

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

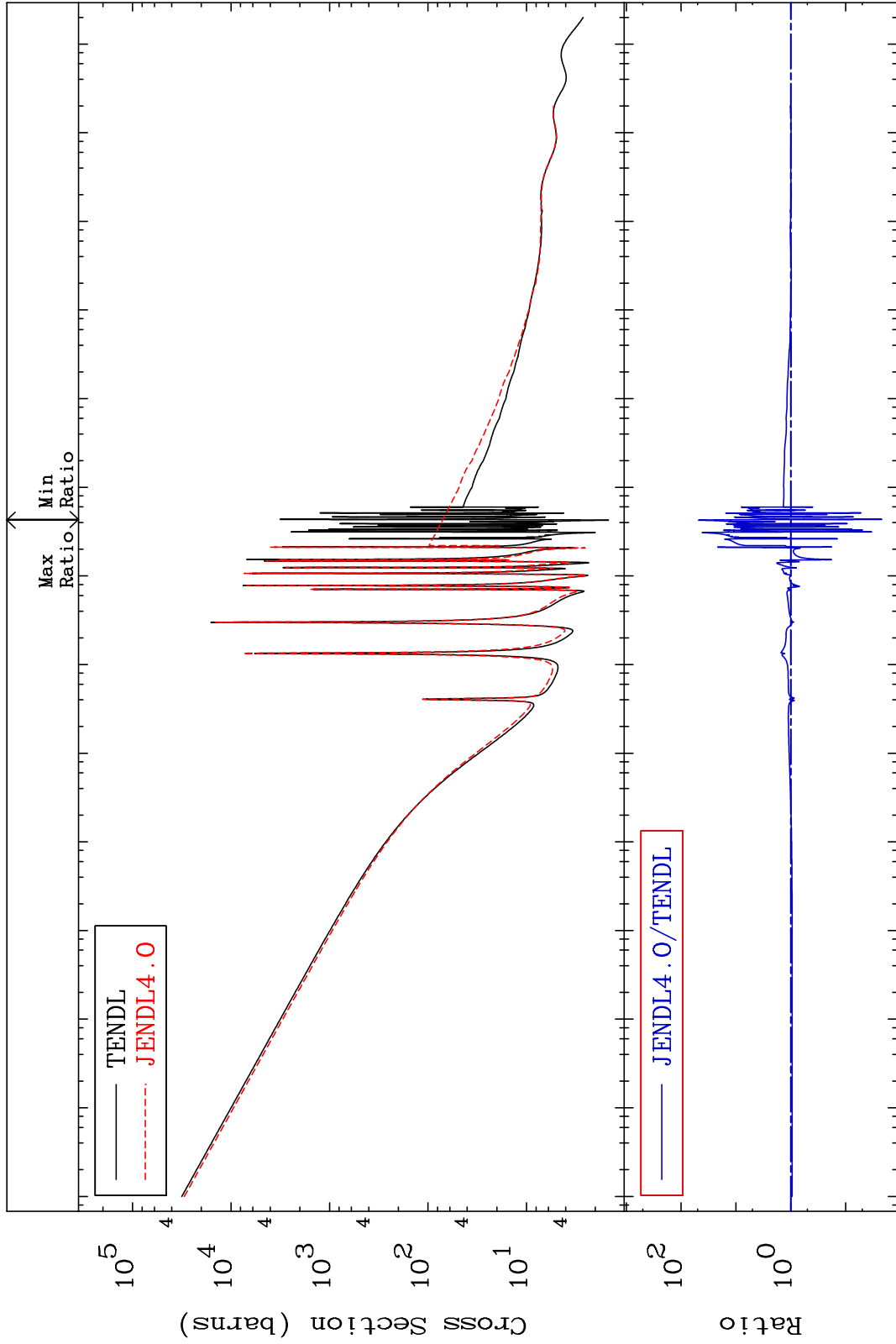
MAT 7225

Total

72-Hf-174

Cross Section

-97.78 To 4755. %



Max Ratio

Min Ratio

TENDL
JENDL4.0

JENDL4.0/TENDL

Incident Energy (eV)

72-Hf-174

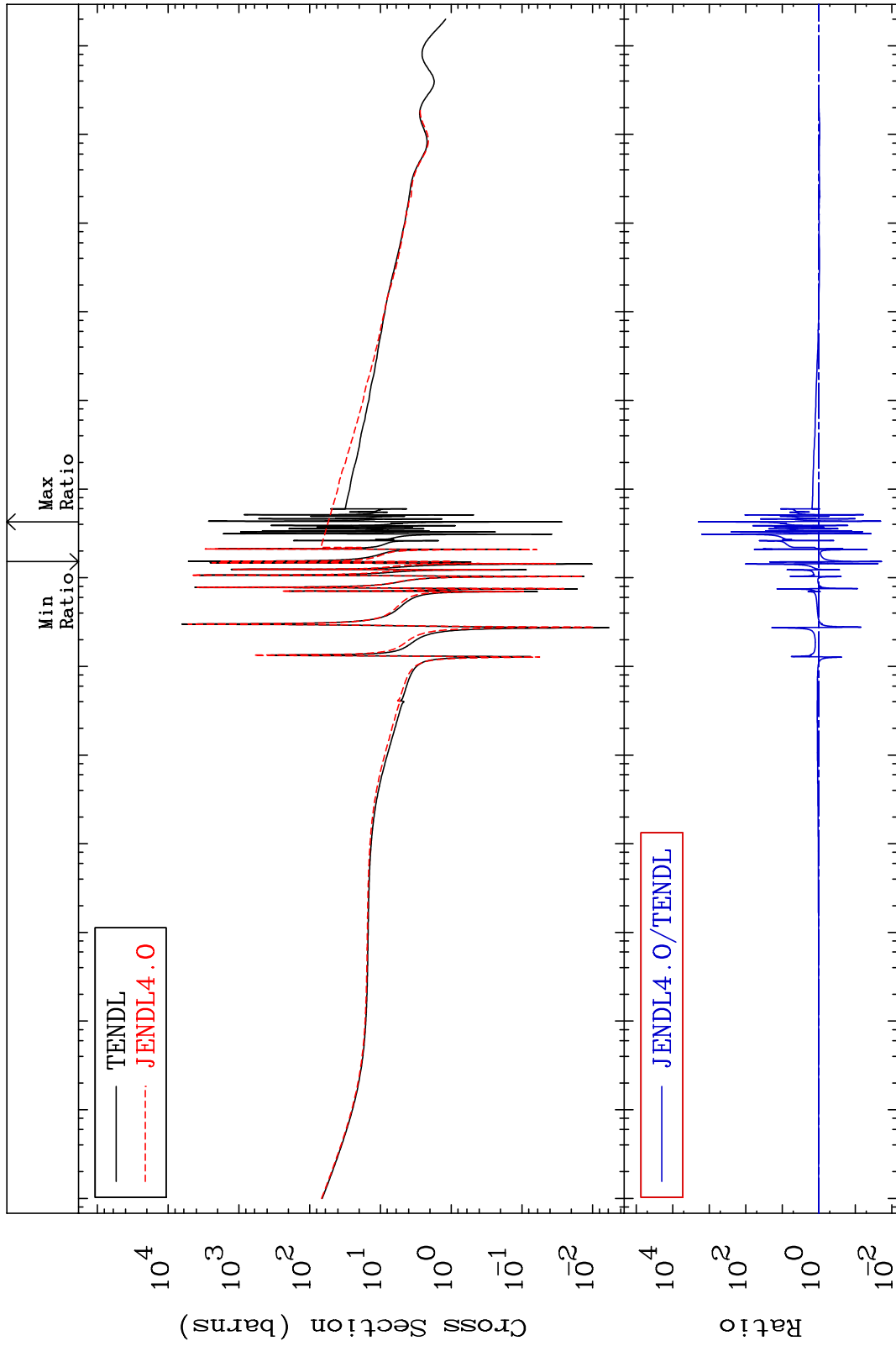
MAT 7225

Elastic

⁷²Hf-174

-98.08 To 9999. %

Cross Section



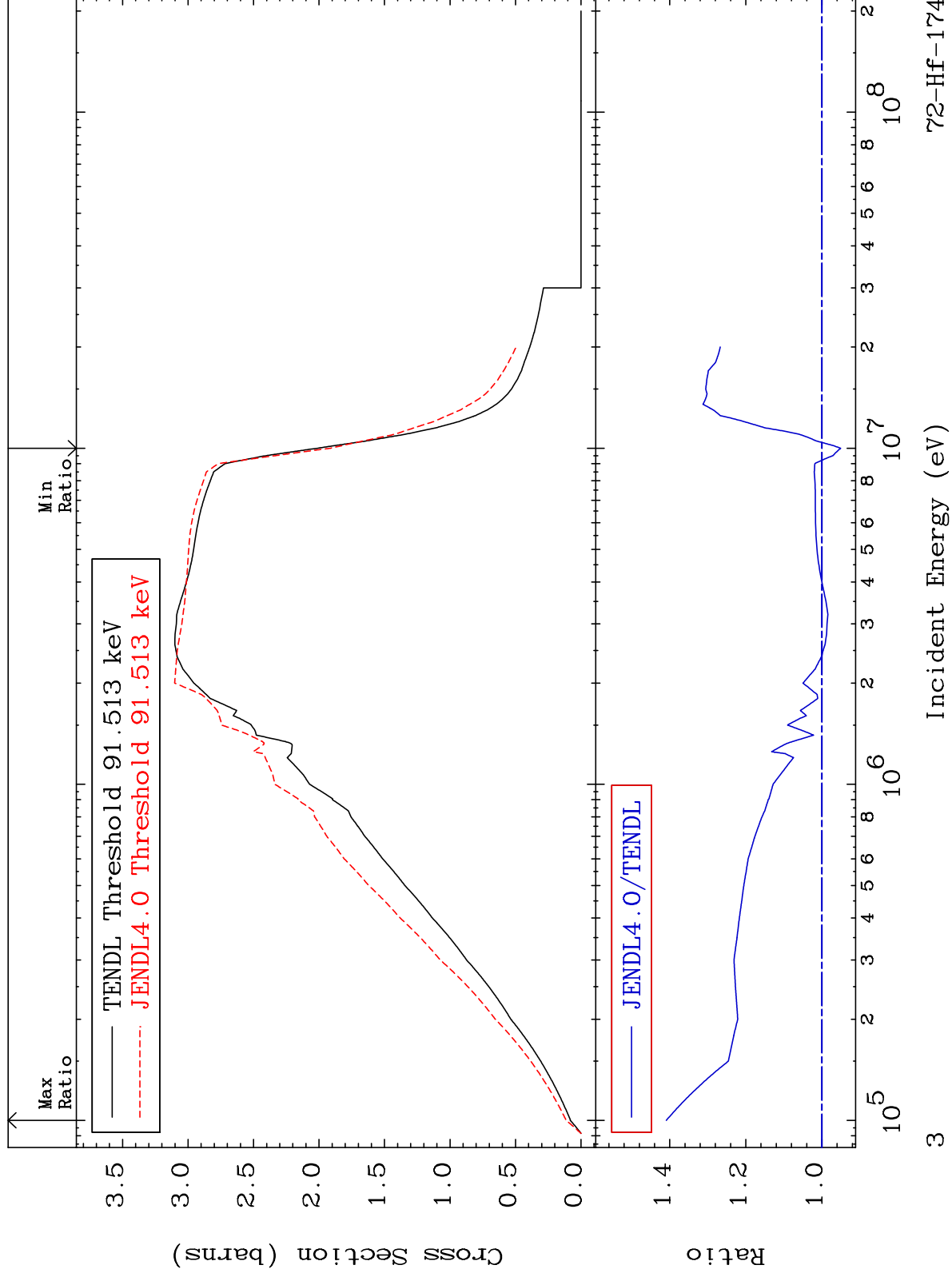
⁷²Hf-174

Incident Energy (eV)

MAT 7225

Inelastic
Cross Section

72-Hf-174
-4.951 To 40.90 %



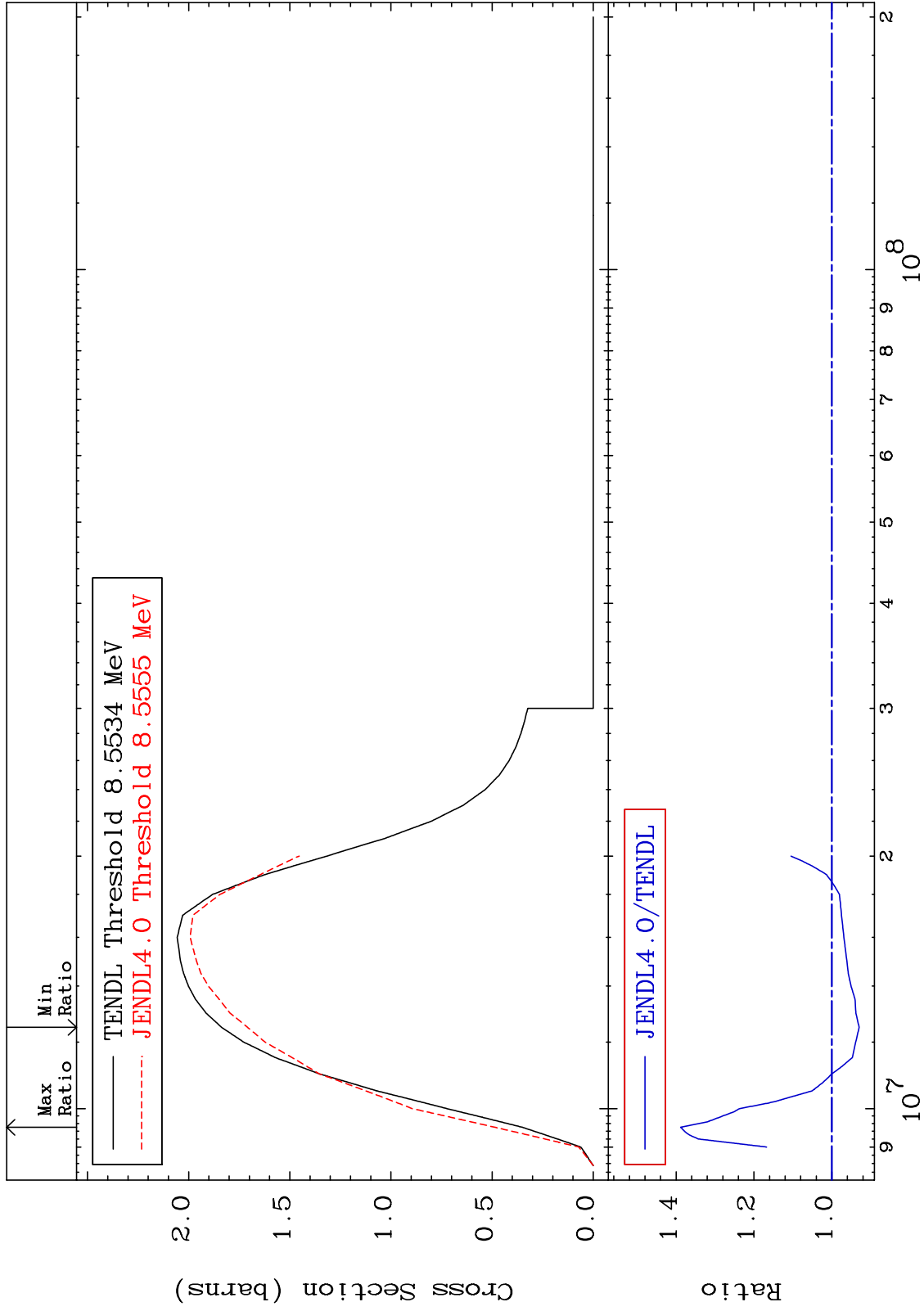
MAT 7225

(n,2n)

