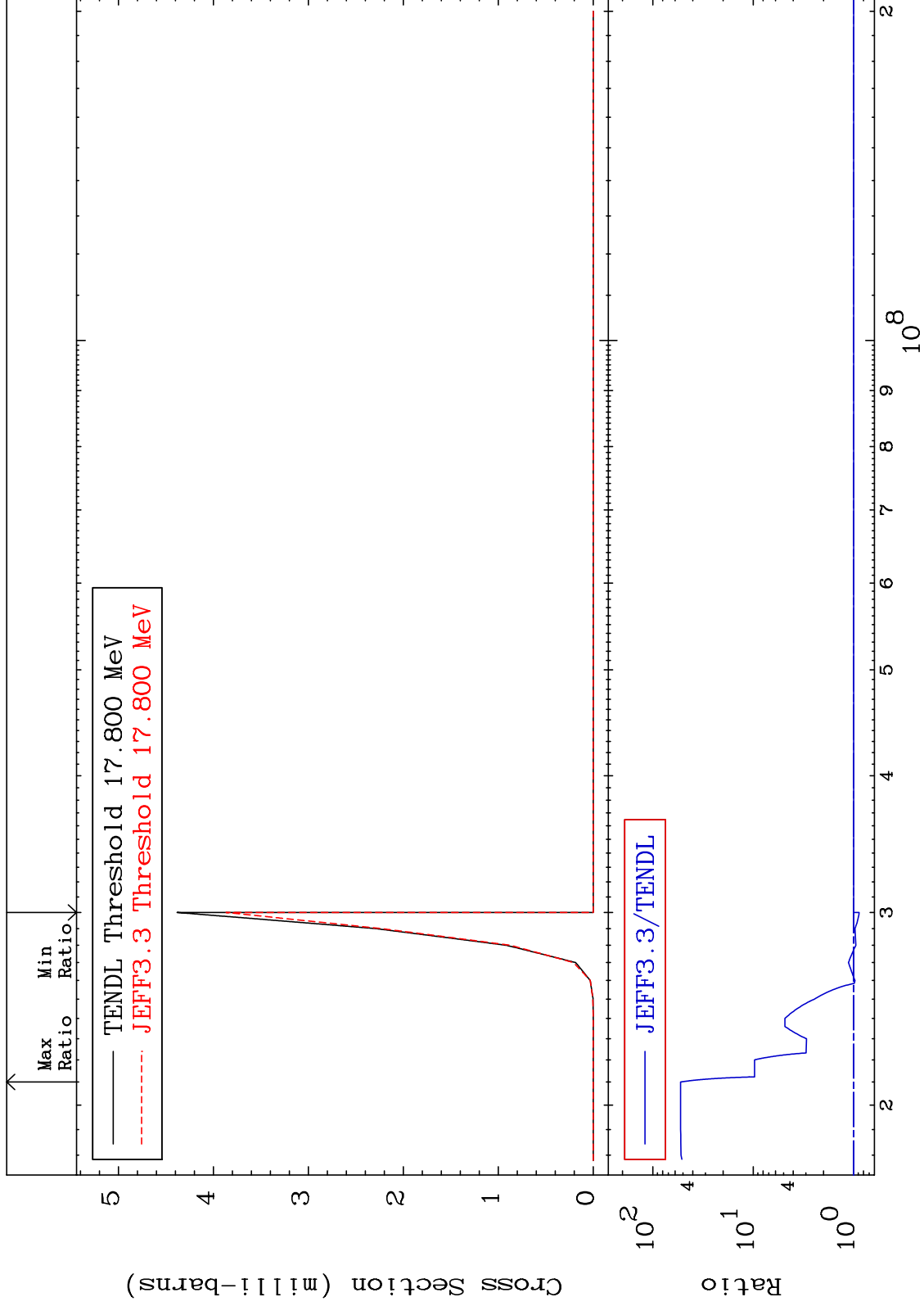
37-Rb-87

MAT 3731

(n,2n) α : 35-Br-82g

37-Rb-87

Radionuclide Production Cross Section -11.76 To 5187. %

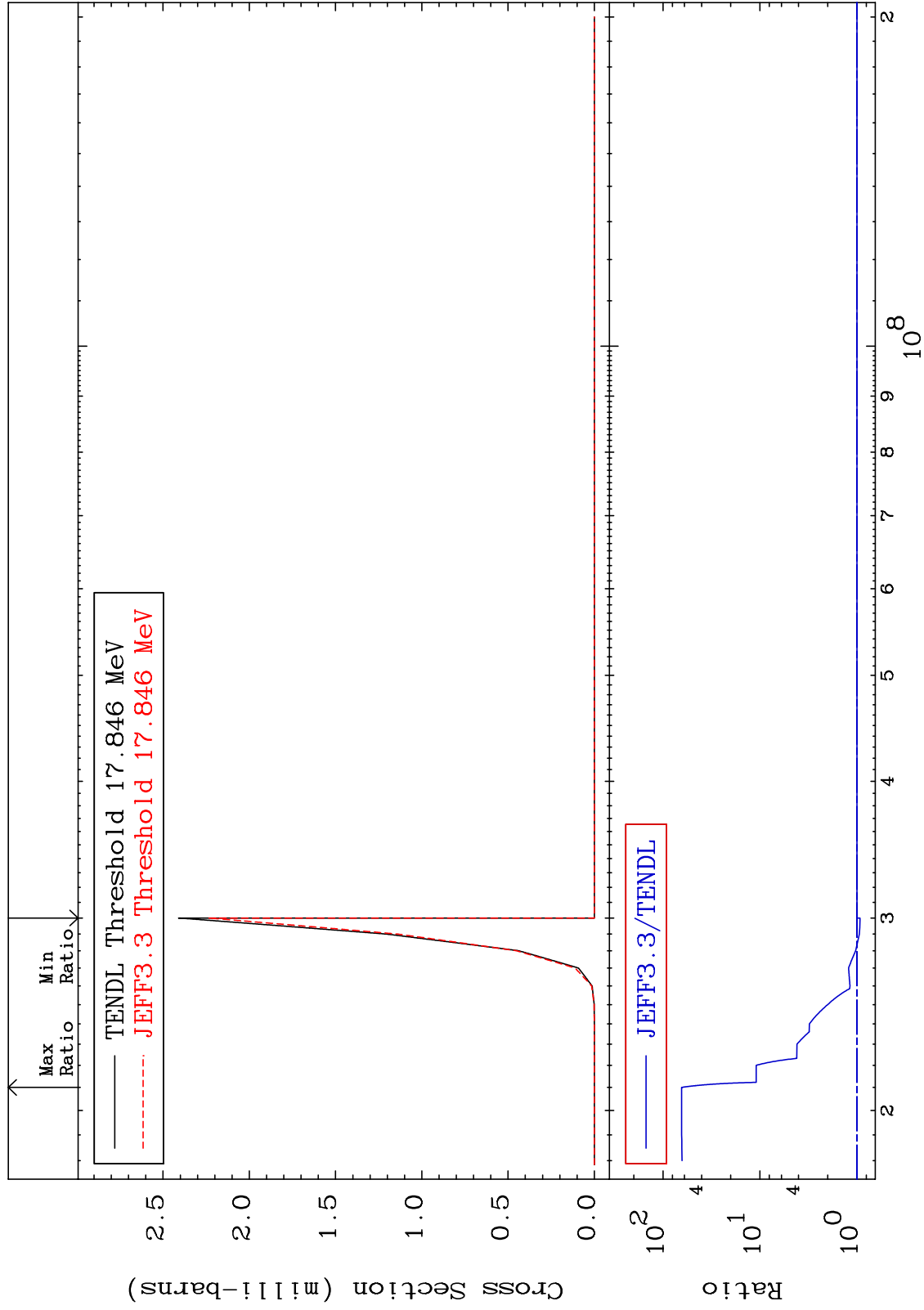


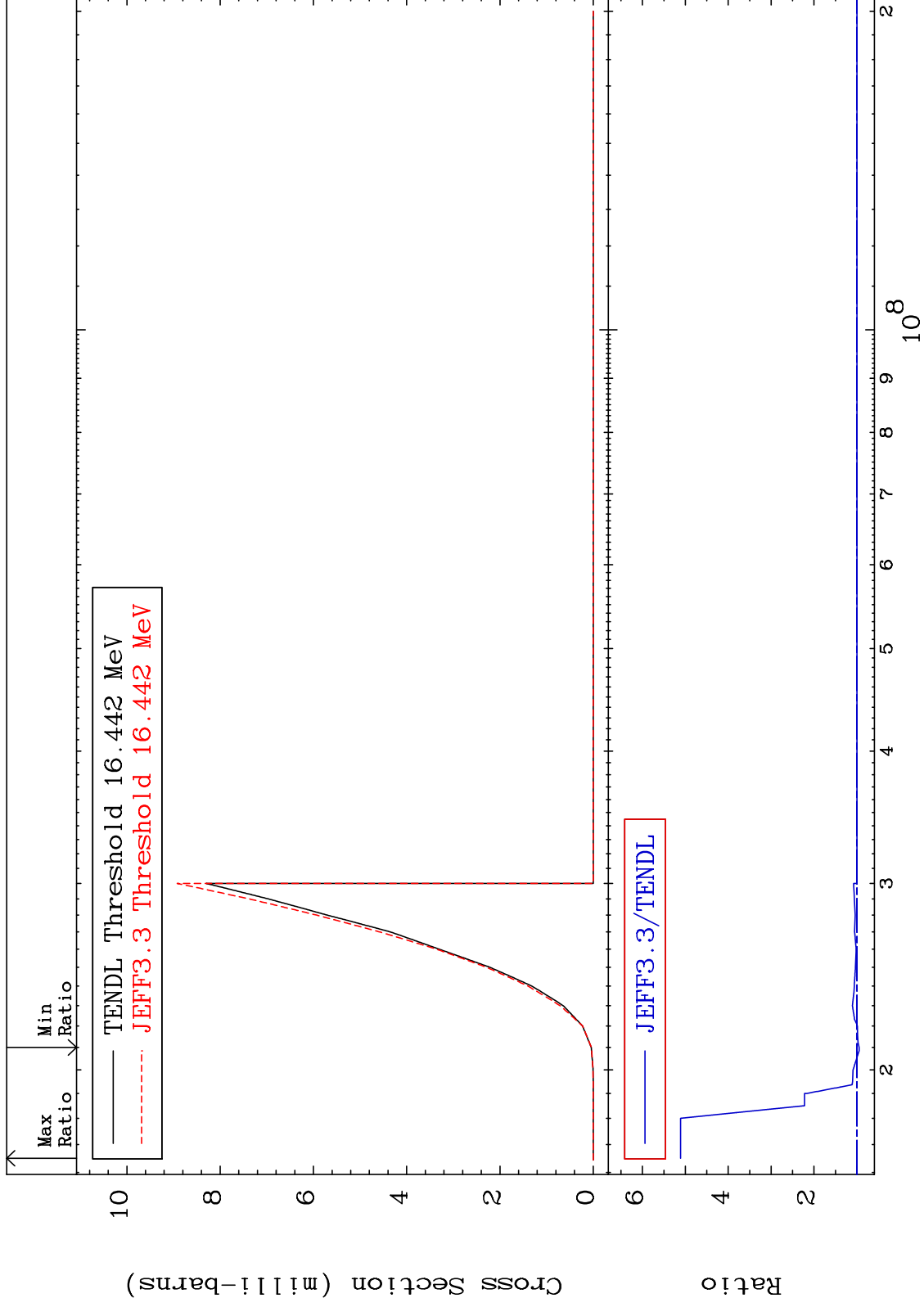
79

Incident Energy (eV)