72-Hf-174

Cross Section

-7.024 To 38.84 %



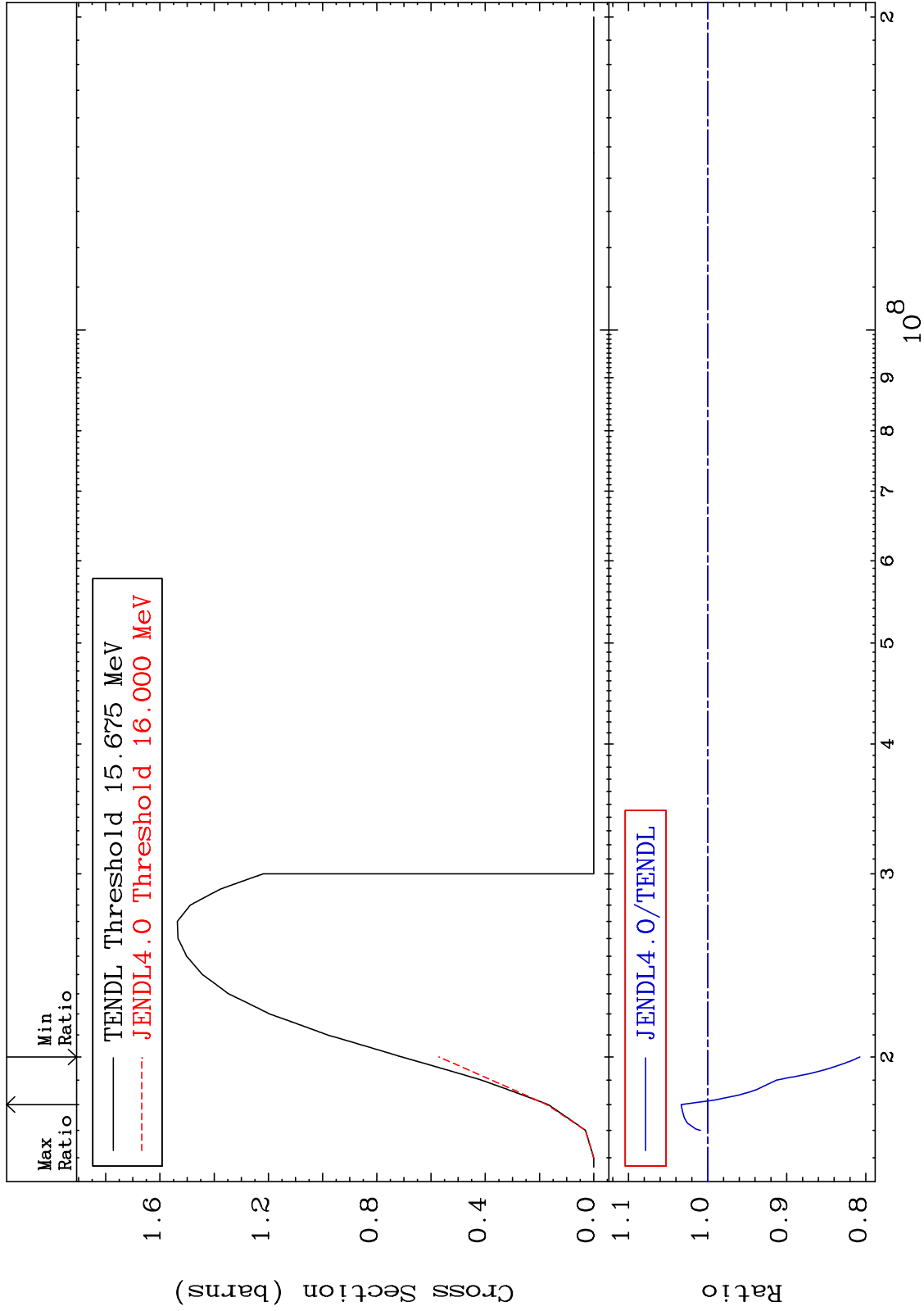
4

Incident Energy (eV)

72-Hf-174

Cross Section

-19.25 To 3.337 %



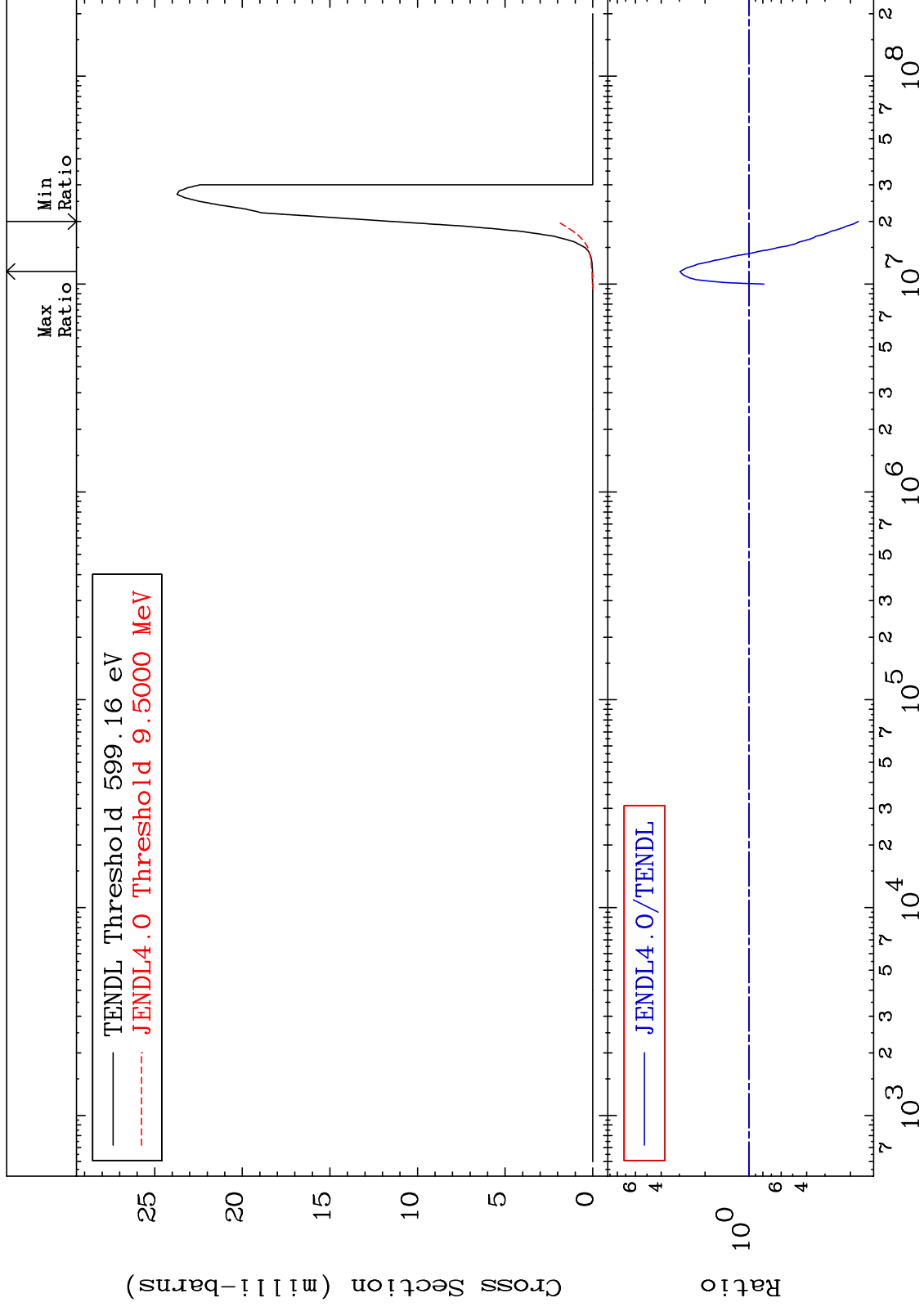
MAT 7225

(n,n') α

Cross Section

72-Hf-174

-82.33 To 196.7 %



6

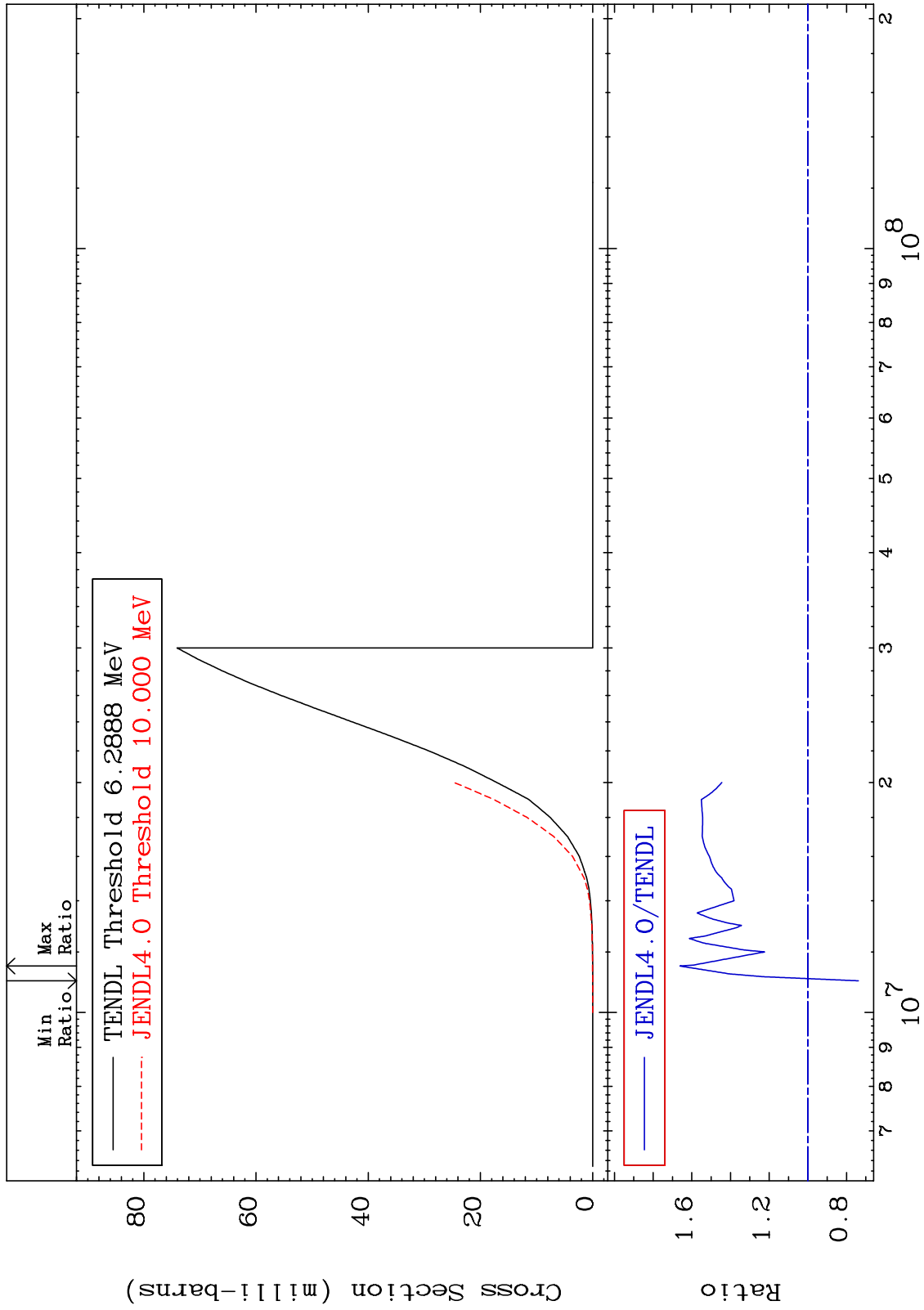
Incident Energy (eV)

72-Hf-174

MAT 7225

(n,n') p
Cross Section

⁷²Hf-174
-26.15 To 66.08 %



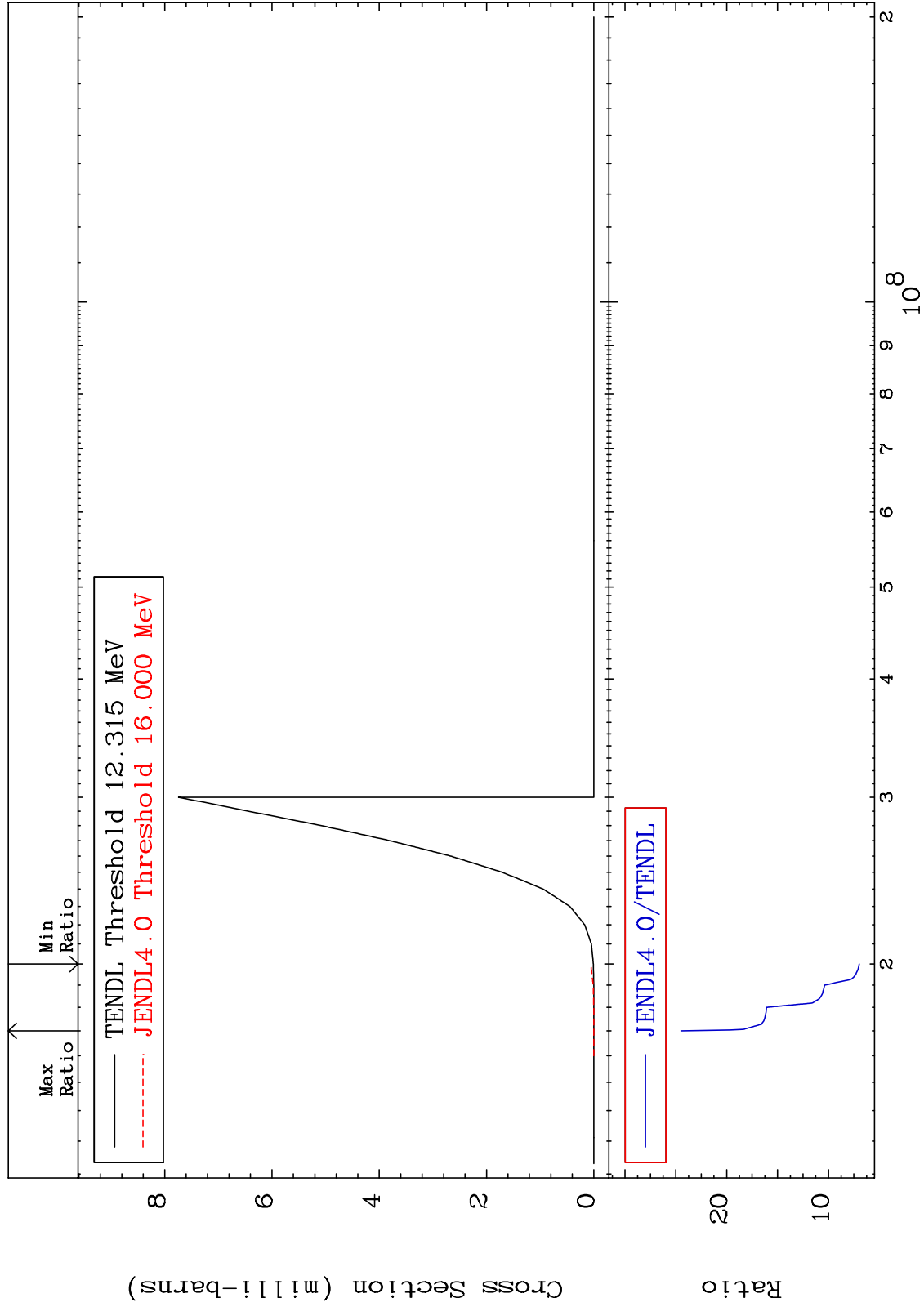
MAT 7225

(n,n') d

72-Hf-174

Cross Section

596.5 To 2349. %



8

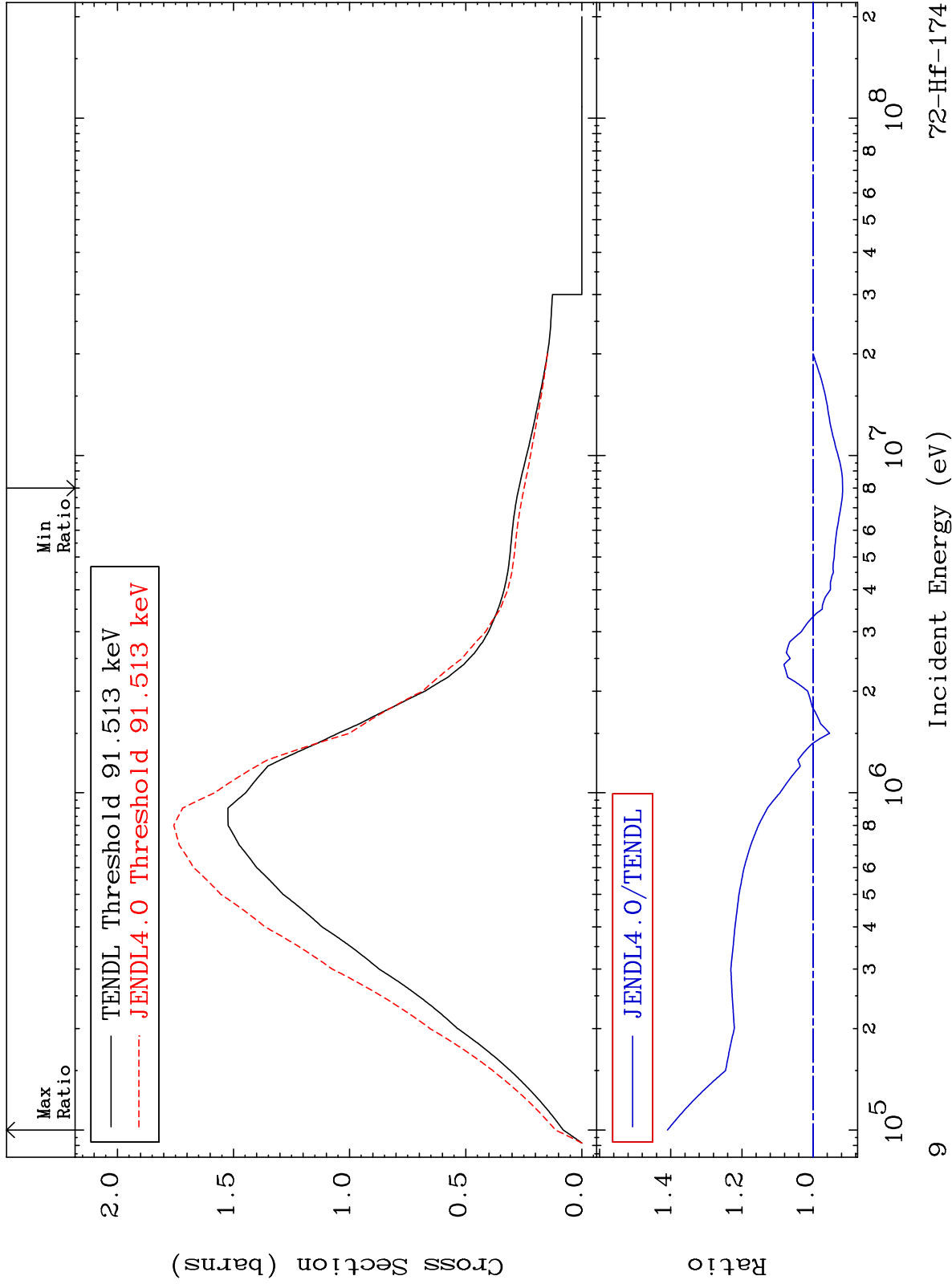
Incident Energy (eV)

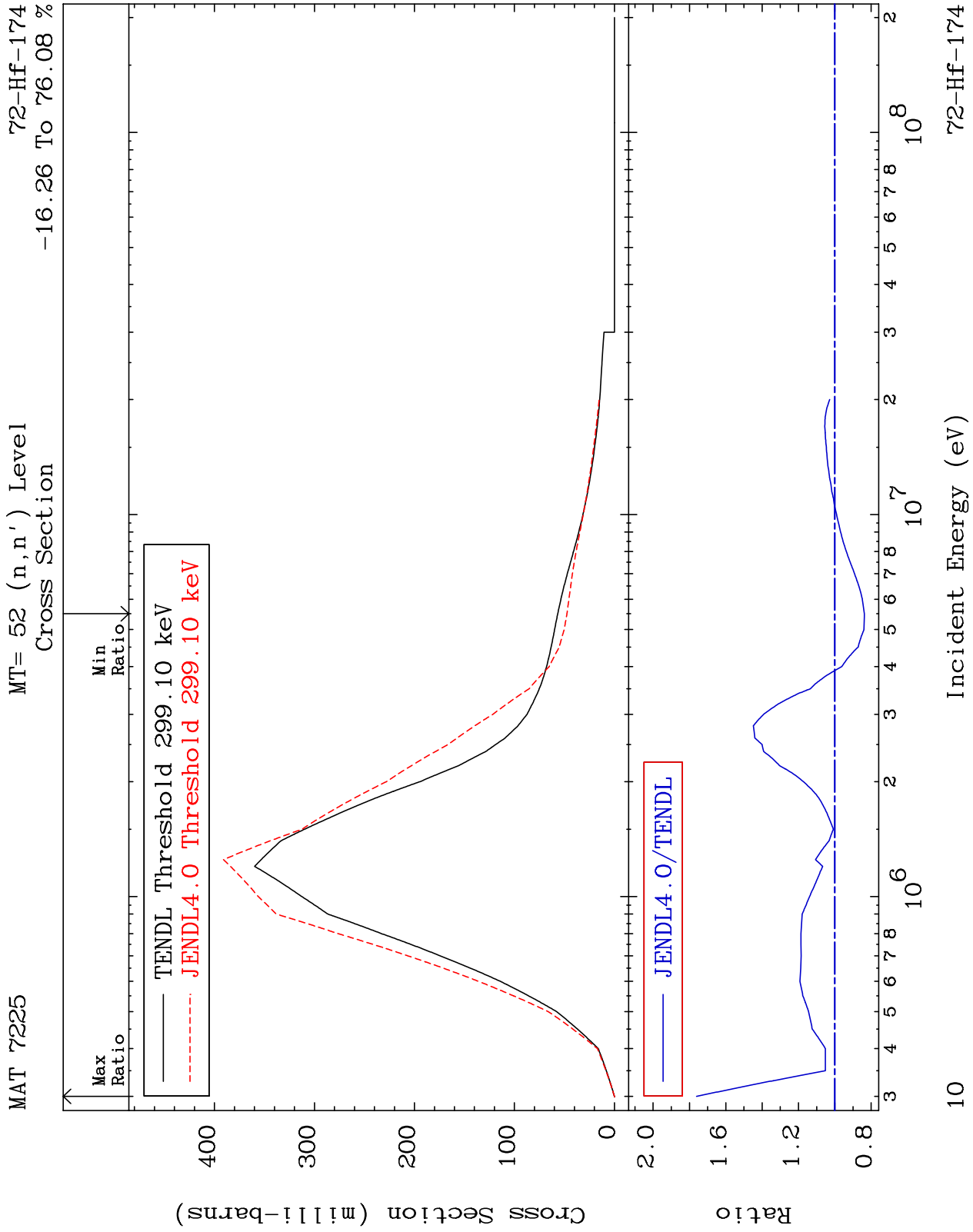
72-Hf-174

MAT 7225

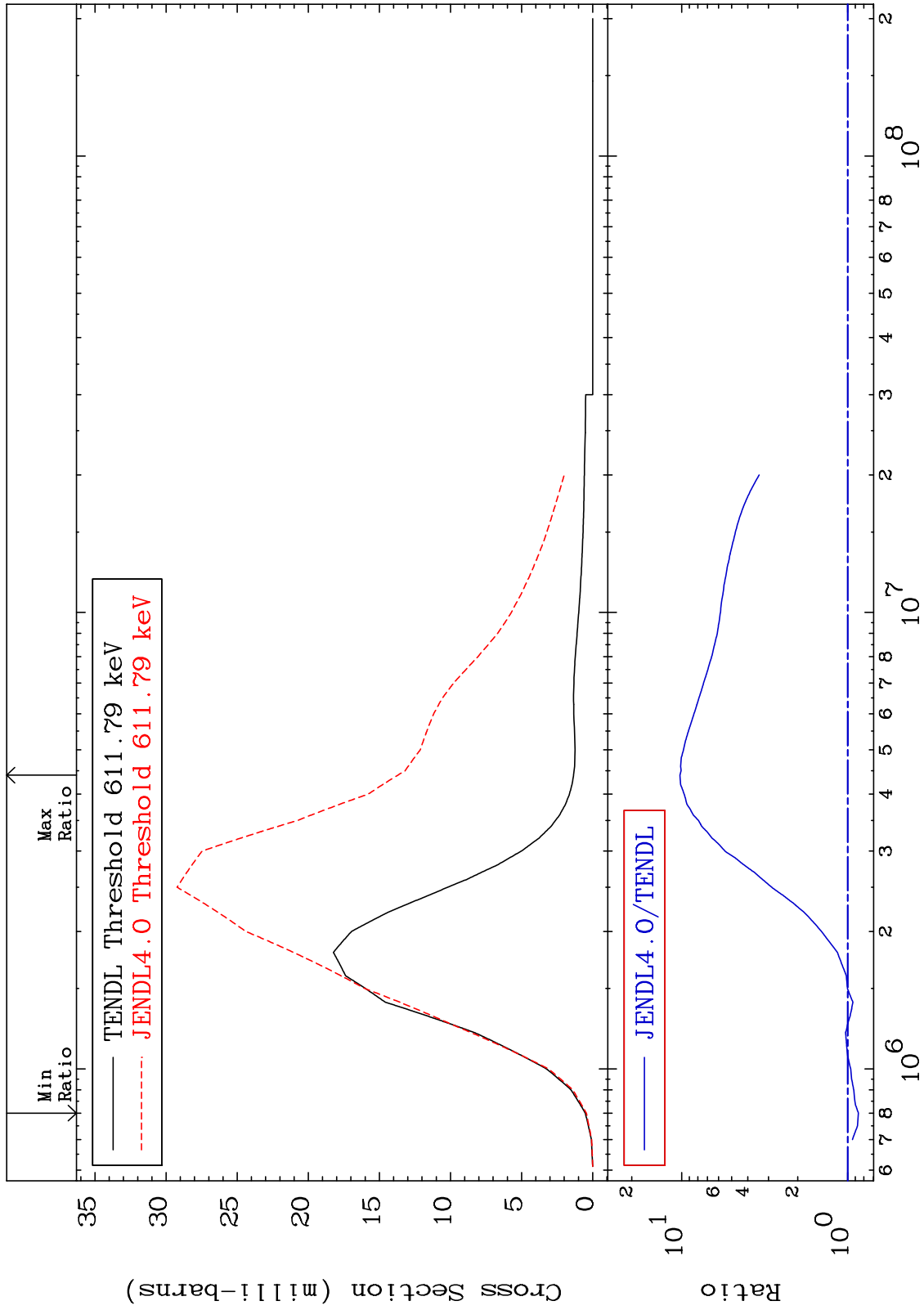
MT= 51 (n,n') Level
Cross Section

72-Hf-174
-8.334 To 40.90 %





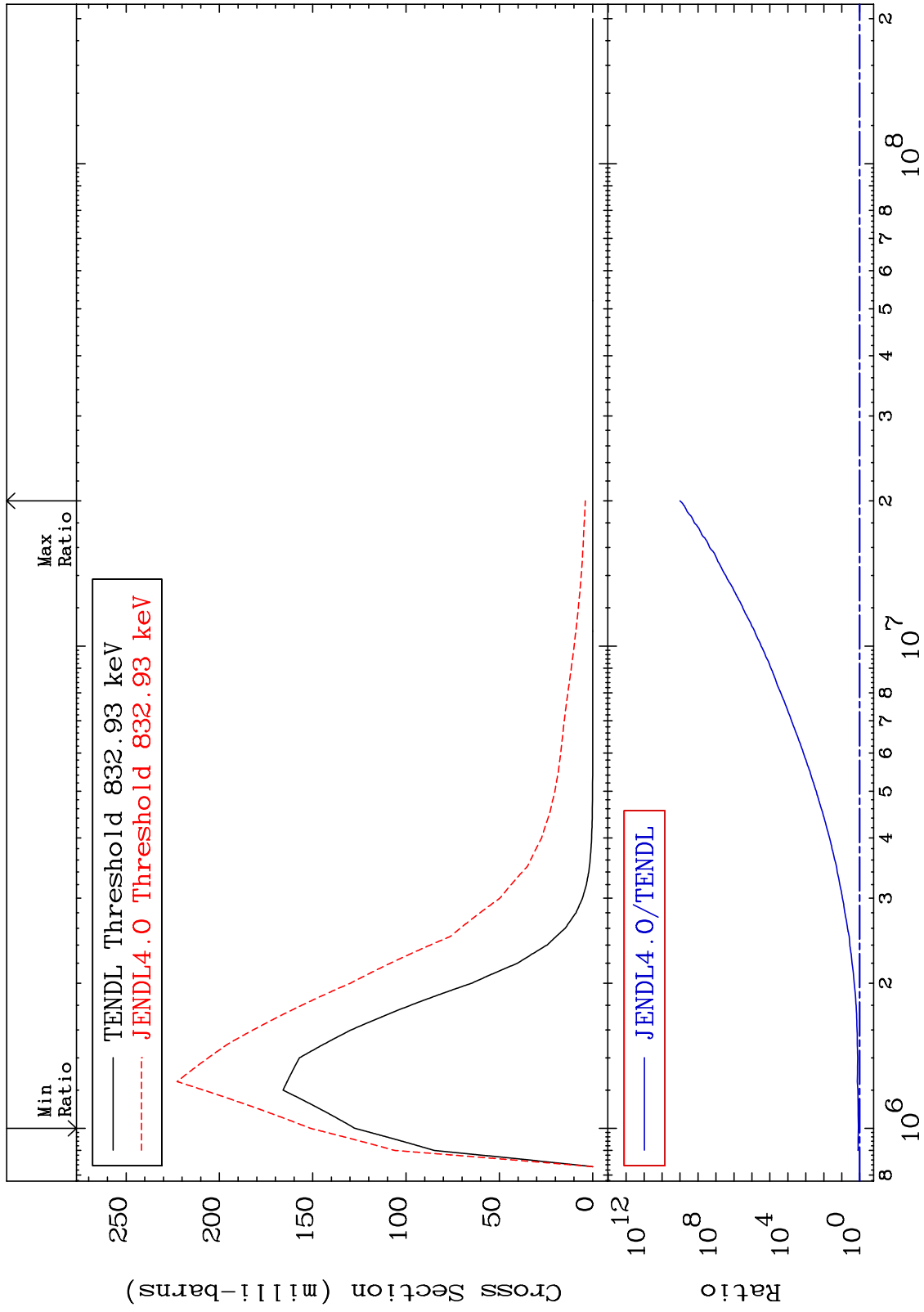
MAT 7225 MT= 53 (n,n') Level
 Cross Section 72-Hf-174
 -13.80 To 923.4 %



MAT 7225

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

72-Hf-174
18.69 To 9999. %



12

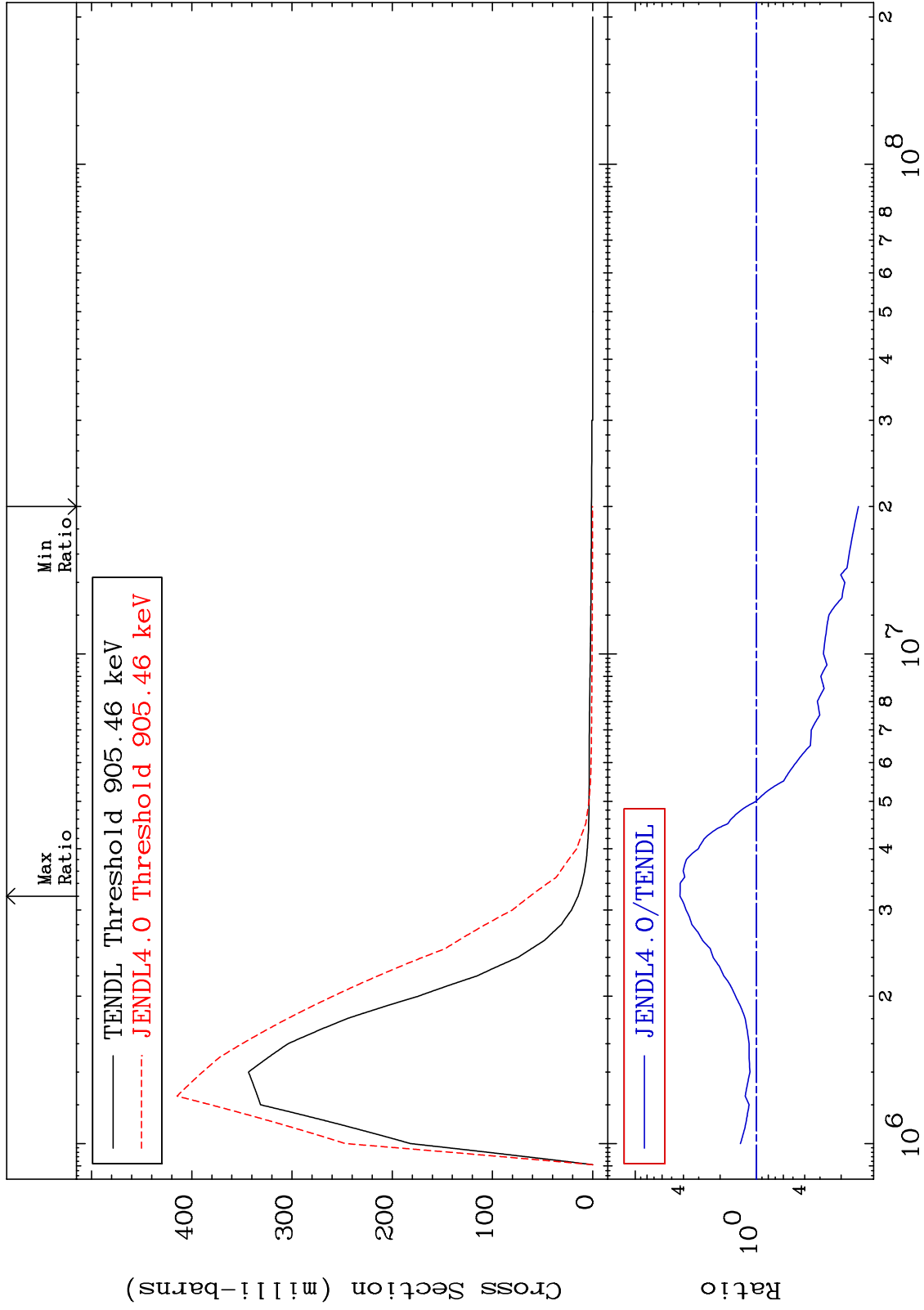
Incident Energy (eV)

72-Hf-174

MAT 7225

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

72-Hf-174
-85.57 To 327.3 %



Incident Energy (eV)