37-Rb-87

Radionuclide Production Cross Section -7.131 To 6320. %



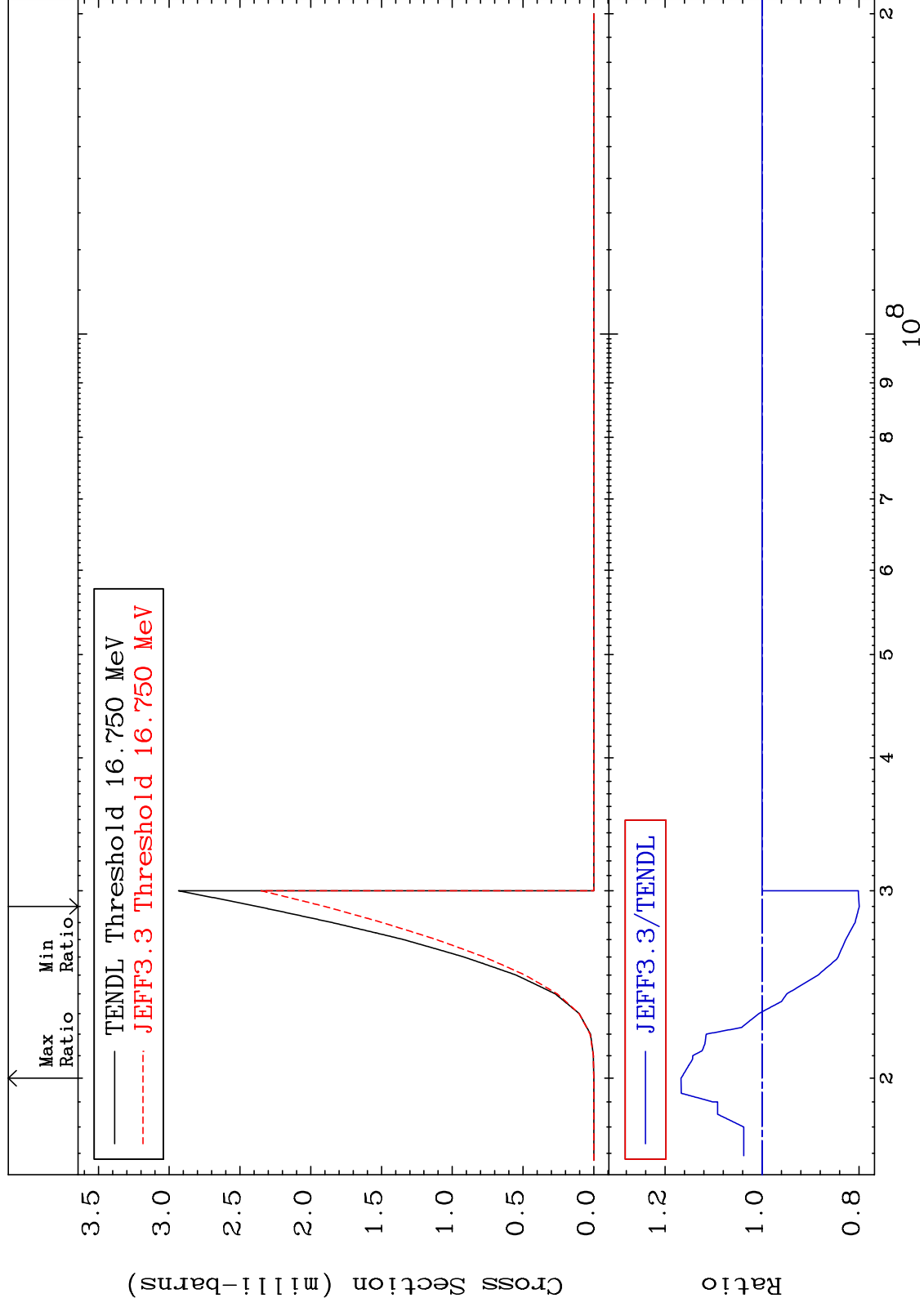


MAT 3731

(n, n') d:36-Kr-85m1

37-Rb-87

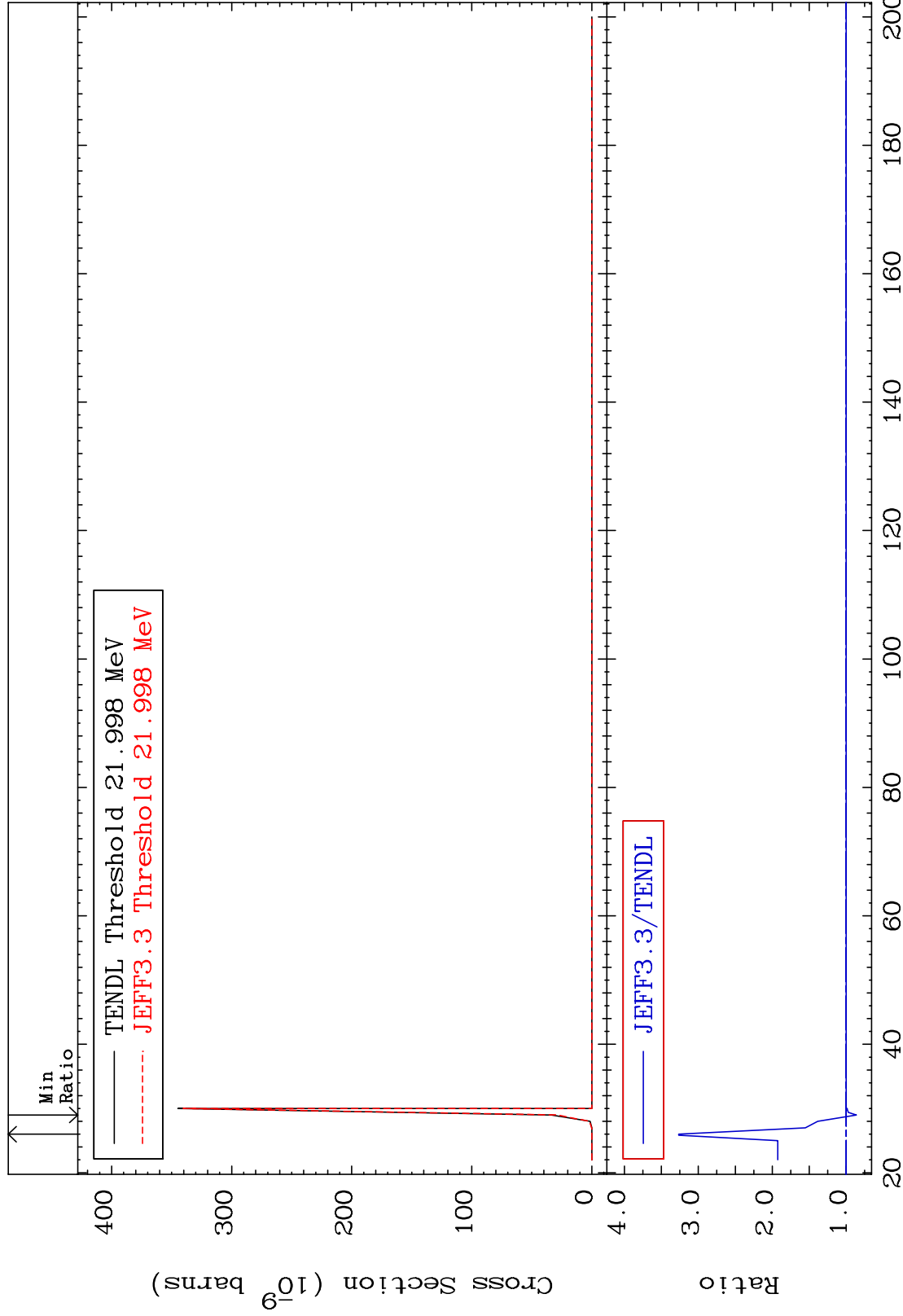
Radionuclide Production Cross Section -20.07 To 16.72 %



MAT 3731

(n, n') He-3:35-Br-84g
Radionuclide Production Cross Section -13.81 To 226.5 %

37-Rb-87



83

Incident Energy (MeV)