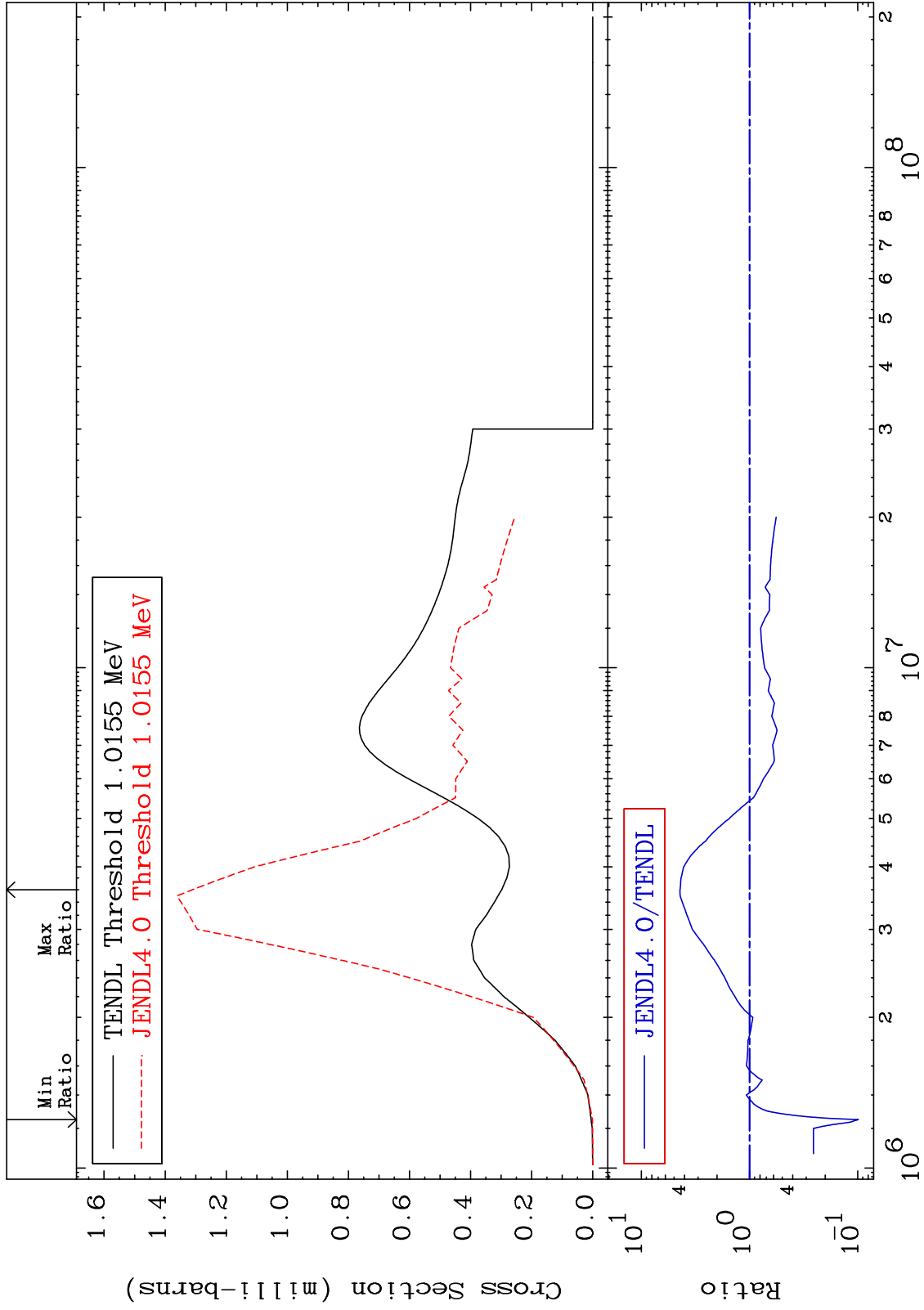
72-Hf-174

13

MAT 7225

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

72-Hf-174
-90.14 To 339.7 %

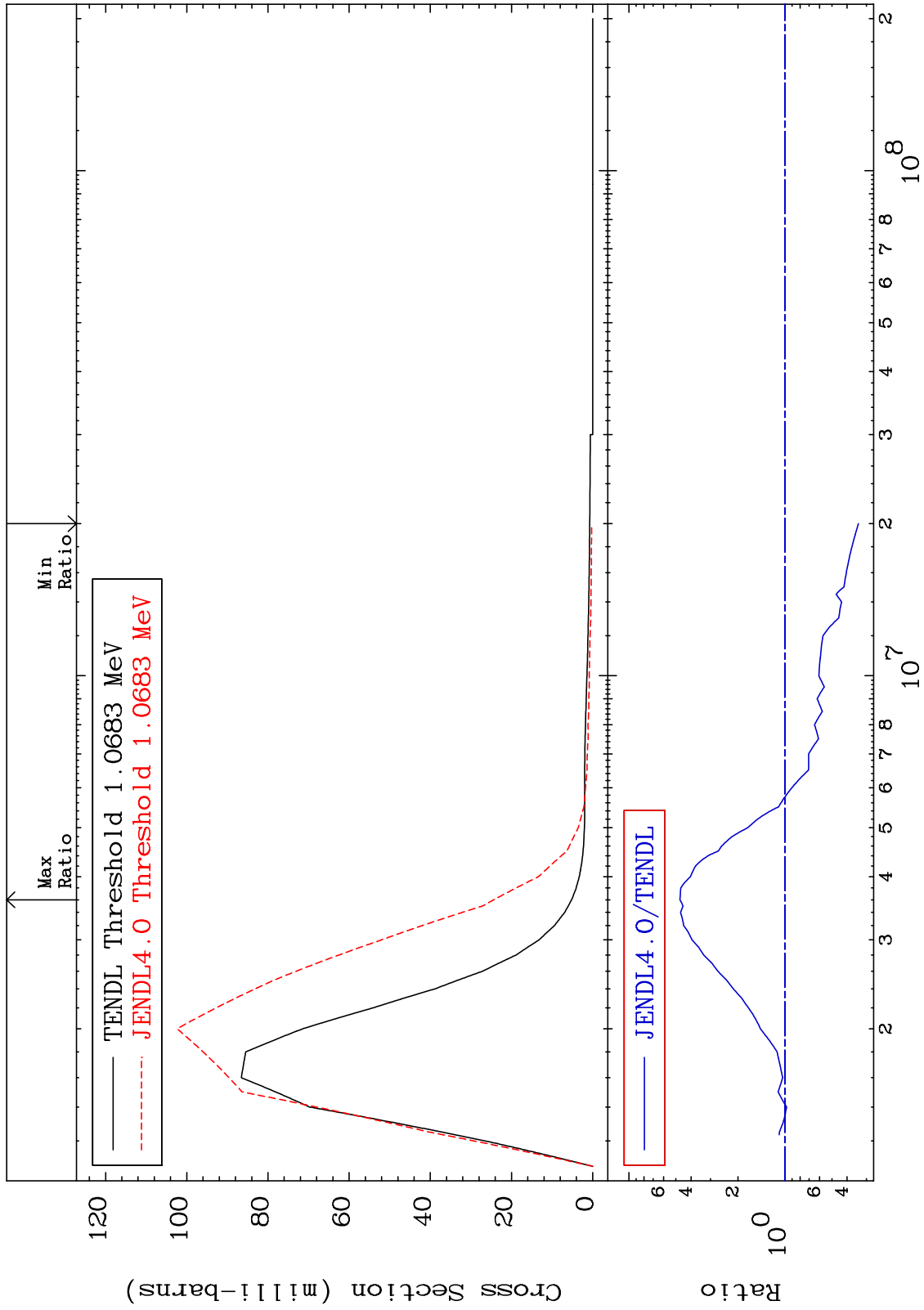


14

Incident Energy (eV)

72-Hf-174

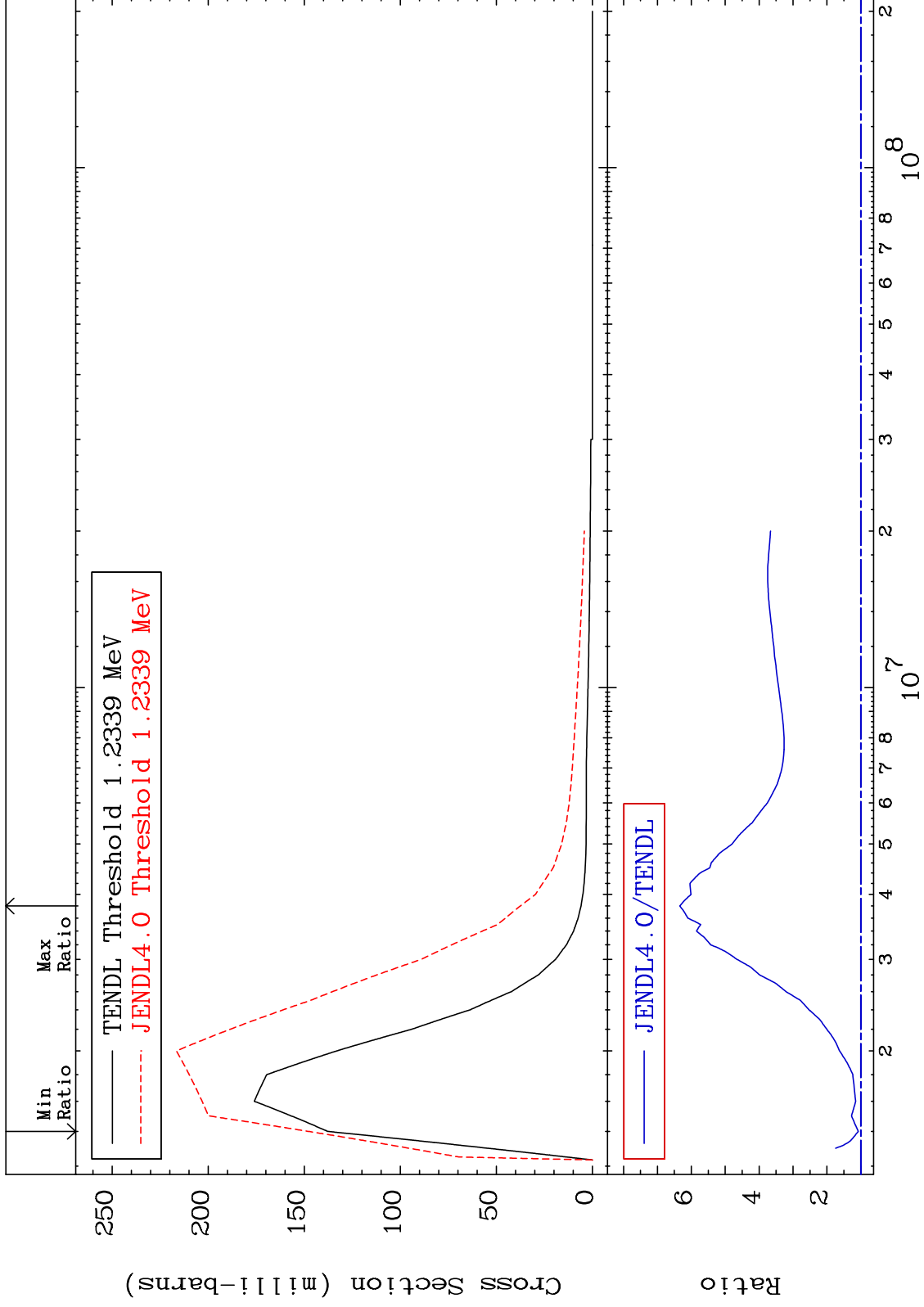
MAT 7225 MT= 57 (n, n') Level Cross Section 72-Hf-174 -66.19 To 370.6 %



MAT 7225

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

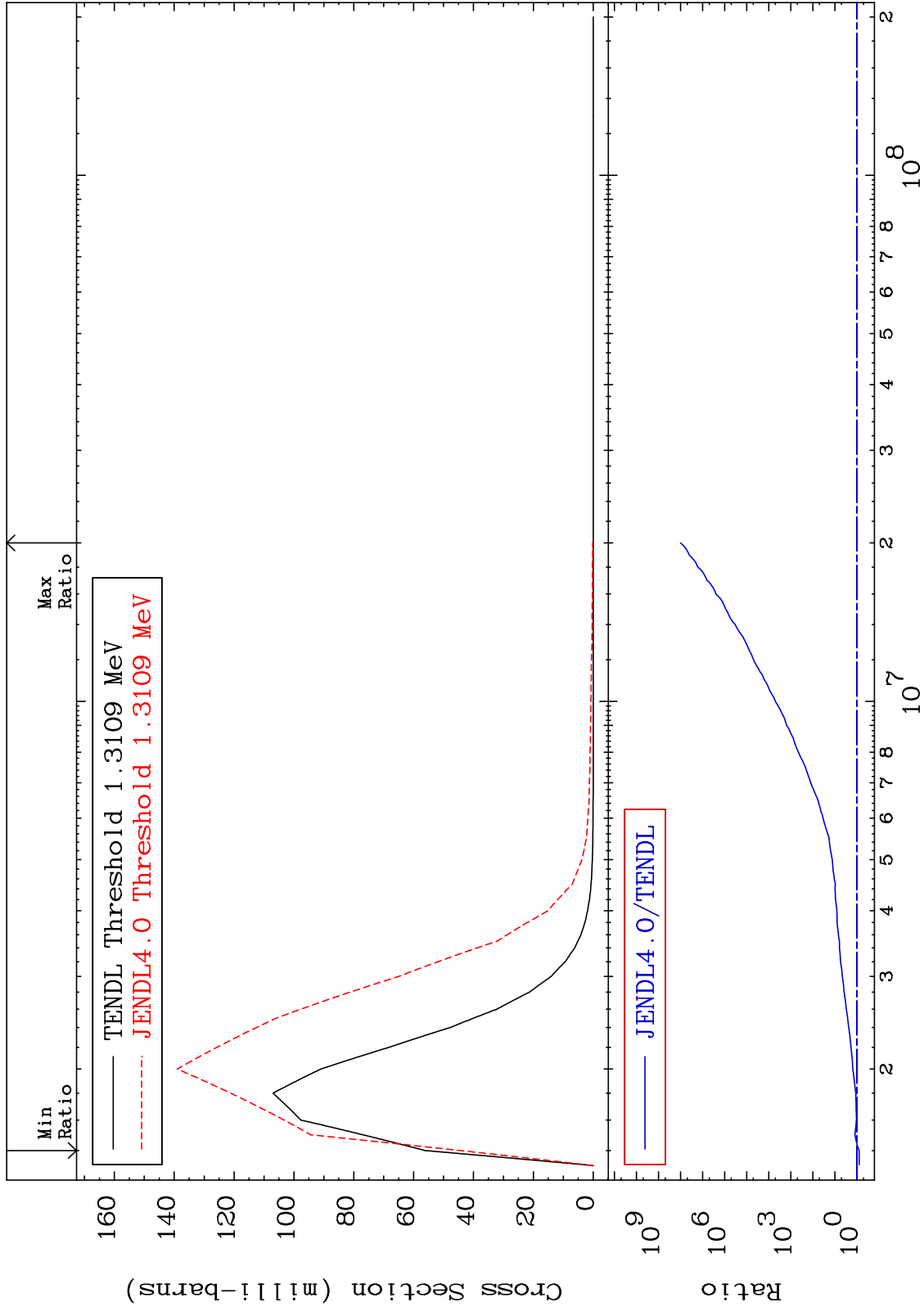
72-Hf-174
7.277 To 534.0 %



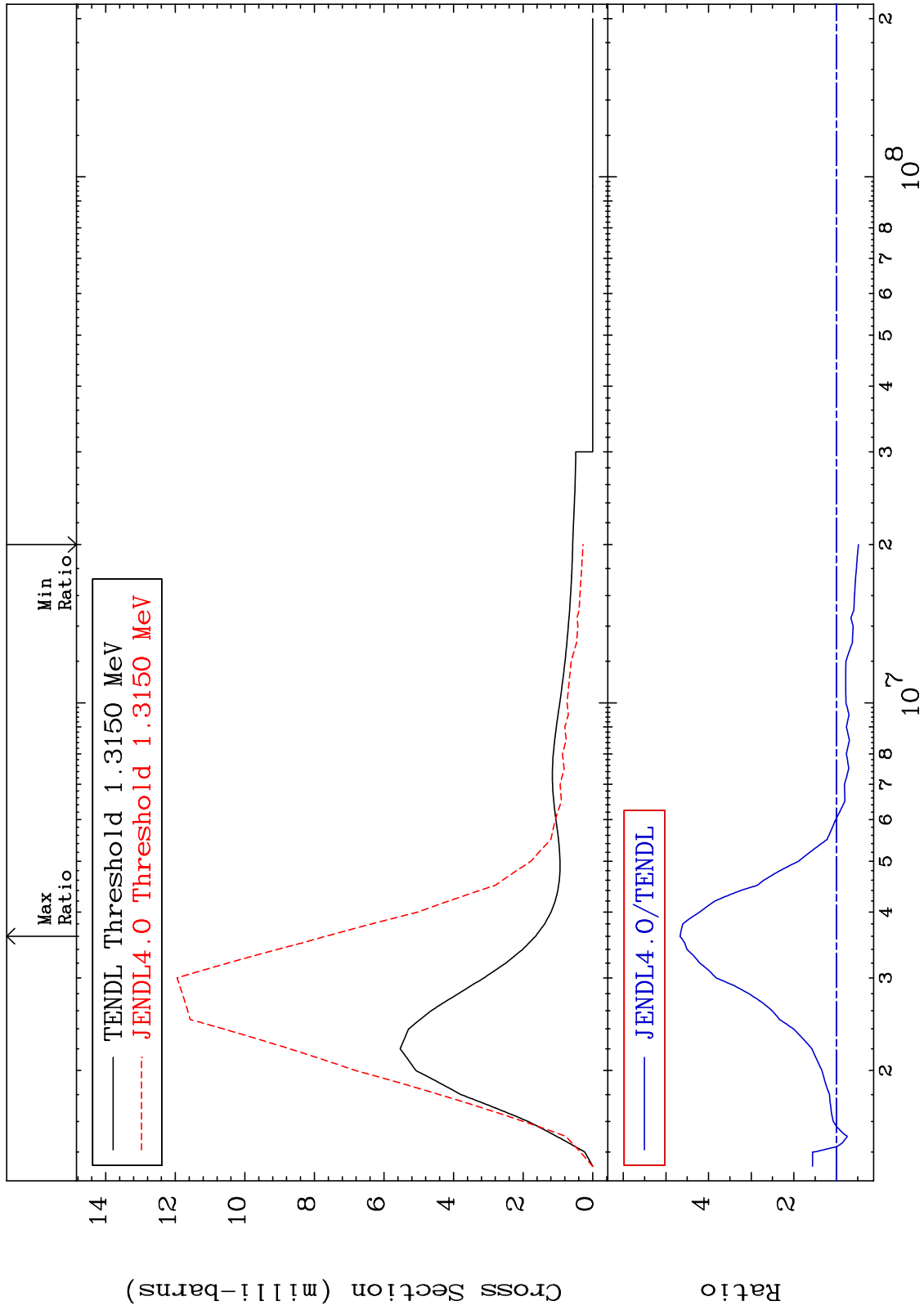
MAT 7225

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

⁷²Hf-174
-20.79 To 9999. %



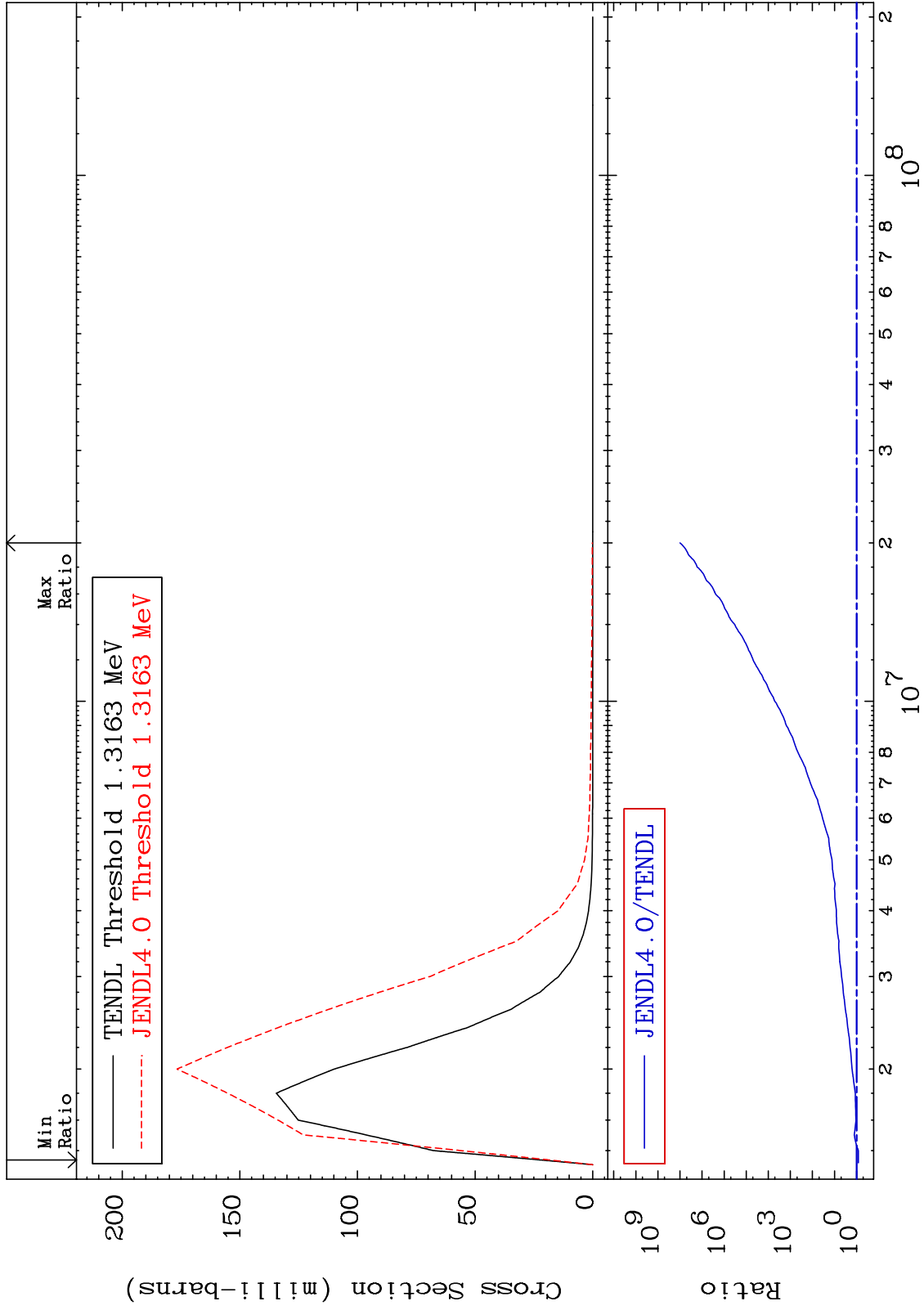
MAT 7225 MT= 60 (n,n') Level Cross Section 72-Hf-174 -51.57 To 366.9 %