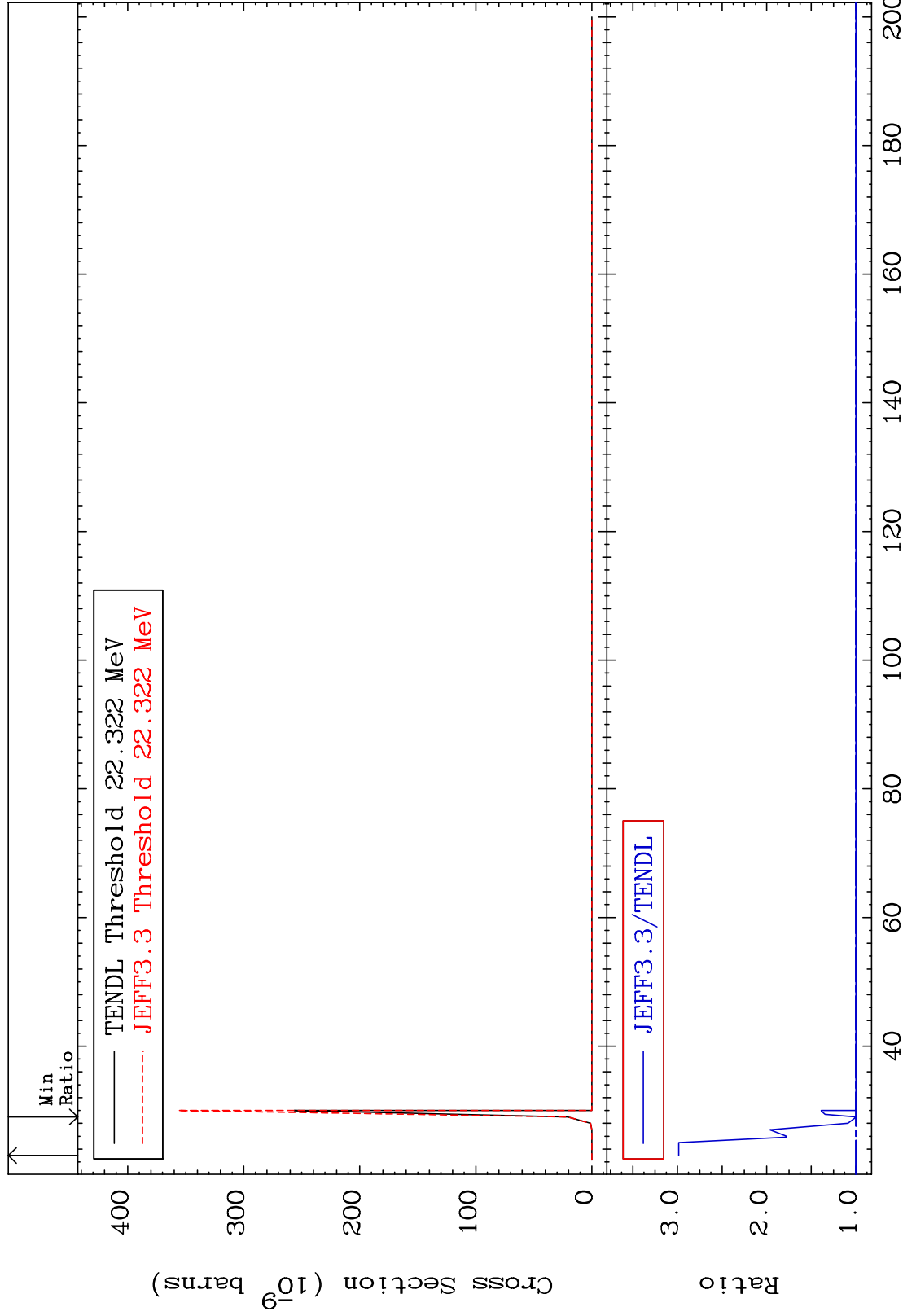
37-Rb-87

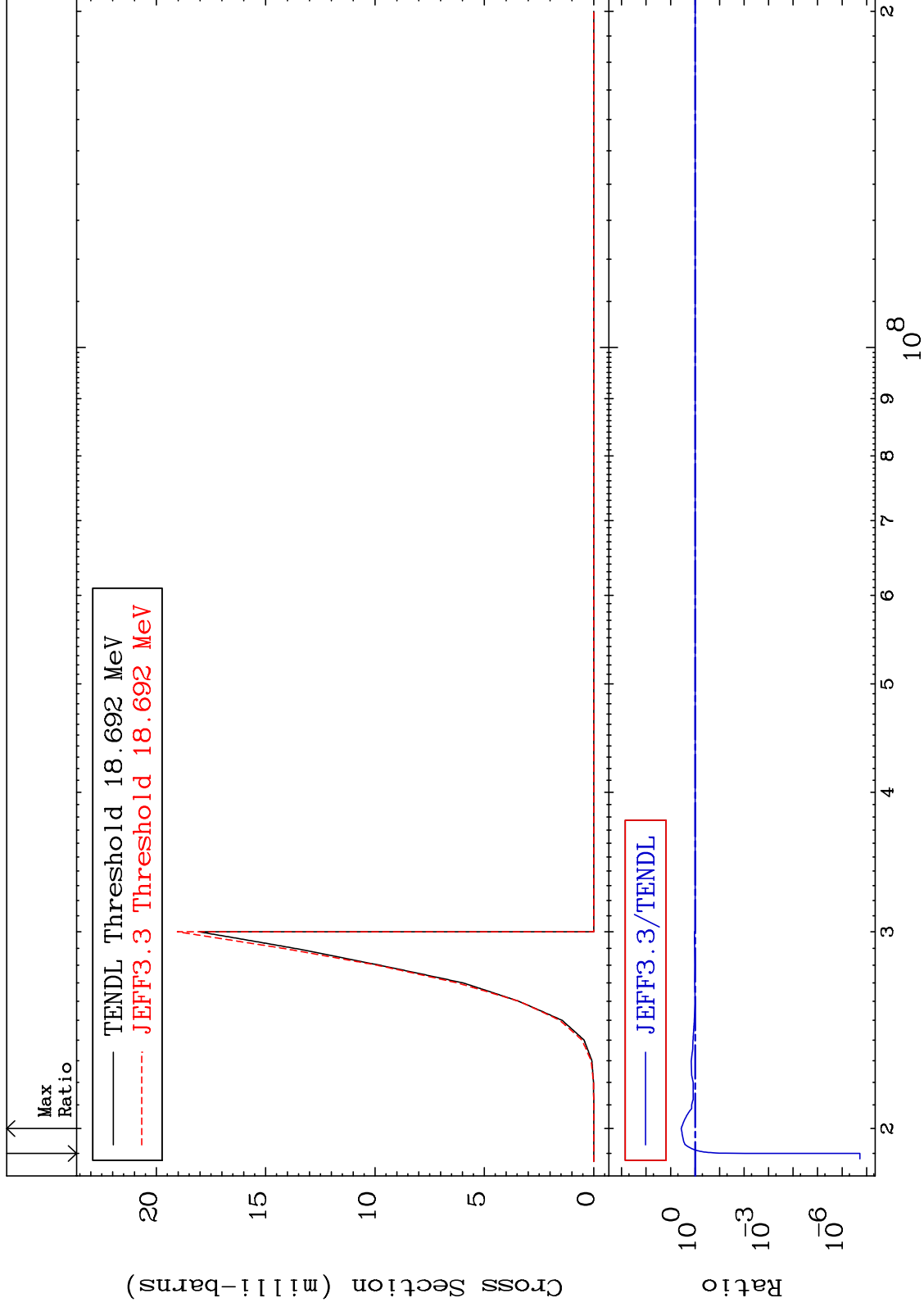
MAT 3731

(n, n') He-3:35-Br-84m1

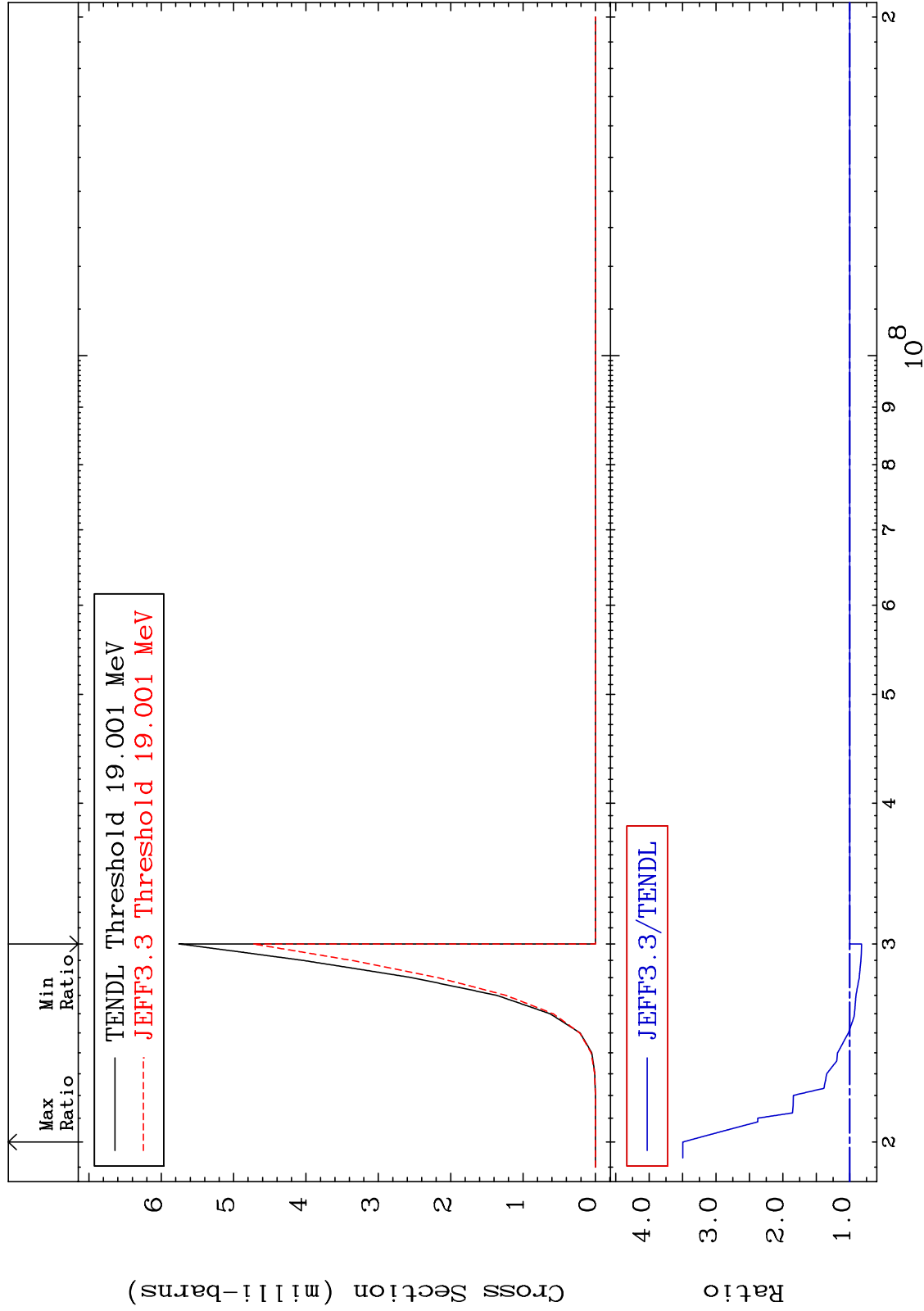
37-Rb-87

Radionuclide Production Cross Section -0.586 To 198.5 %