MAT 7225

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

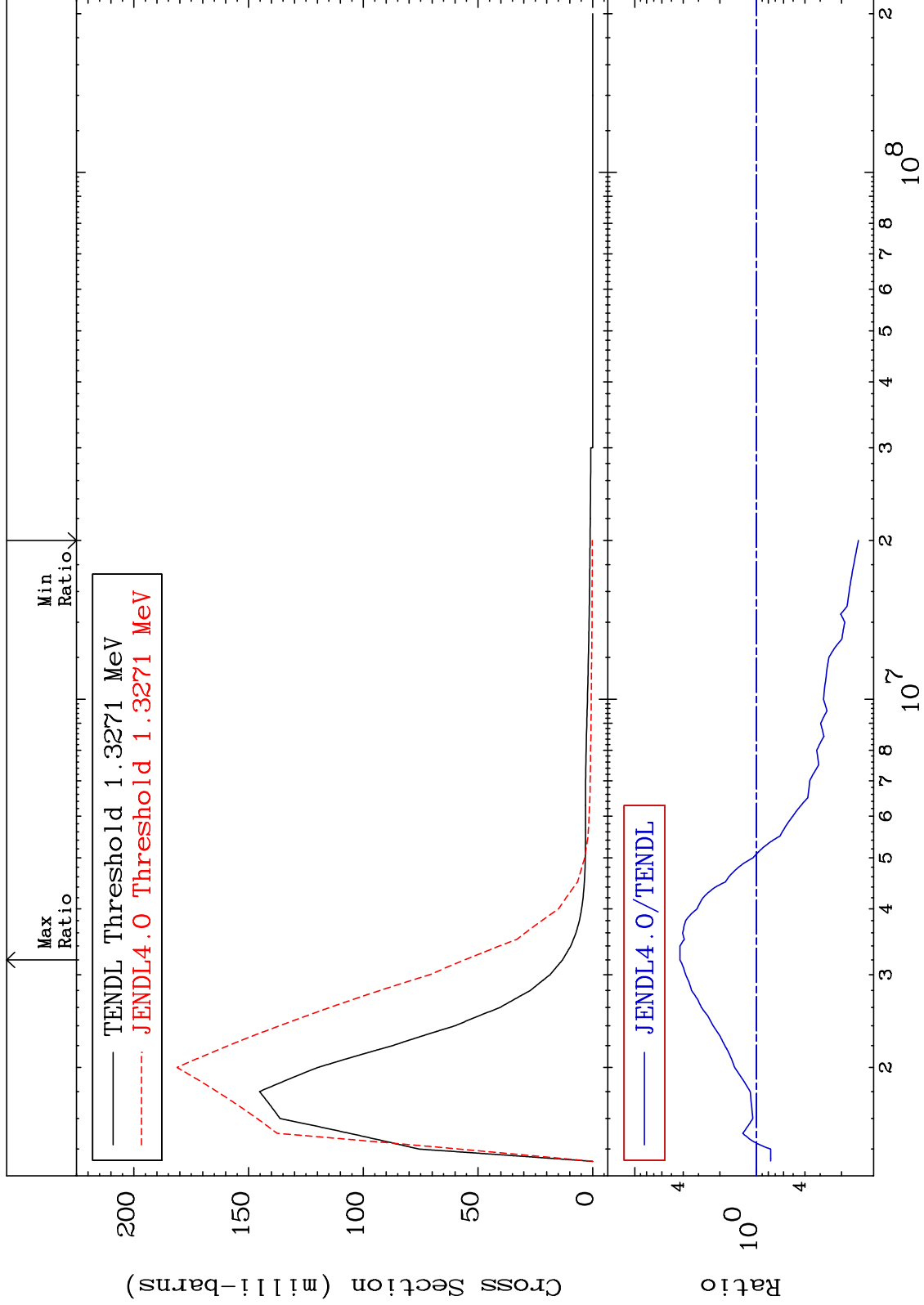
72-Hf-174
-17.15 To 9999. %



MAT 7225

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

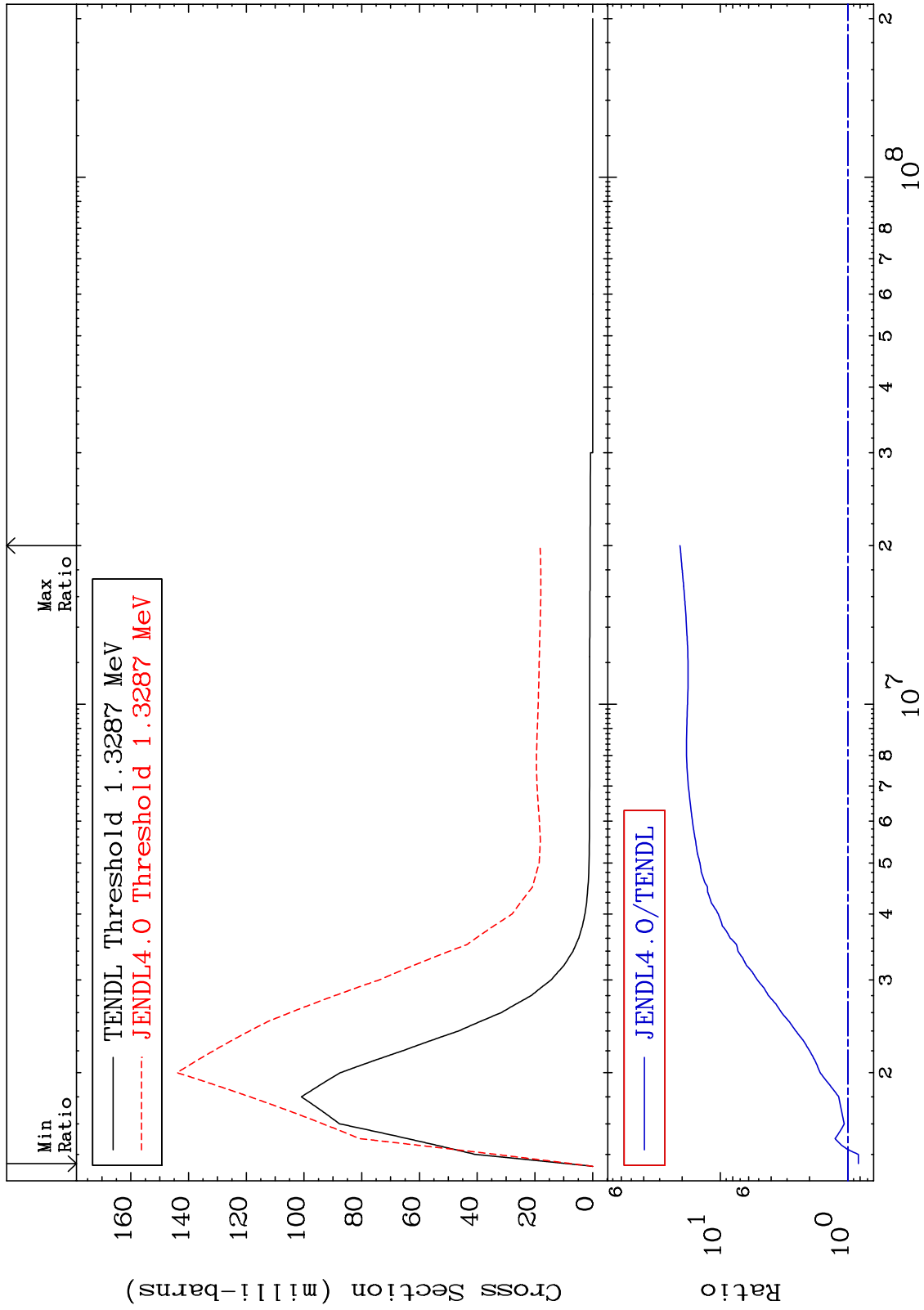
72-Hf-174
-85.47 To 325.5 %



MAT 7225

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

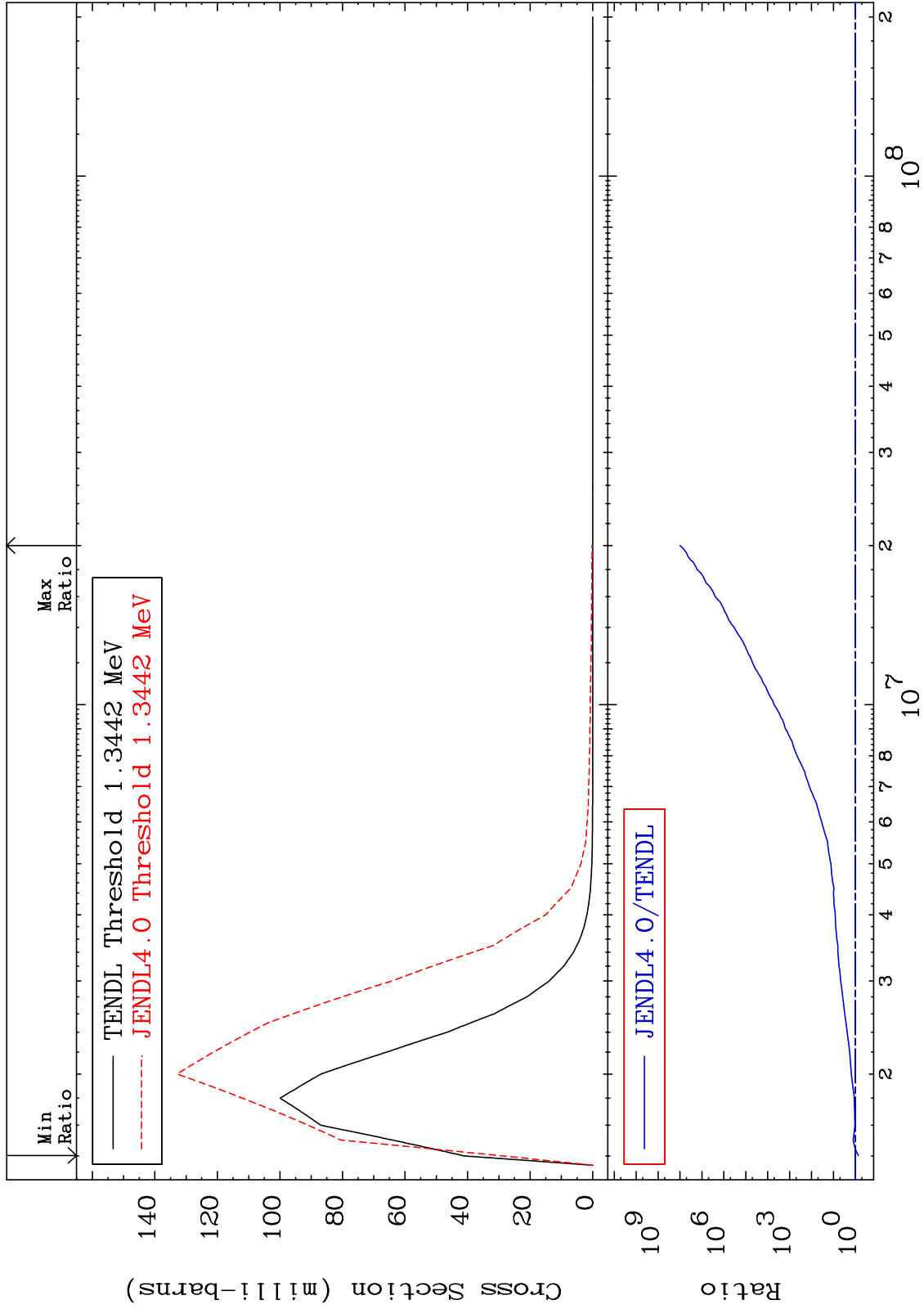
72-Hf-174
-17.42 To 1974. %



MAT 7225

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

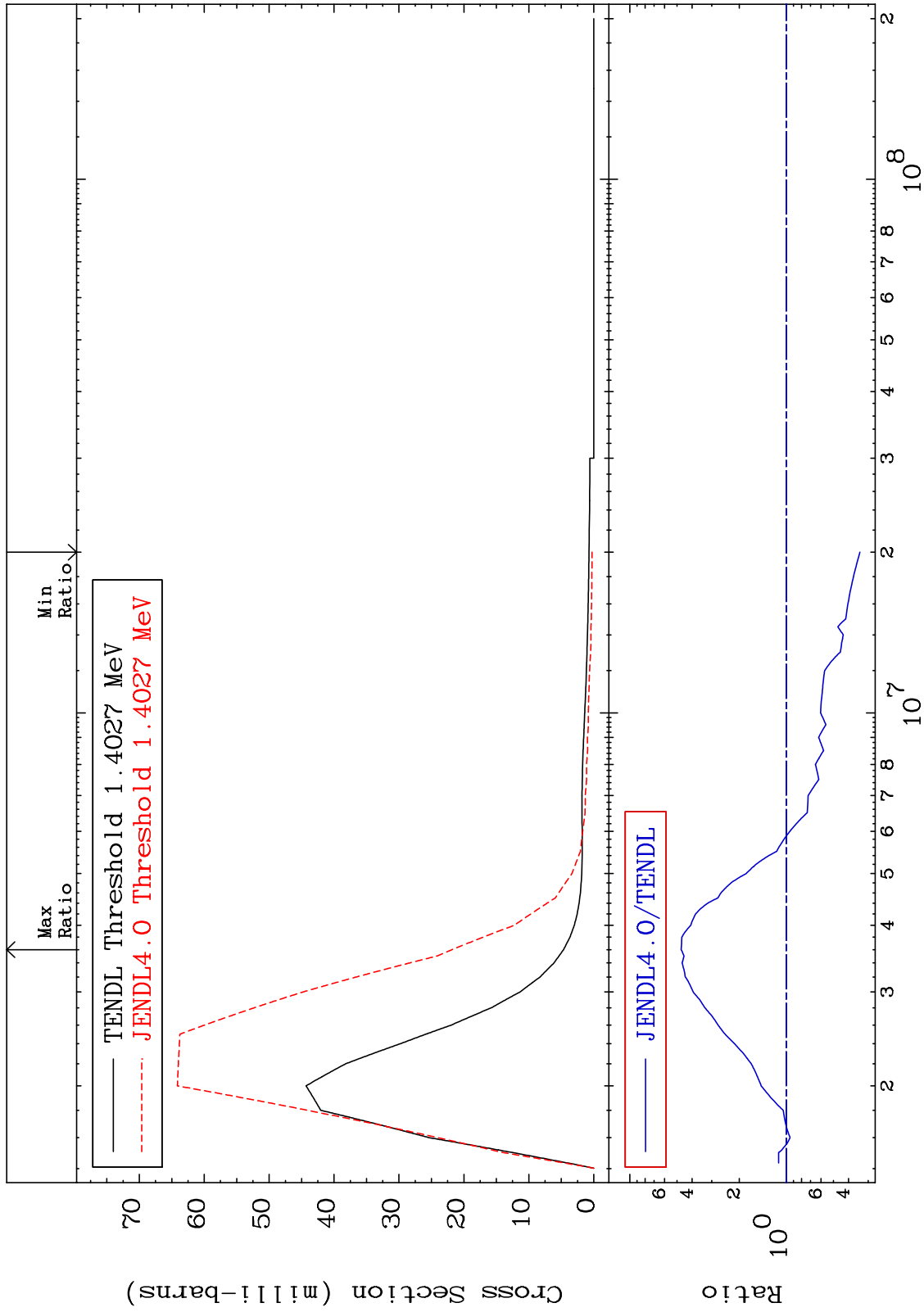
72-Hf-174
-27.60 To 9999. %



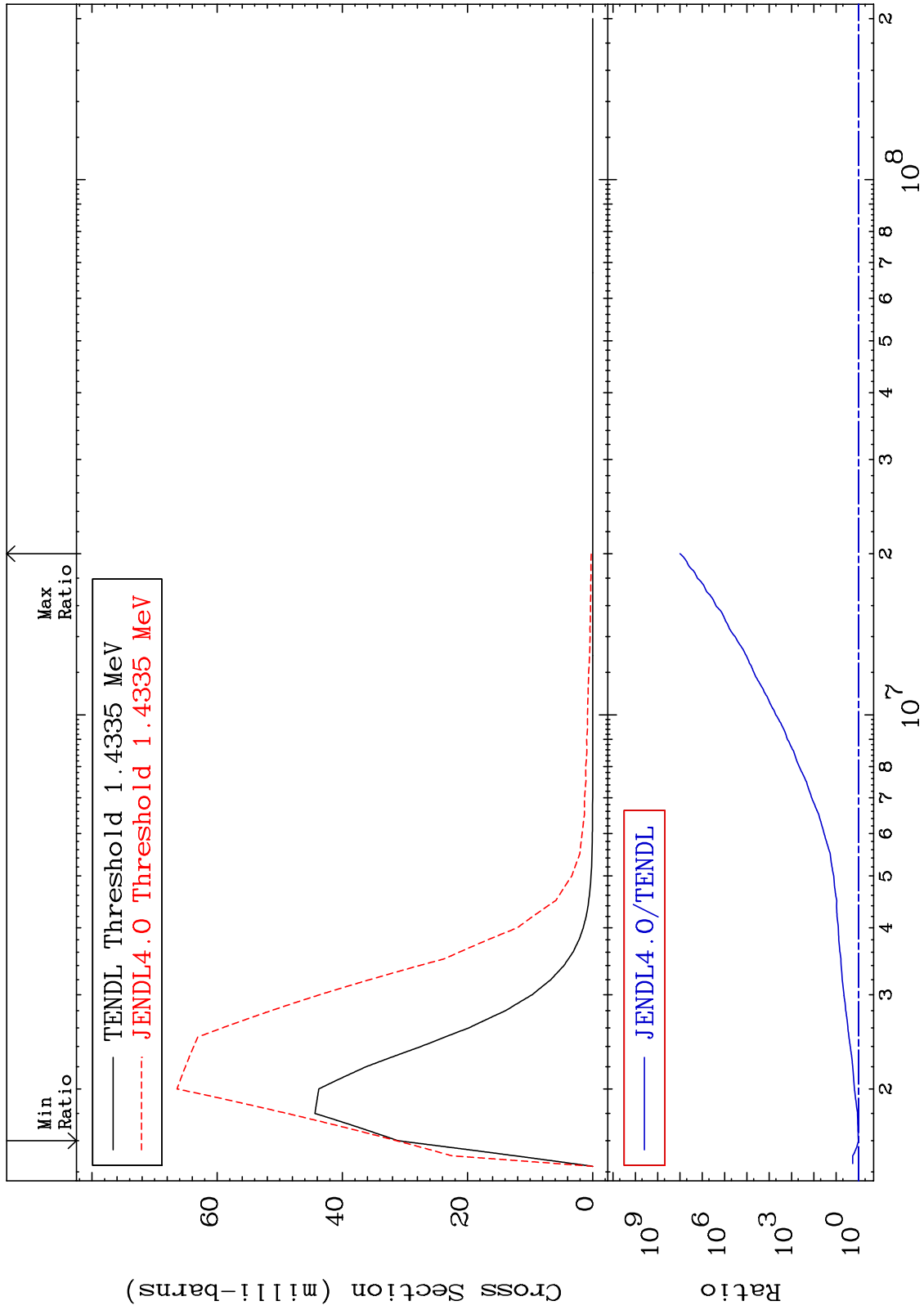
MAT 7225

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

⁷²Hf-174
-66.15 To 369.8 %



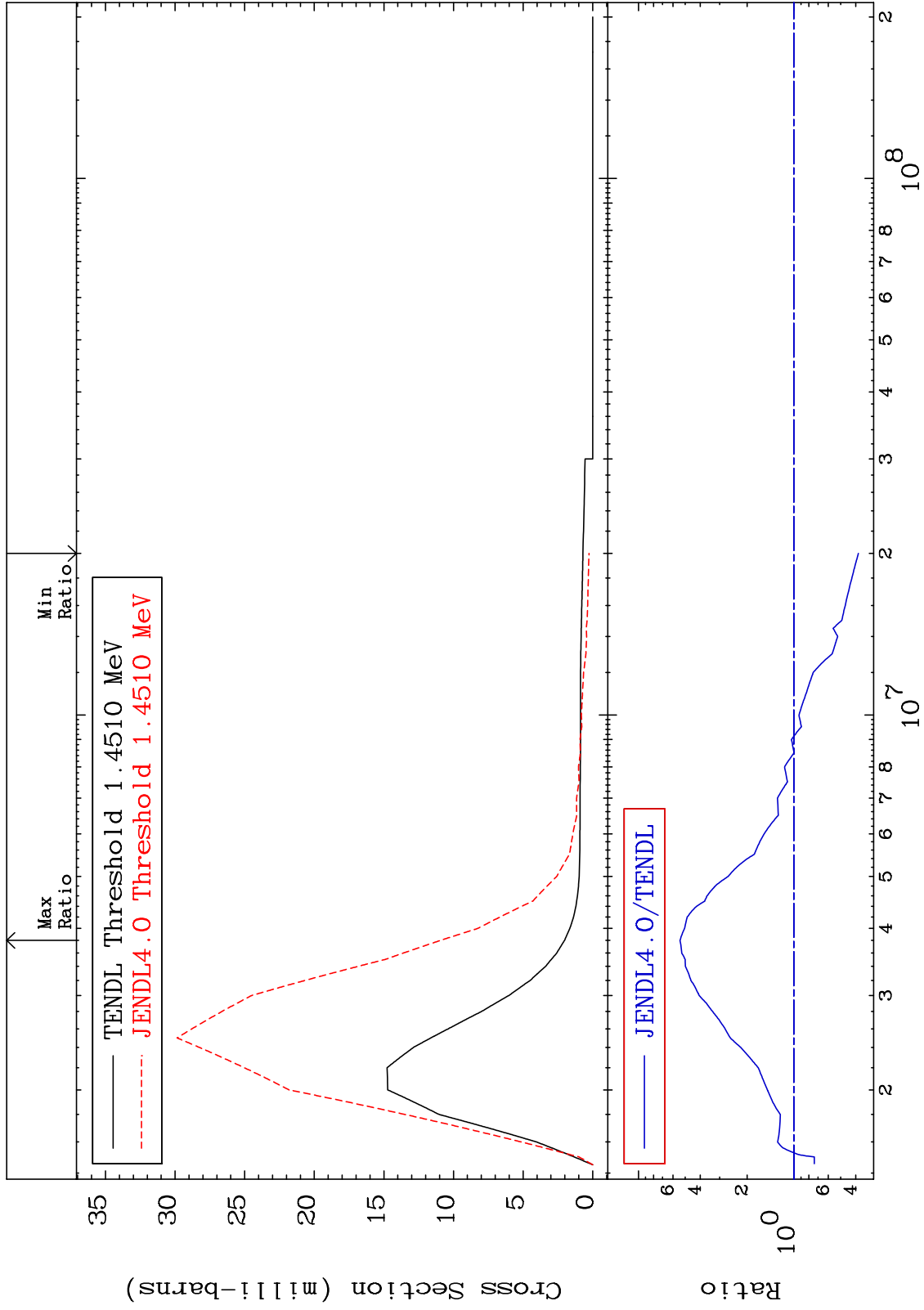
MAT 7225 MT= 66 (n,n') Level Cross Section 72-Hf-174
 0.654 To 9999. %