Radionuclide Production Cross Section -17.71 To 249.7 %

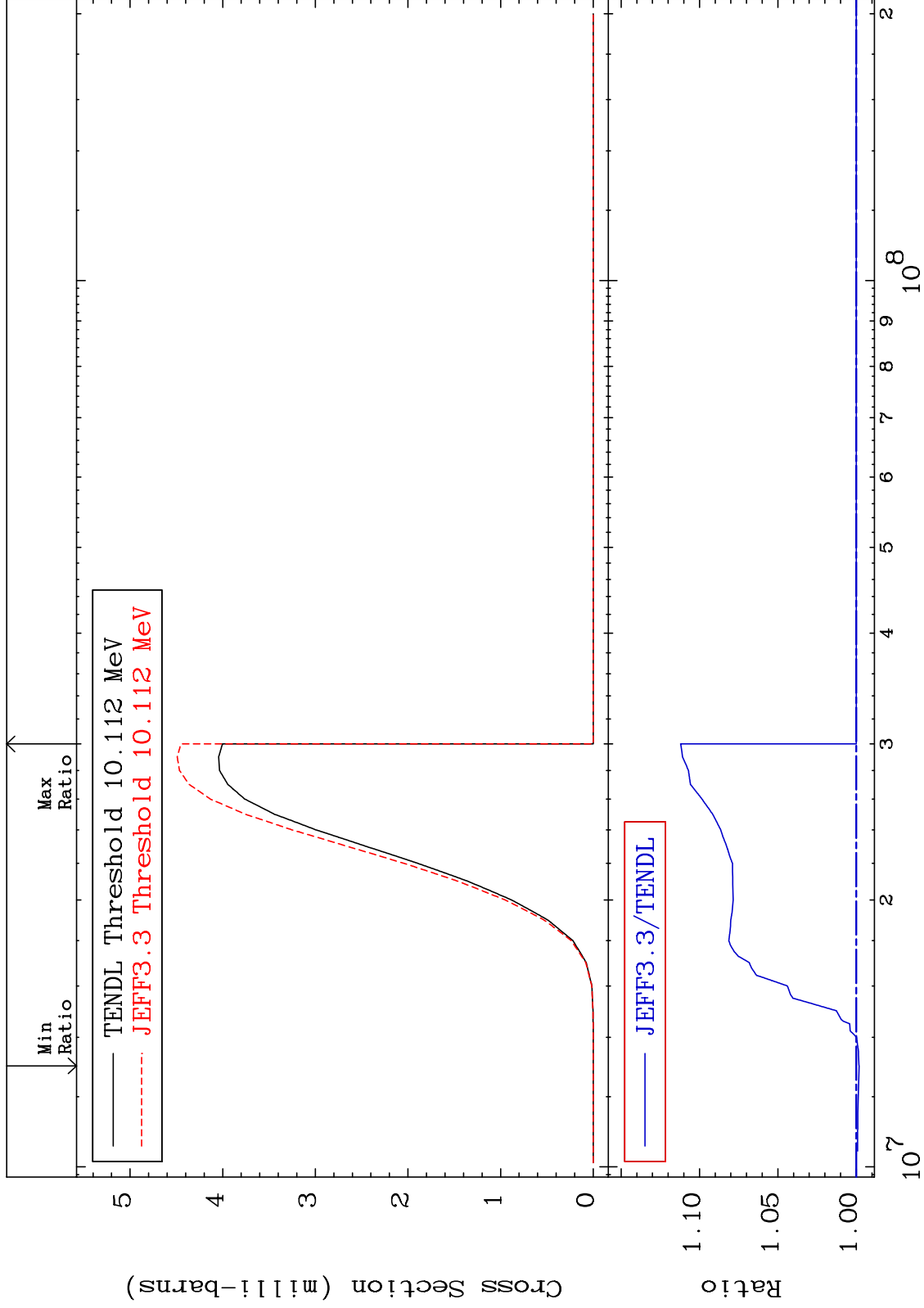


MAT 3731

37-Rb-87

(n, t) : 36-Kr-85g

Radionuclide Production Cross Section -0.187 To 11.20 %



87

Incident Energy (eV)