MAT 7225

MT= 67 (n, n') Level
Cross Section

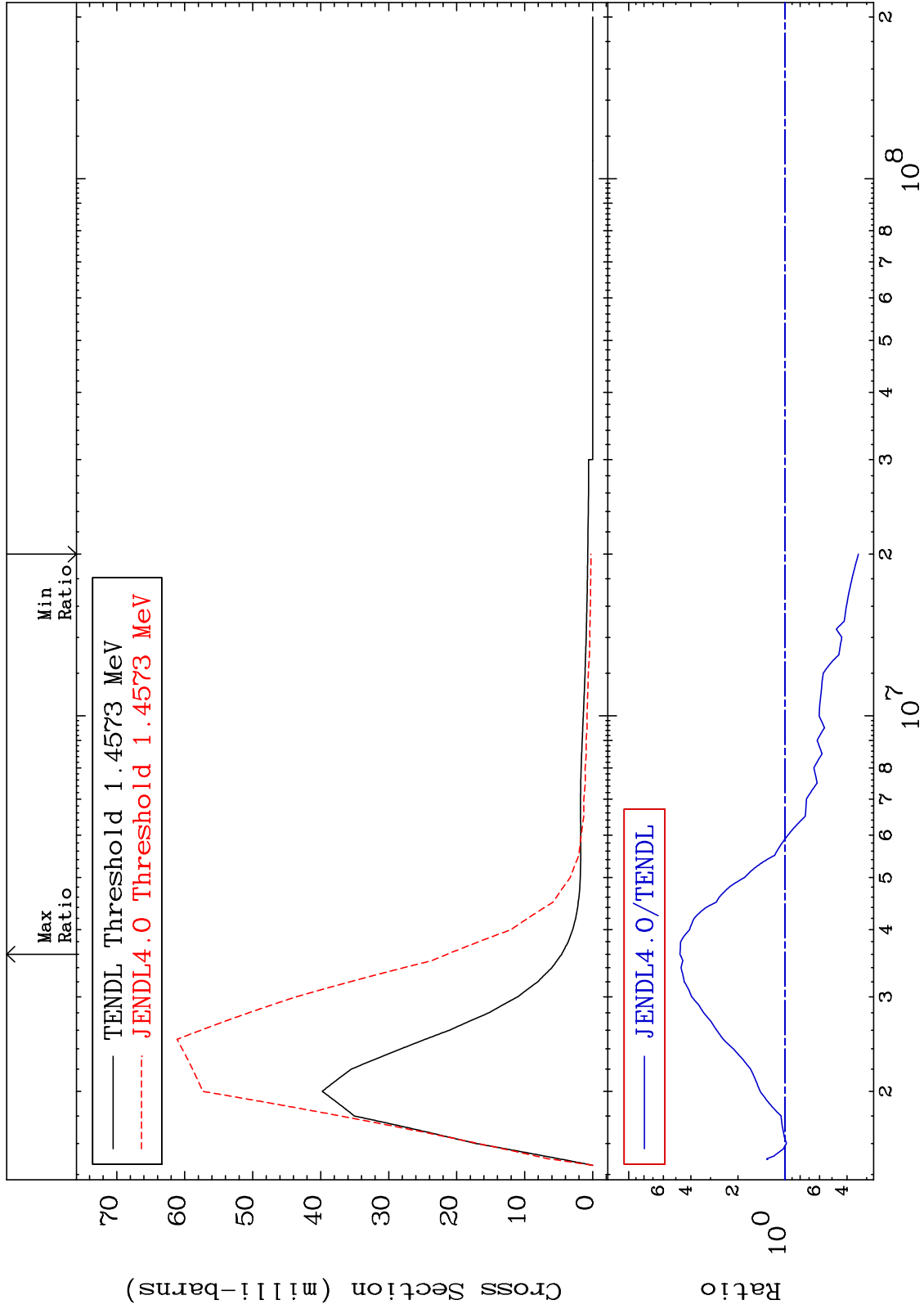
72-Hf-174
-61.57 To 440.3 %



MAT 7225

MT= 68 (n,n') Level
Cross Section

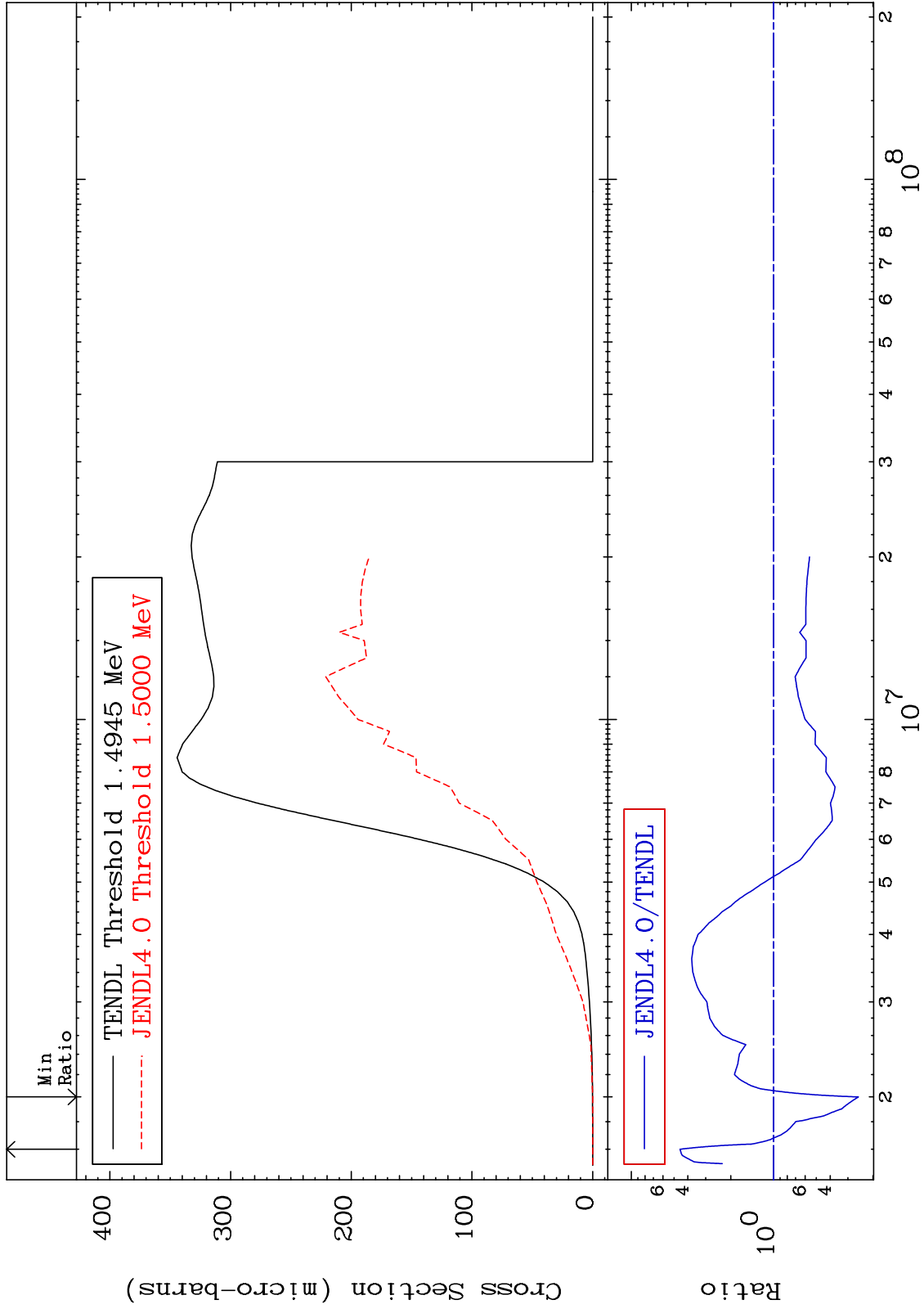
72-Hf-174
-66.13 To 369.8 %



MAT 7225

MT= 69 (n,n') Level
Cross Section

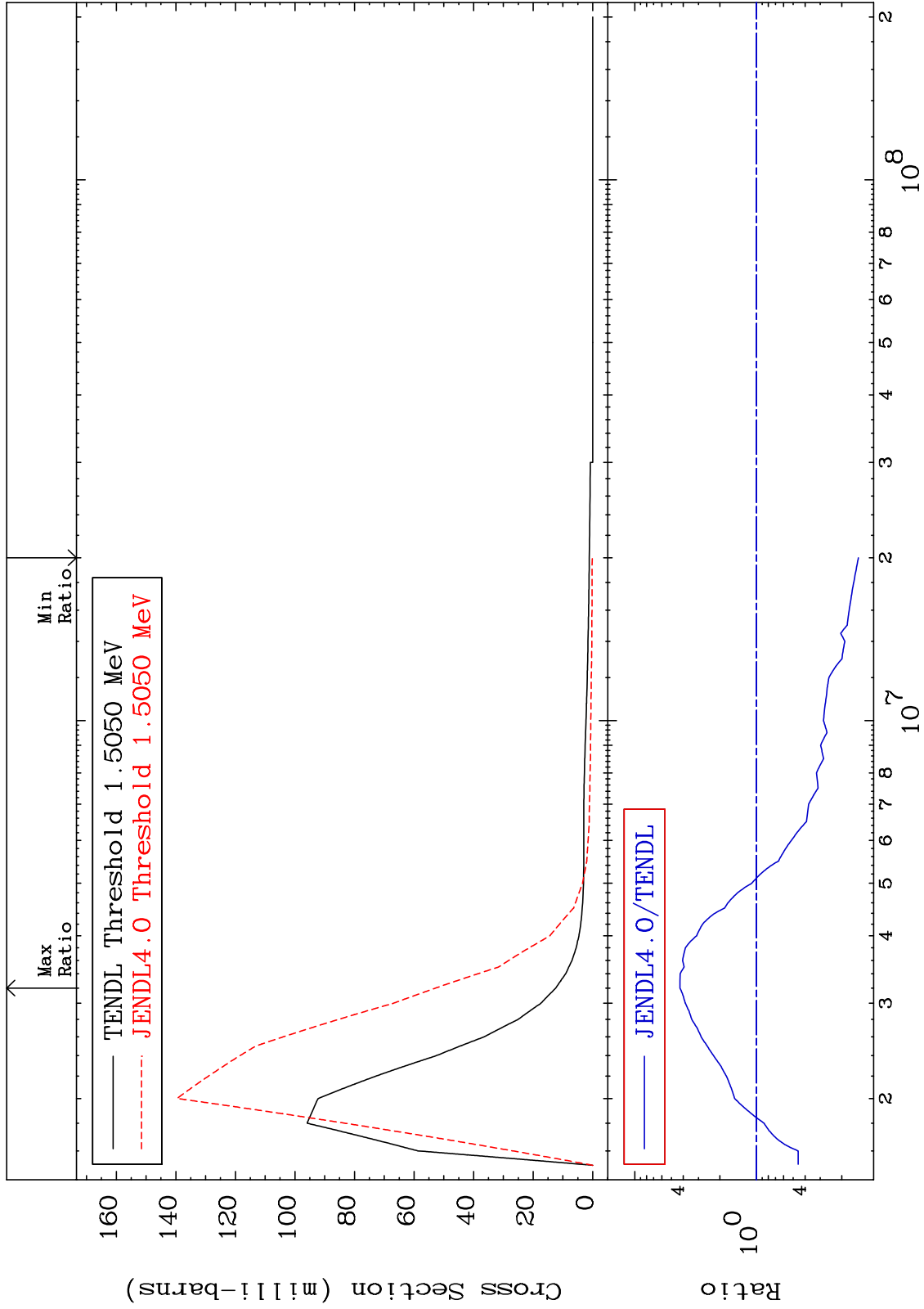
⁷²Hf-174
-74.69 To 354.3 %



MAT 7225

MT= 70 (n,n') Level
Cross Section

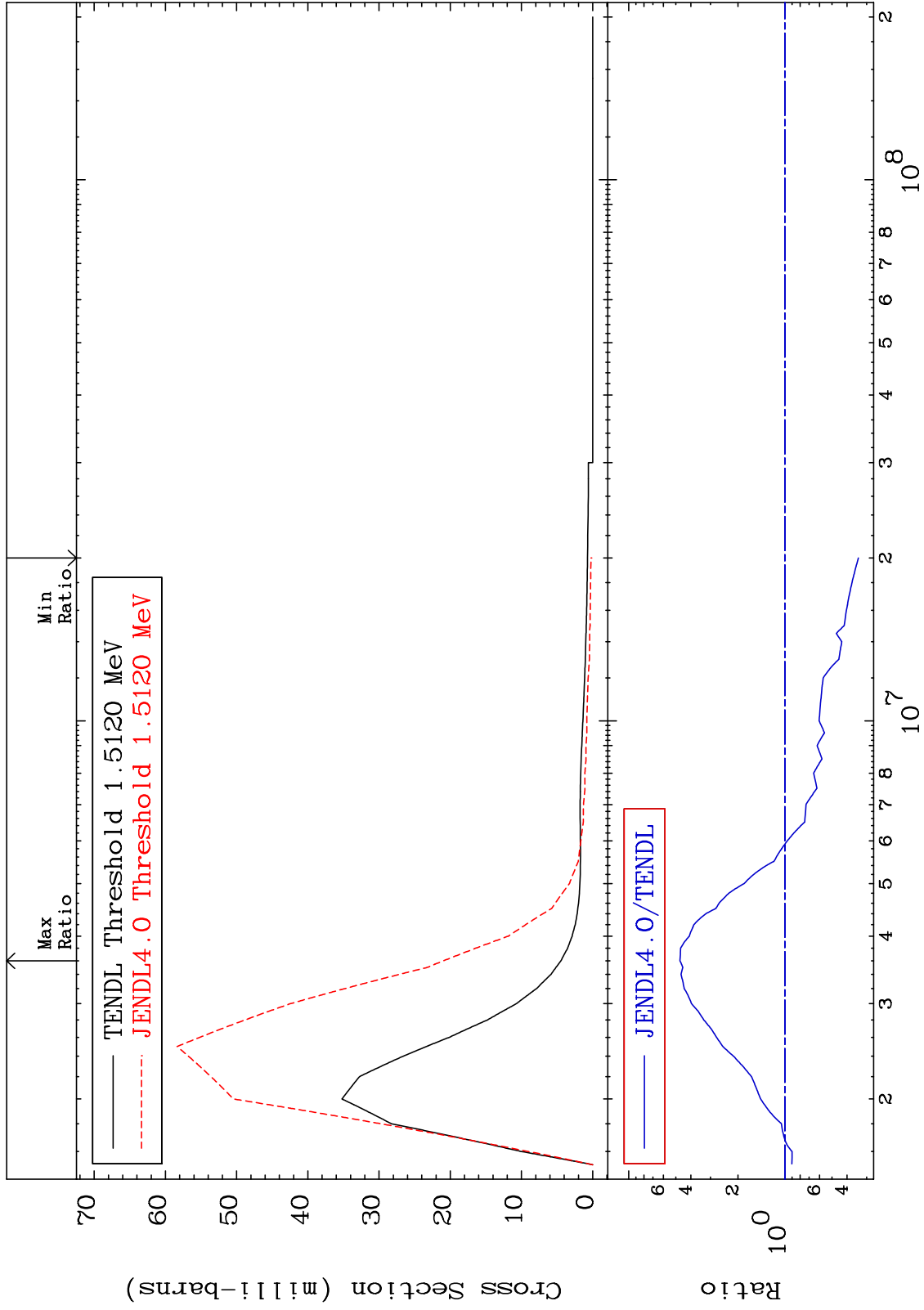
72-Hf-174
-85.42 To 325.3 %



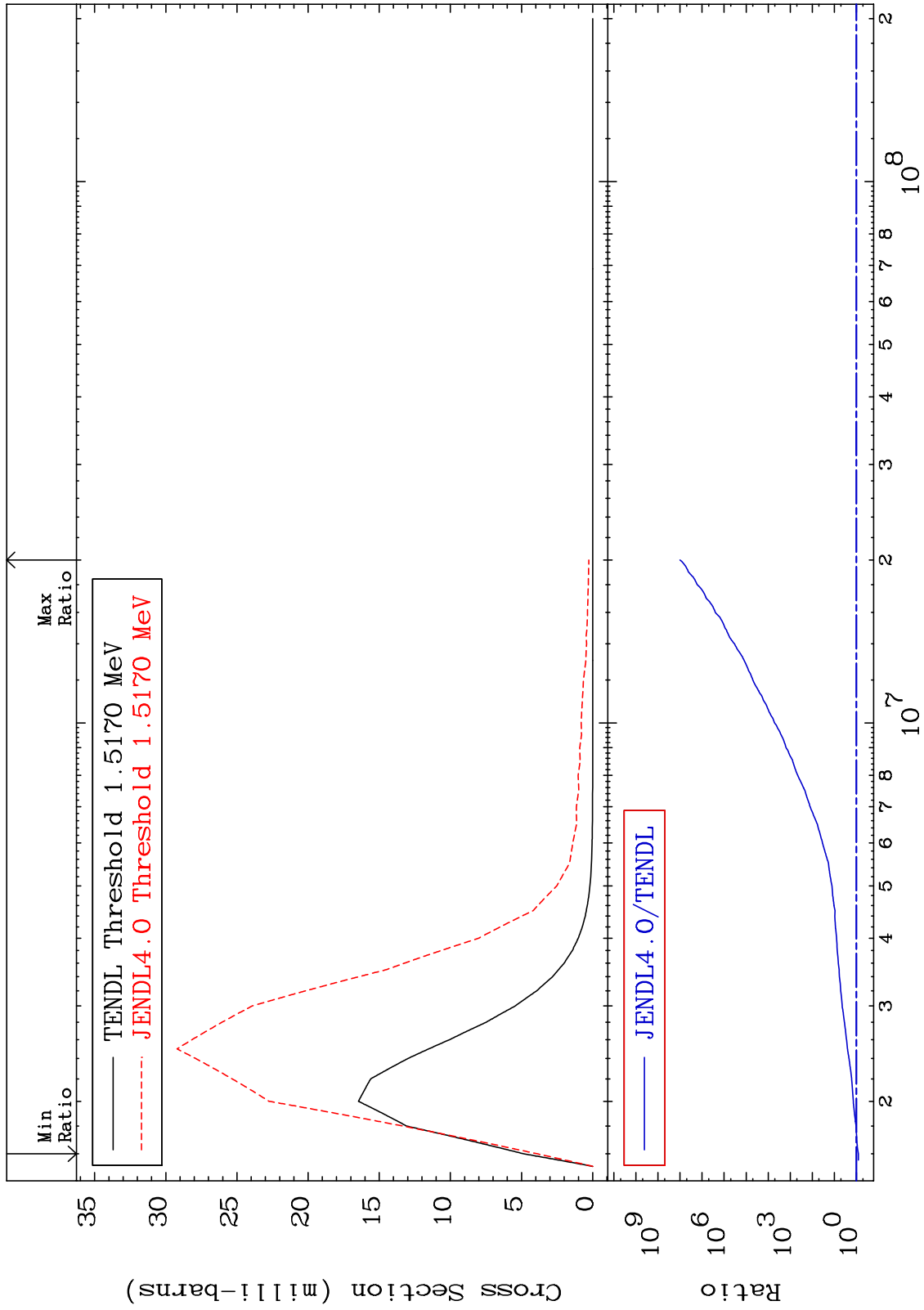
MAT 7225

MT= 71 (n,n') Level
Cross Section

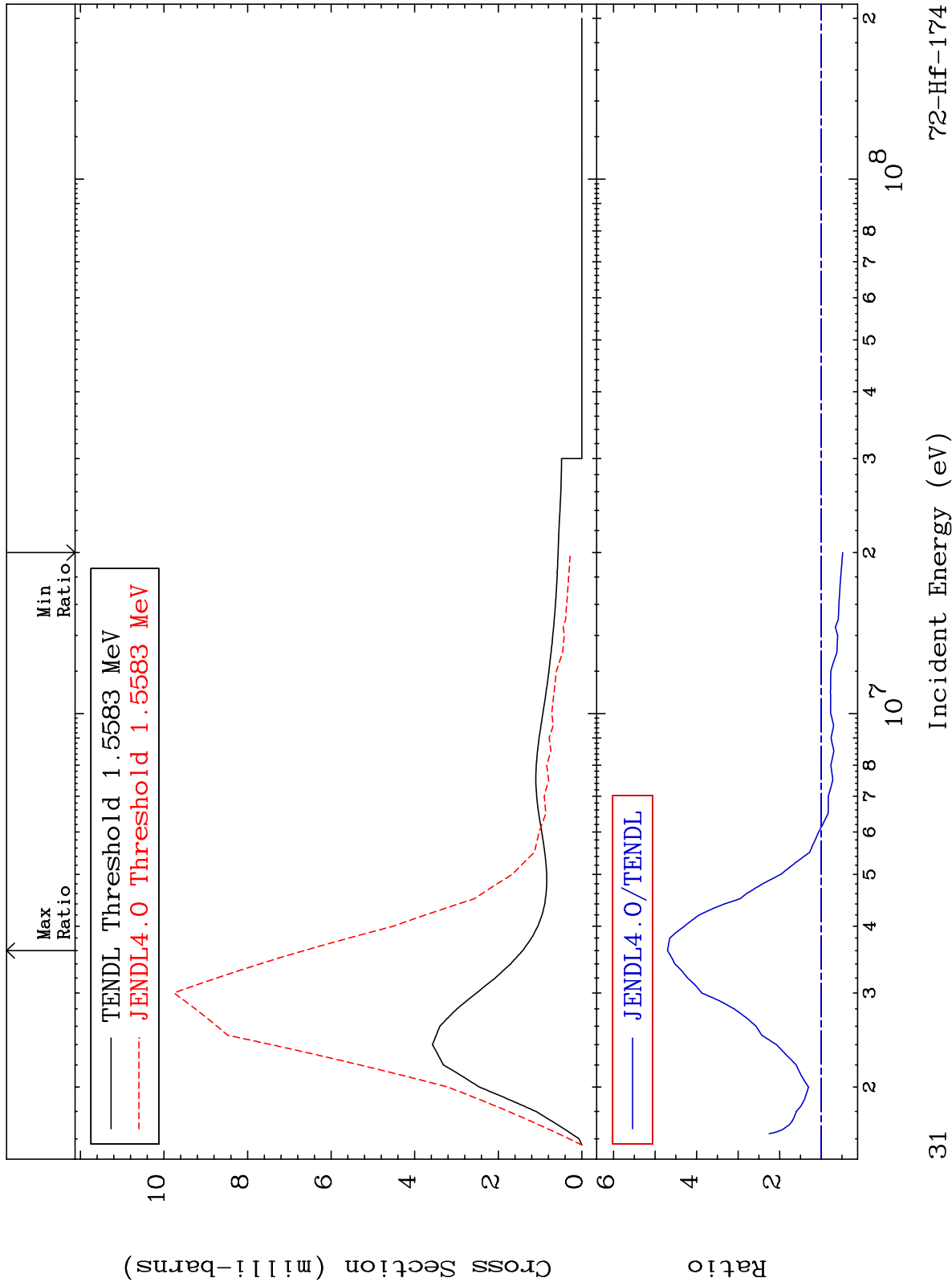
72-Hf-174
-66.13 To 369.7 %



MAT 7225 MT= 72 (n,n') Level Cross Section 72-Hf-174
 -19.42 To 9999. %



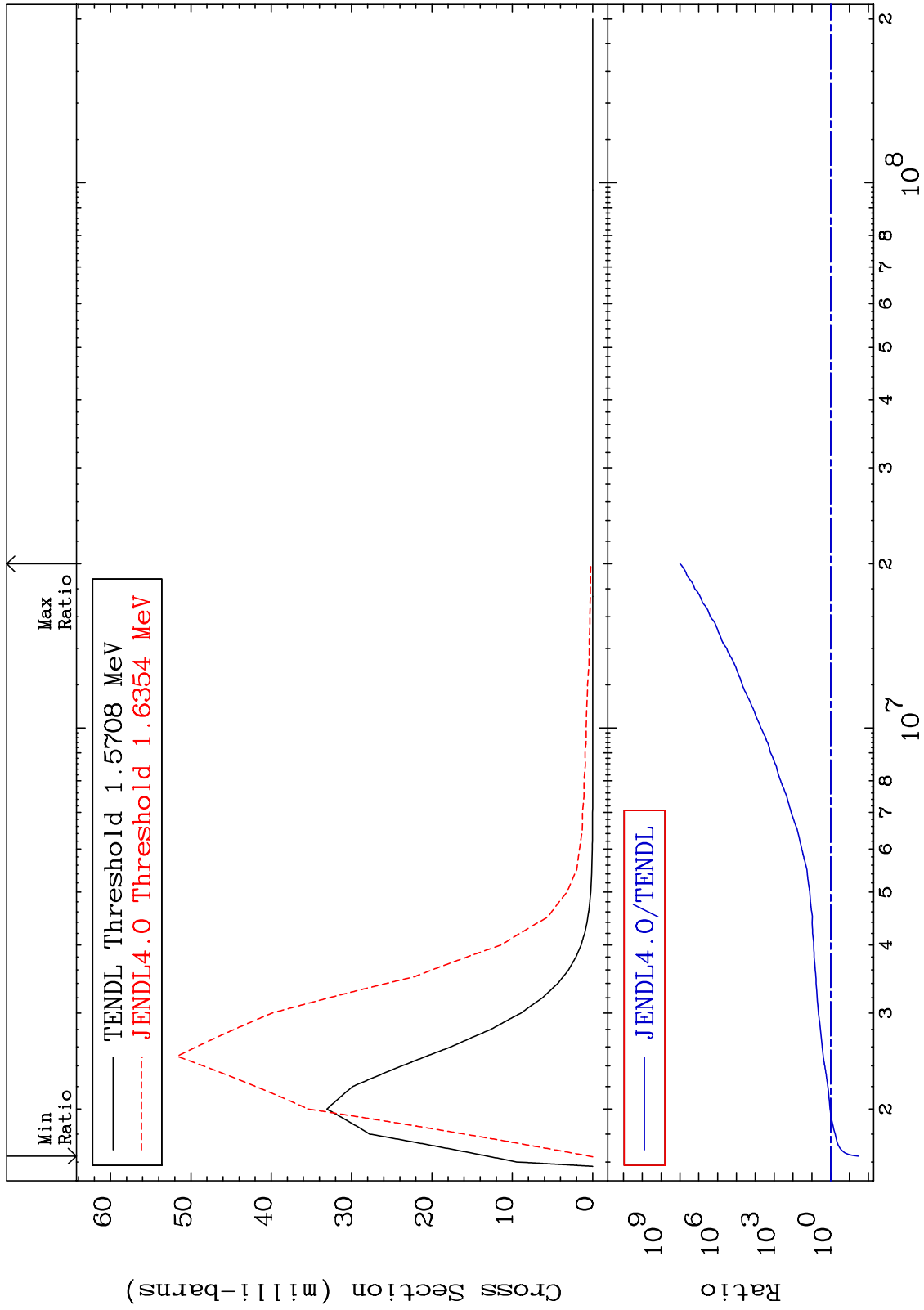
MAT 7225 MT= 73 (n,n') Level Cross Section 72-Hf-174 -51.53 To 369.9 %