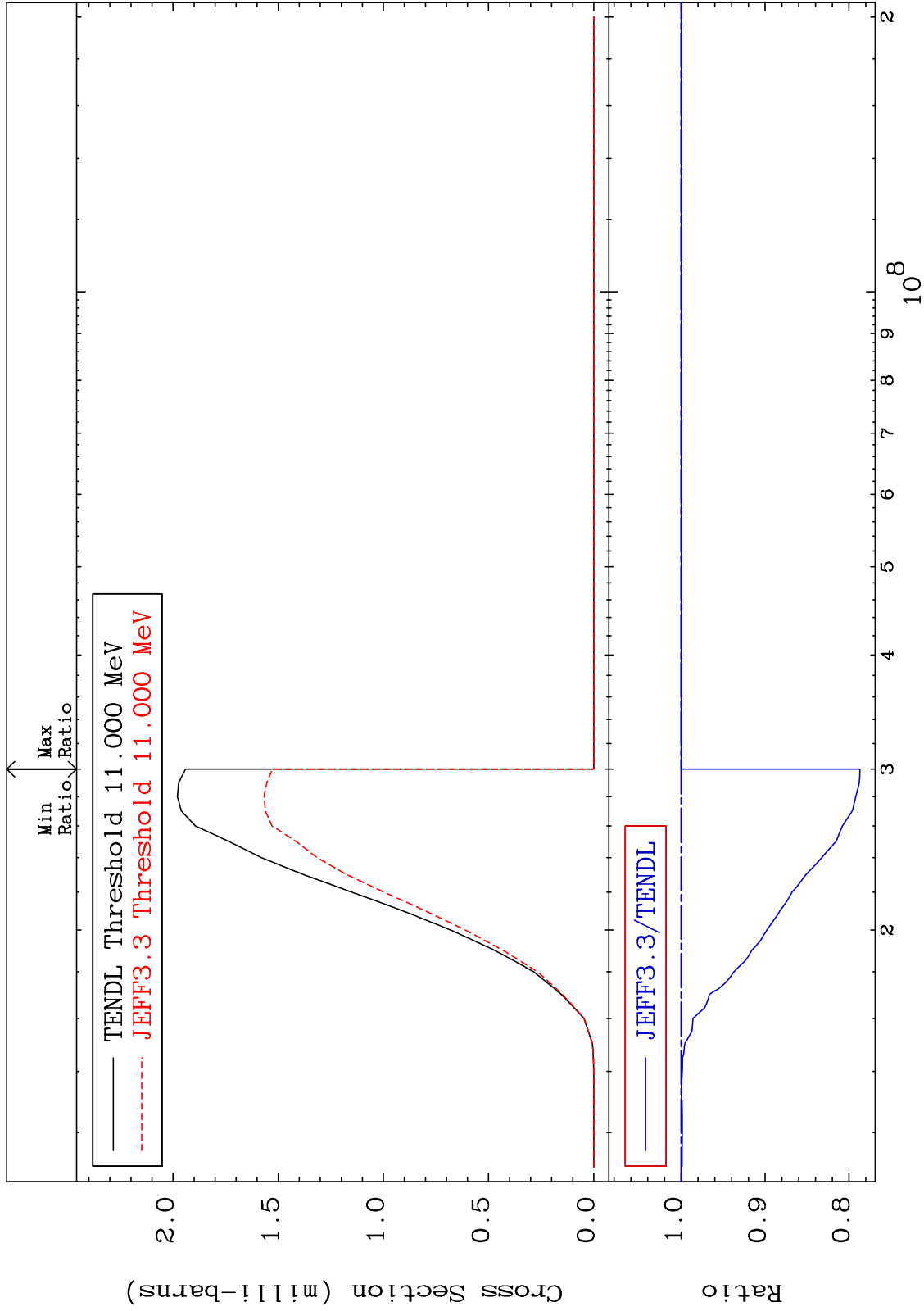
37-Rb-87

MAT 3731

(n, t):36-Kr-85m1

37-Rb-87

Radionuclide Production Cross Section -21.30 To 0.000 %



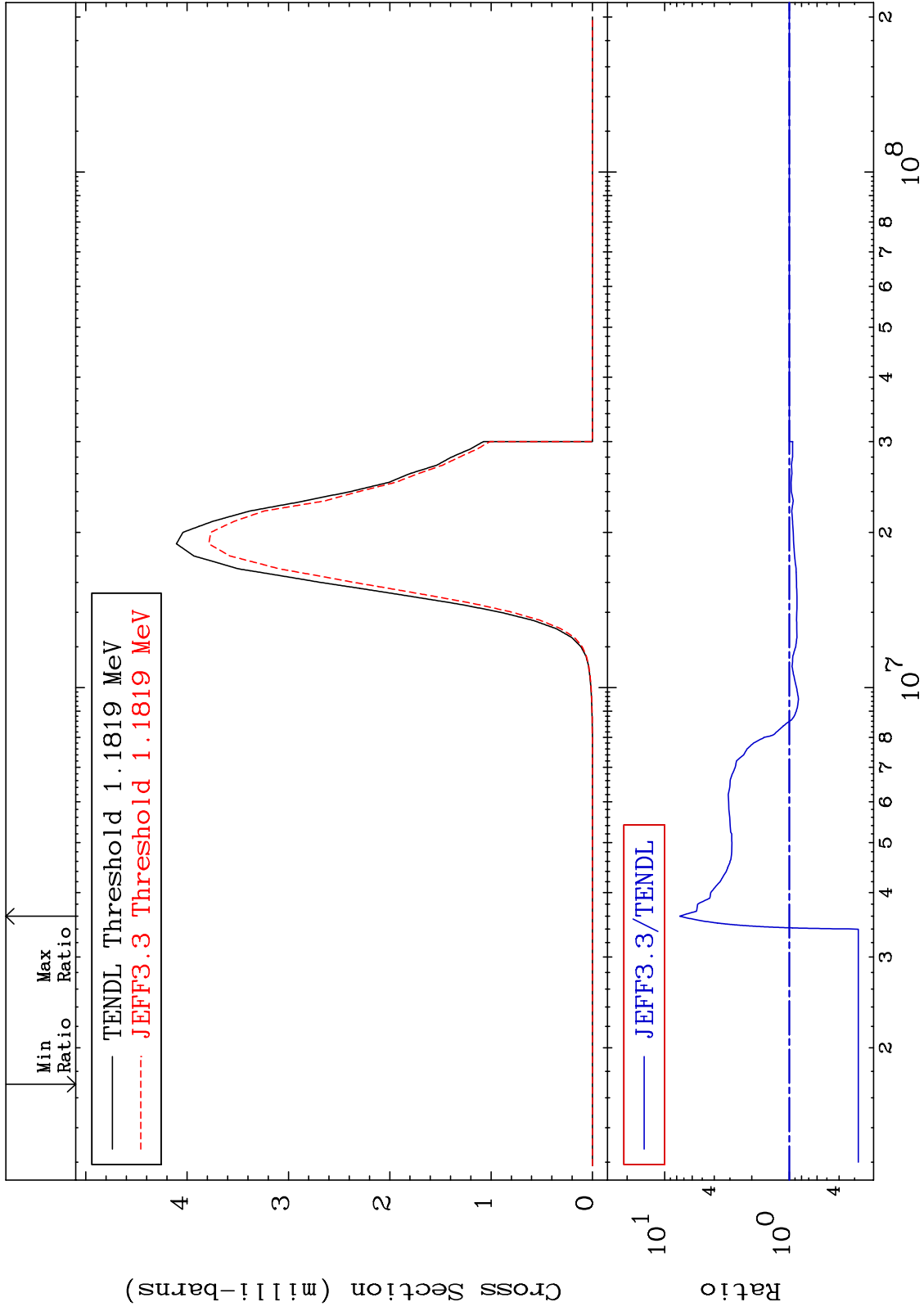
MAT 3731

(n, α): 35-Br-84g

37-Rb-87

Radionuclide Production Cross Section

-72.00 To 655.3 %

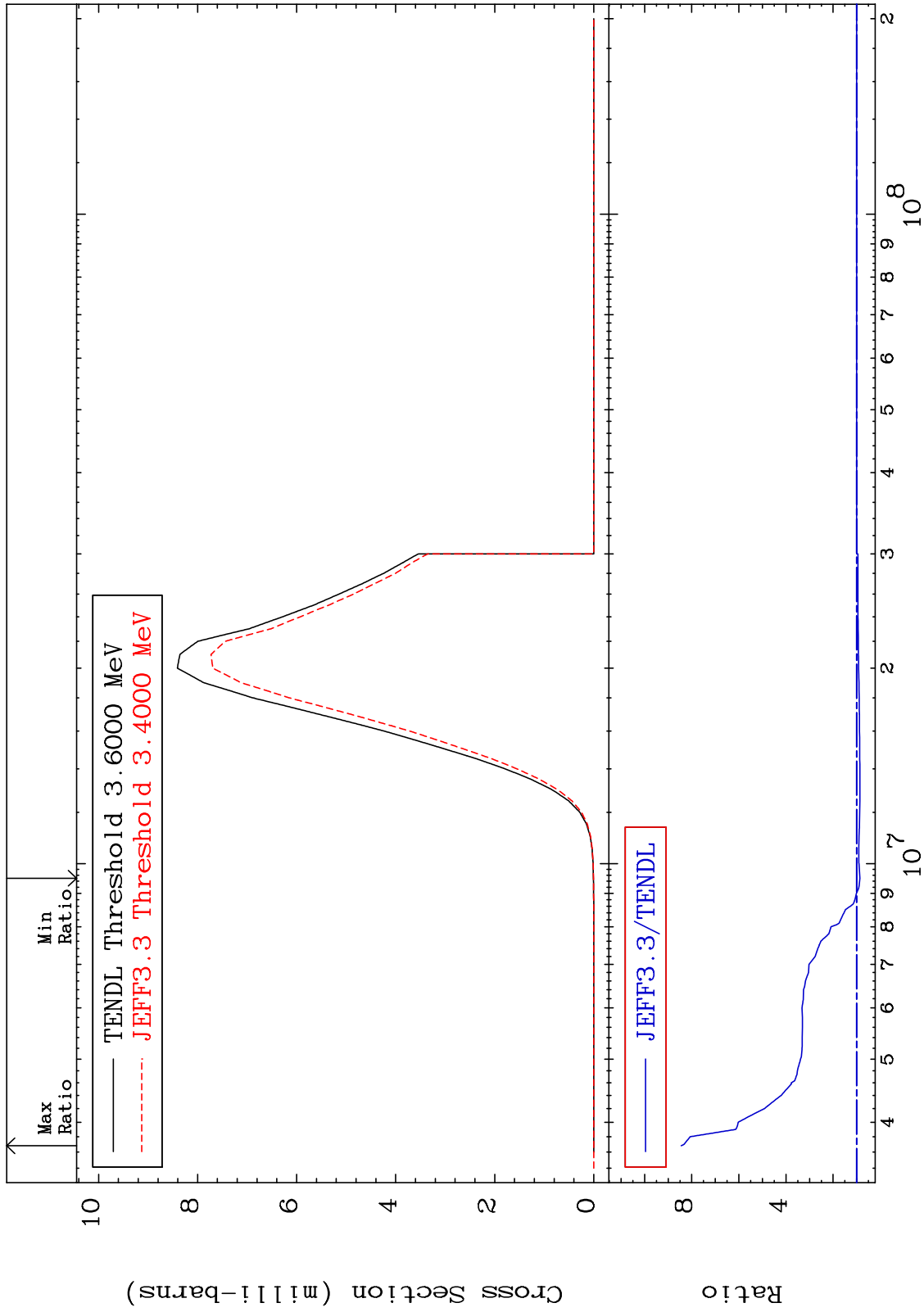


MAT 3731

(n, α): 35-Br-84m1

37-Rb-87

Radionuclide Production Cross Section -13.83 To 744.6 %



90

Incident Energy (eV)

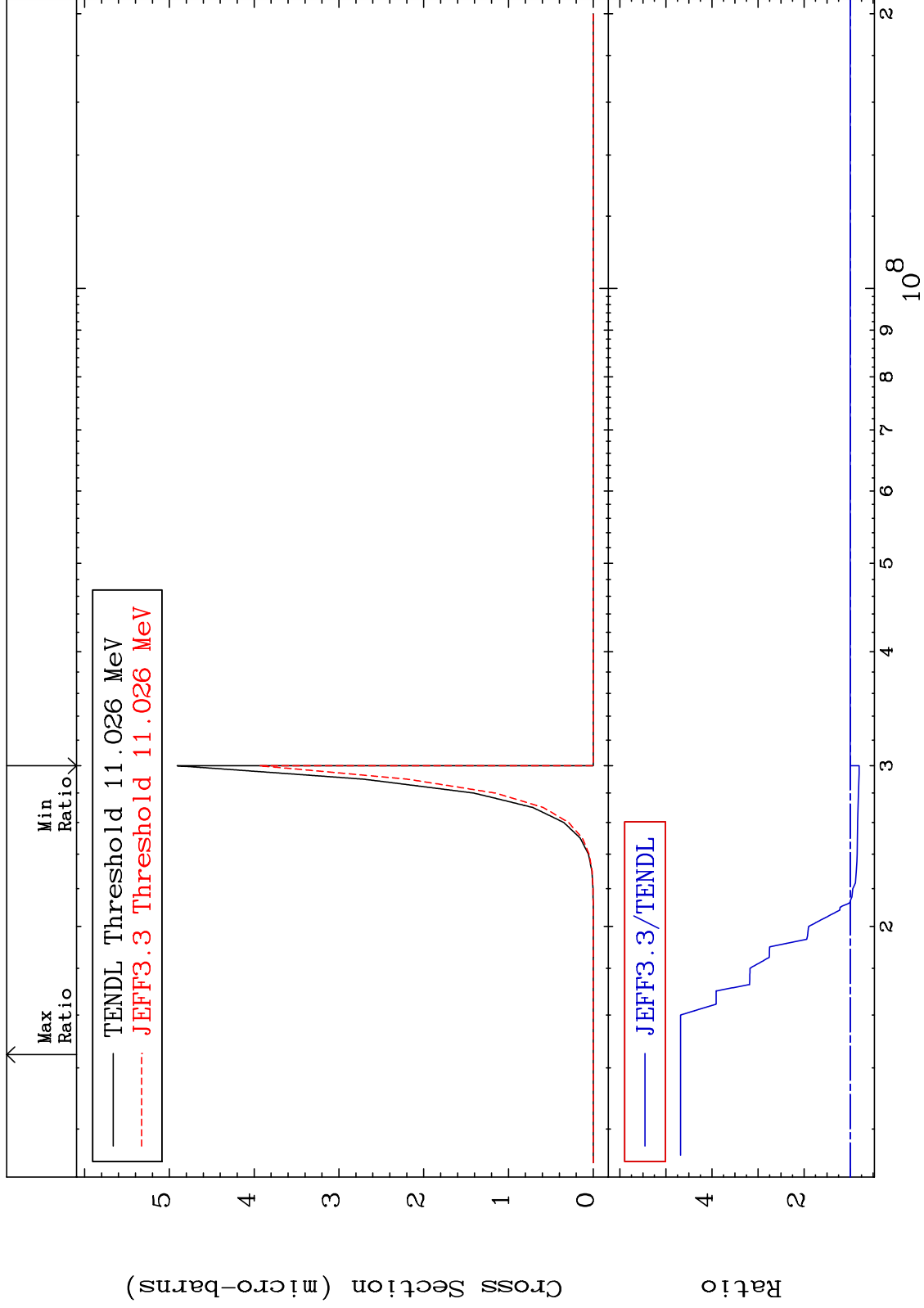
37-Rb-87

MAT 3731

(n, p) α :34-Se-83g

37-Rb-87

Radionuclide Production Cross Section -19.73 To 368.1 %

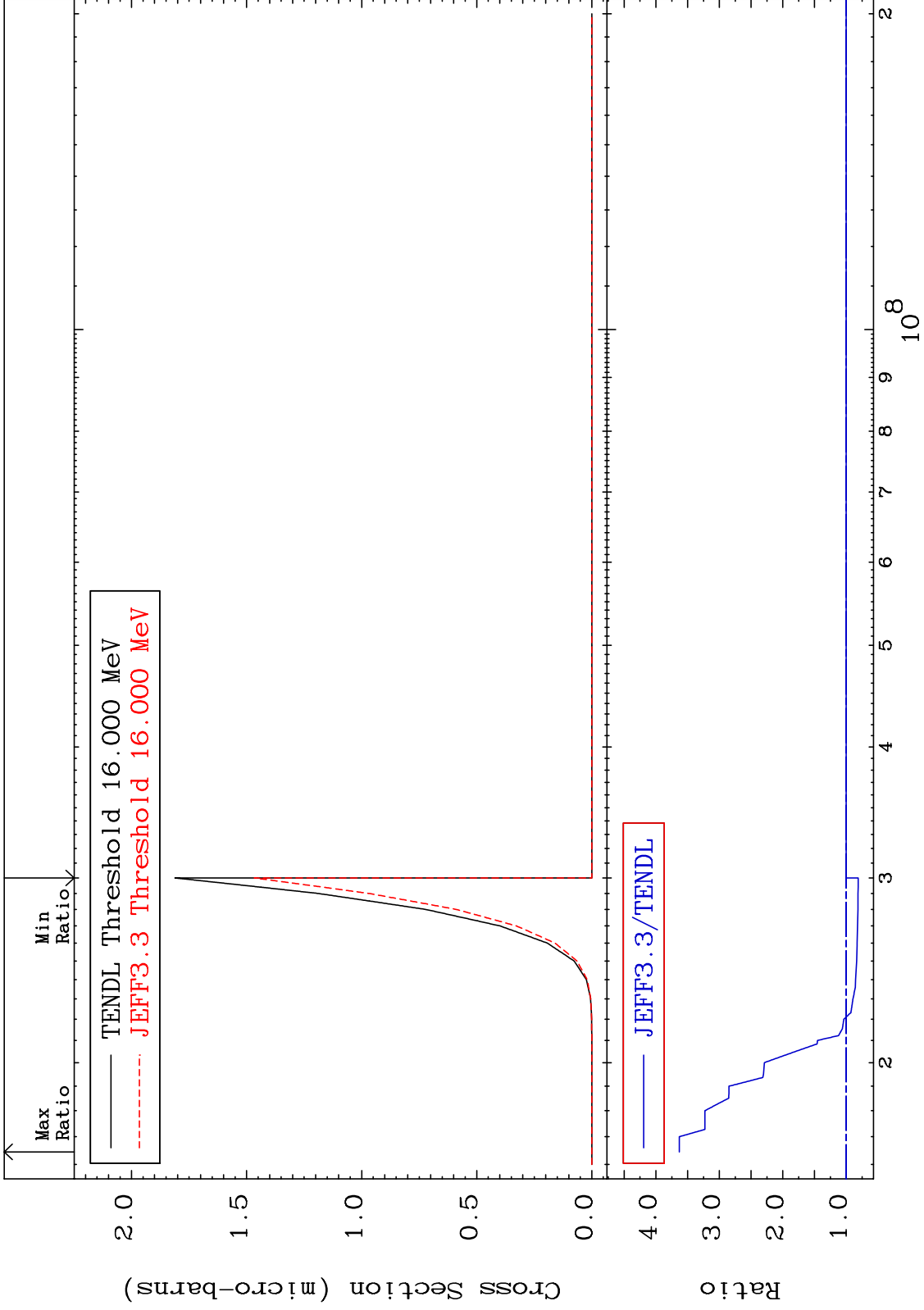


MAT 3731

(n, p) α : 34-Se-83m1

37-Rb-87

Radionuclide Production Cross Section -18.97 To 263.0 %



92

Incident Energy (eV)

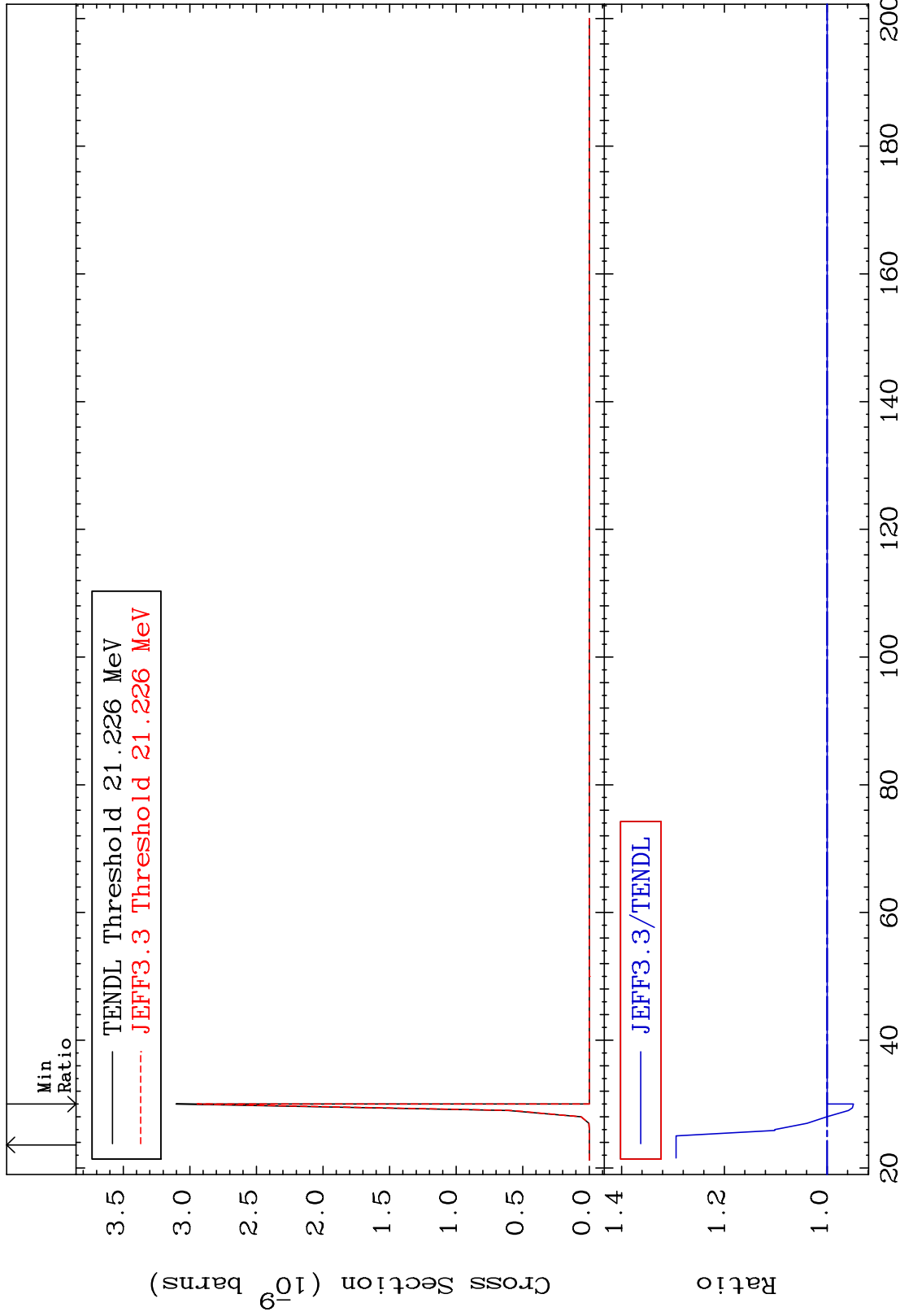
37-Rb-87

MAT 3731

(n,p) t:35-Br-84g

37-Rb-87

Radionuclide Production Cross Section -5.132 To 29.38 %



93

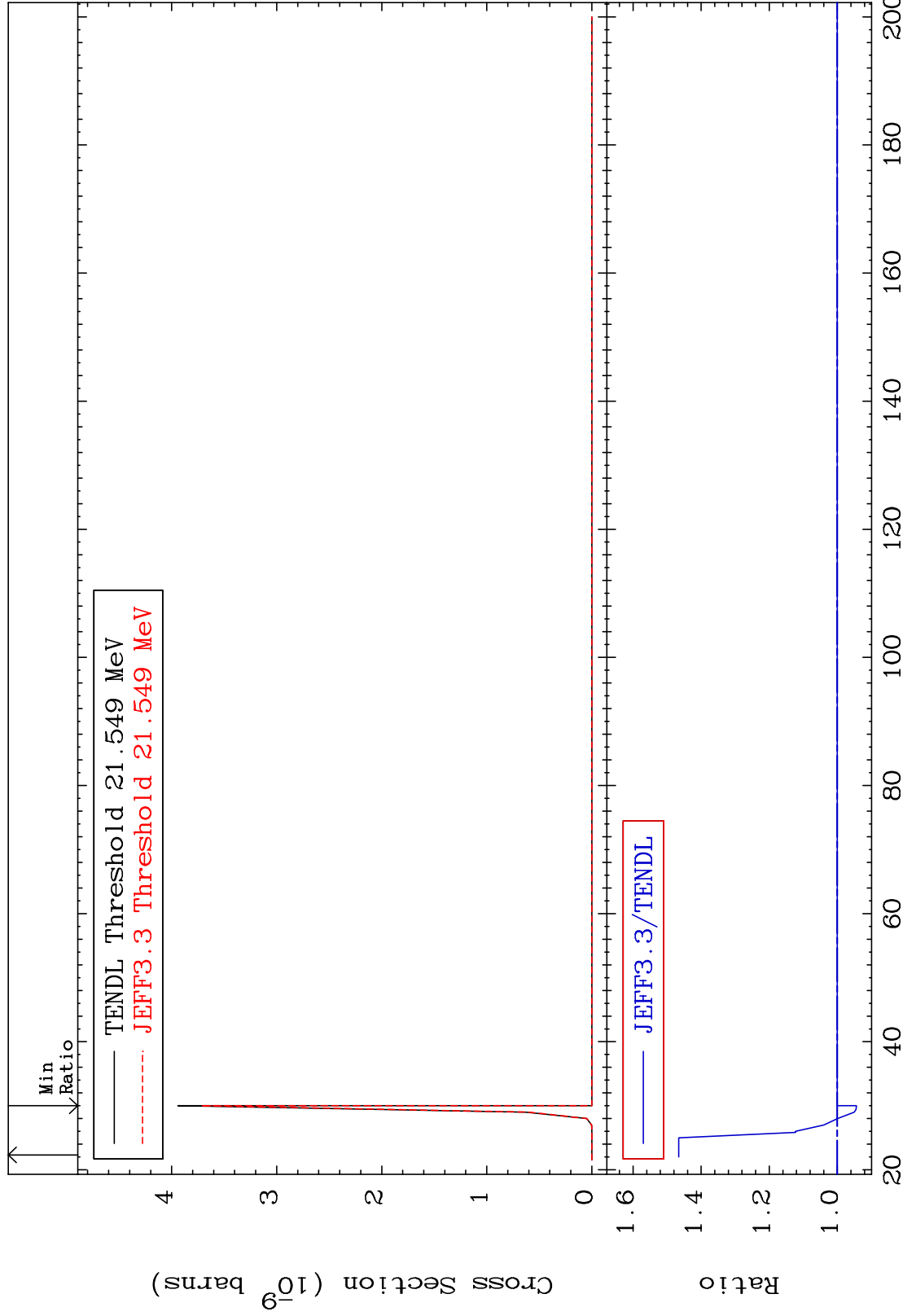
37-Rb-87

MAT 3731

(n, p) t: 35-Br-84m1

37-Rb-87

Radionuclide Production Cross Section -5.611 To 46.58 %



94

Incident Energy (MeV)

37-Rb-87