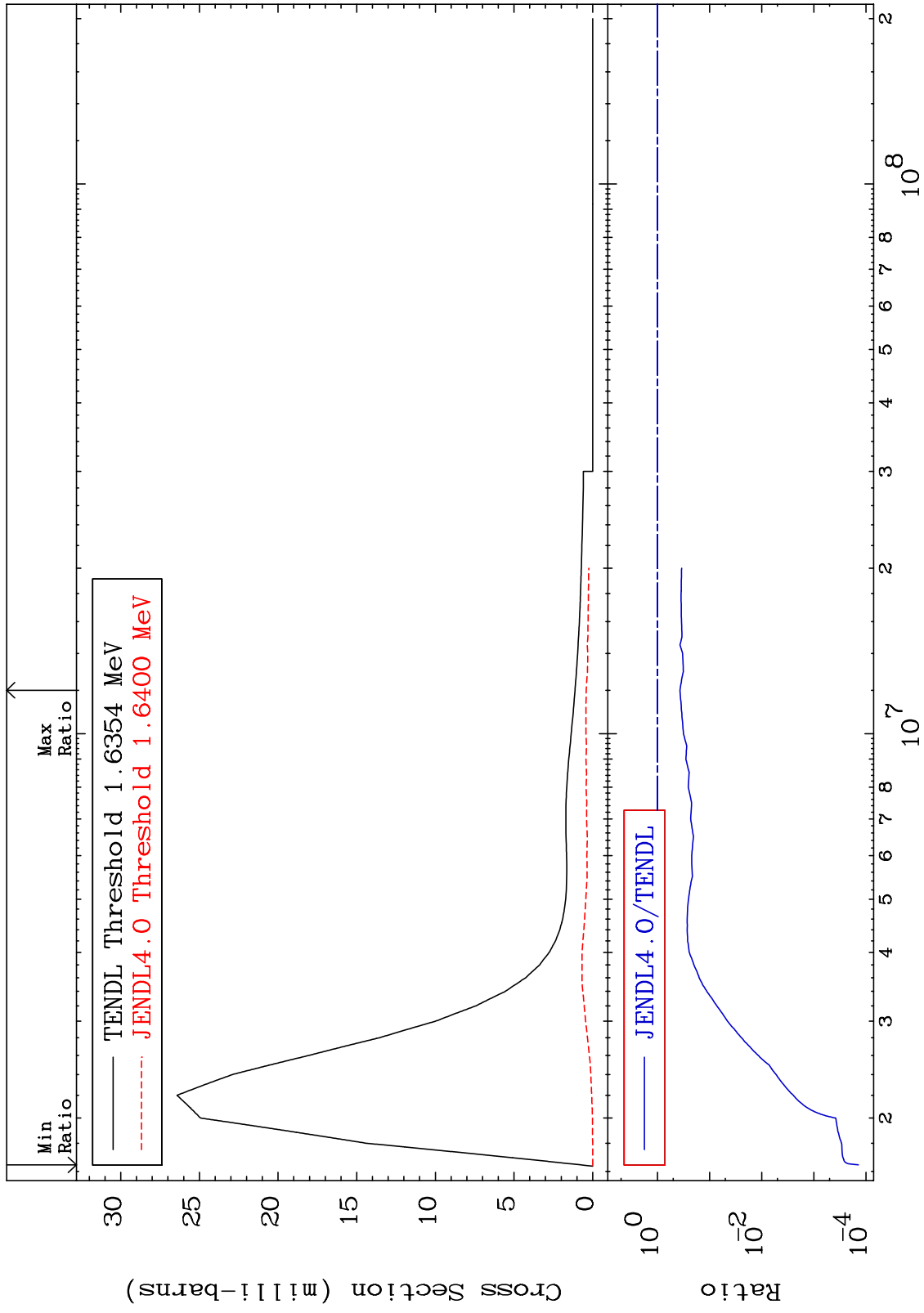
MAT 7225

MT= 74 (n,n') Level
Cross Section

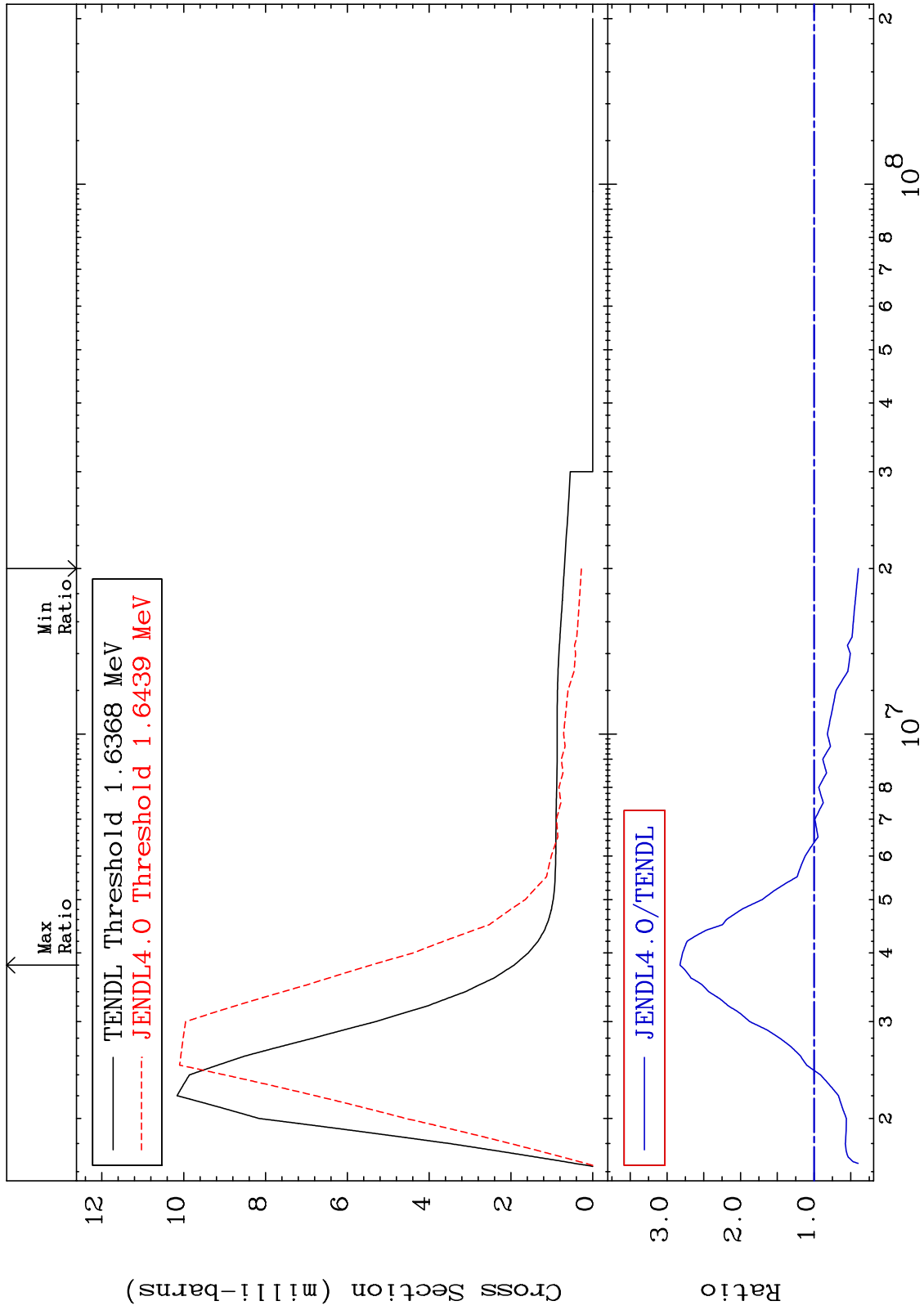
⁷²Hf-174
-96.65 To 9999. %



MAT 7225 MT= 75 (n,n') Level Cross Section 72-Hf-174 -99.99 To -63.09%



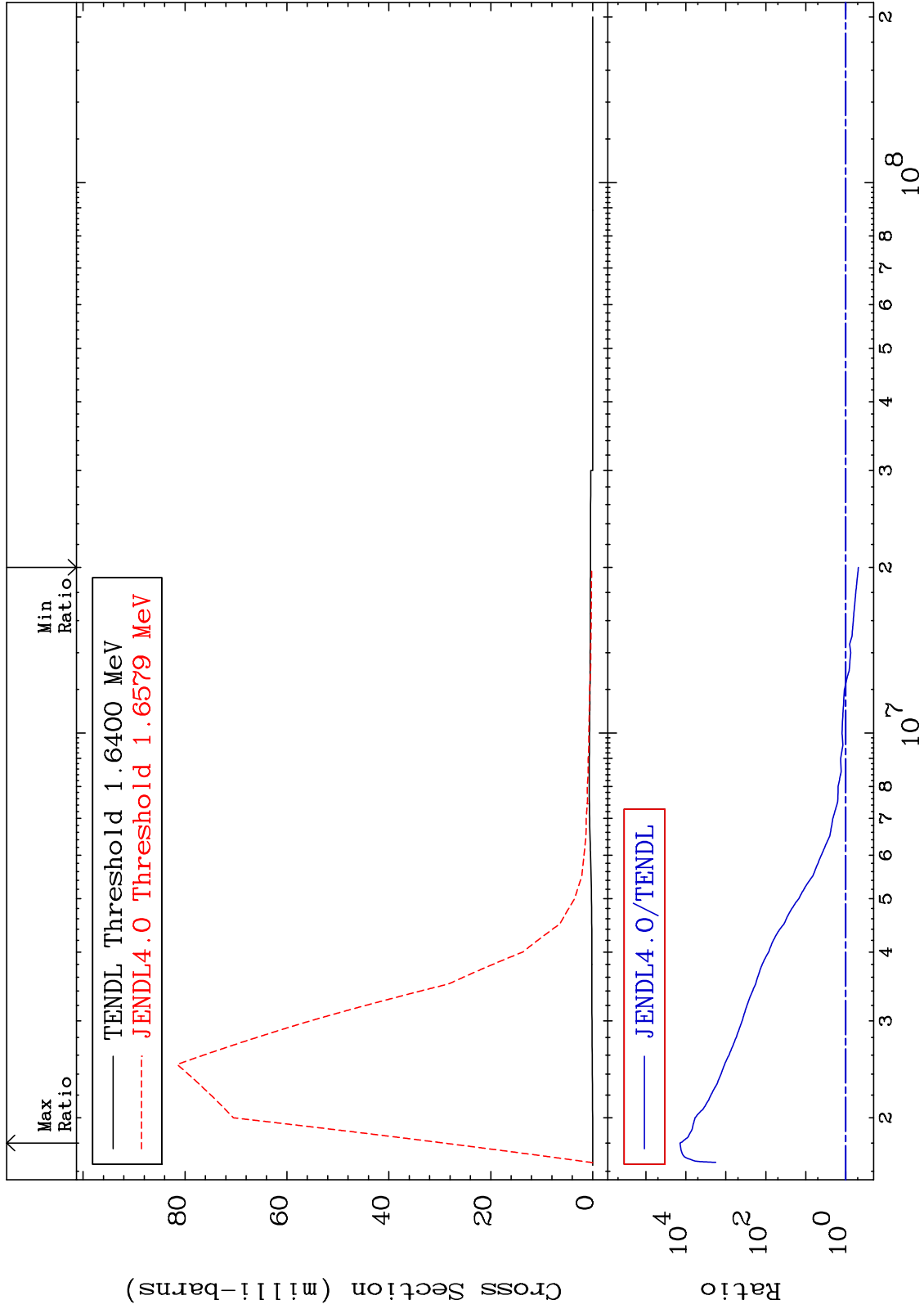
MAT 7225 MT= 76 (n,n') Level Cross Section -60.36 To 182.3 % 72-Hf-174



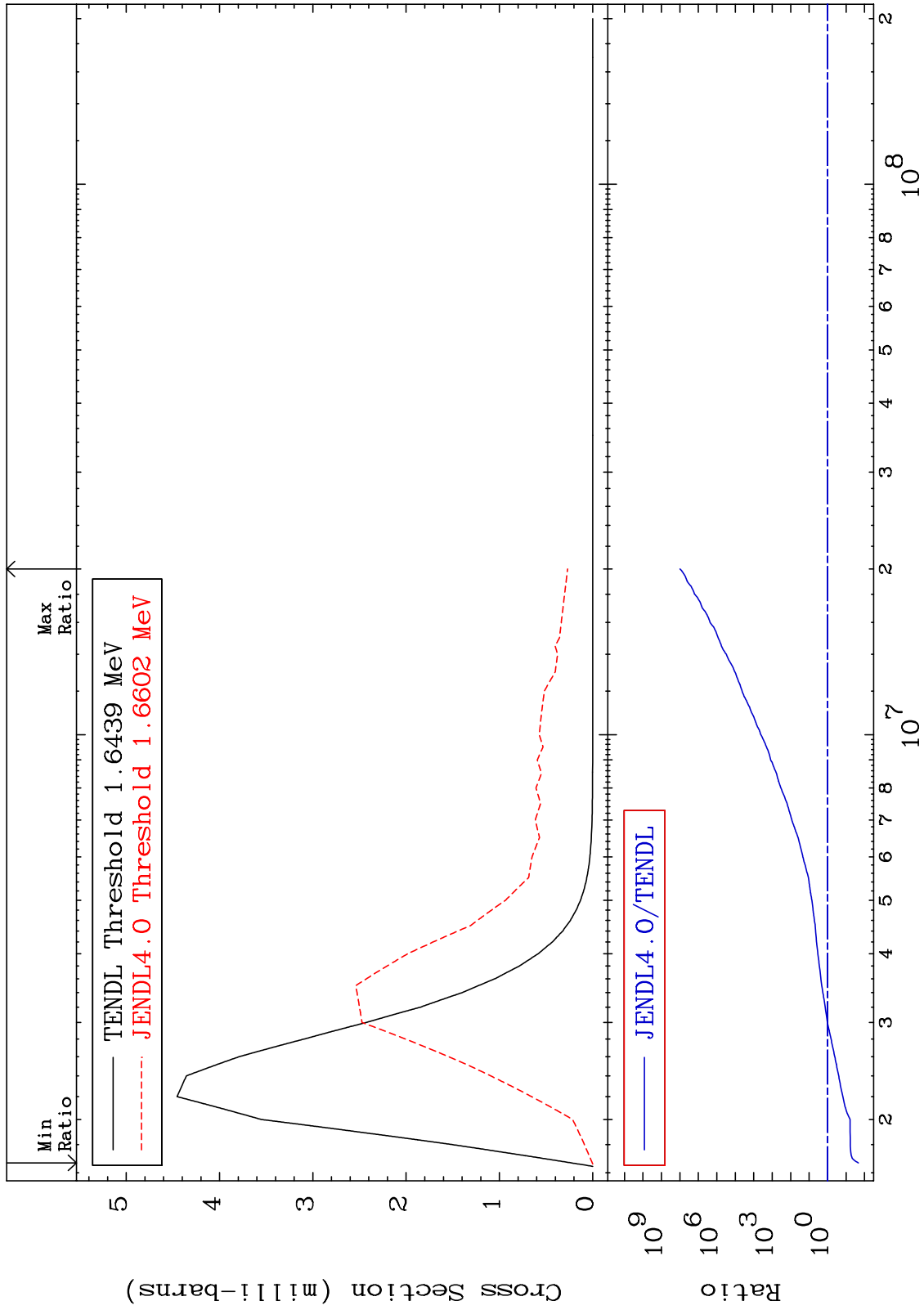
MAT 7225

MT= 77 (n,n') Level
Cross Section

72-Hf-174
-51.94 To 9999. %



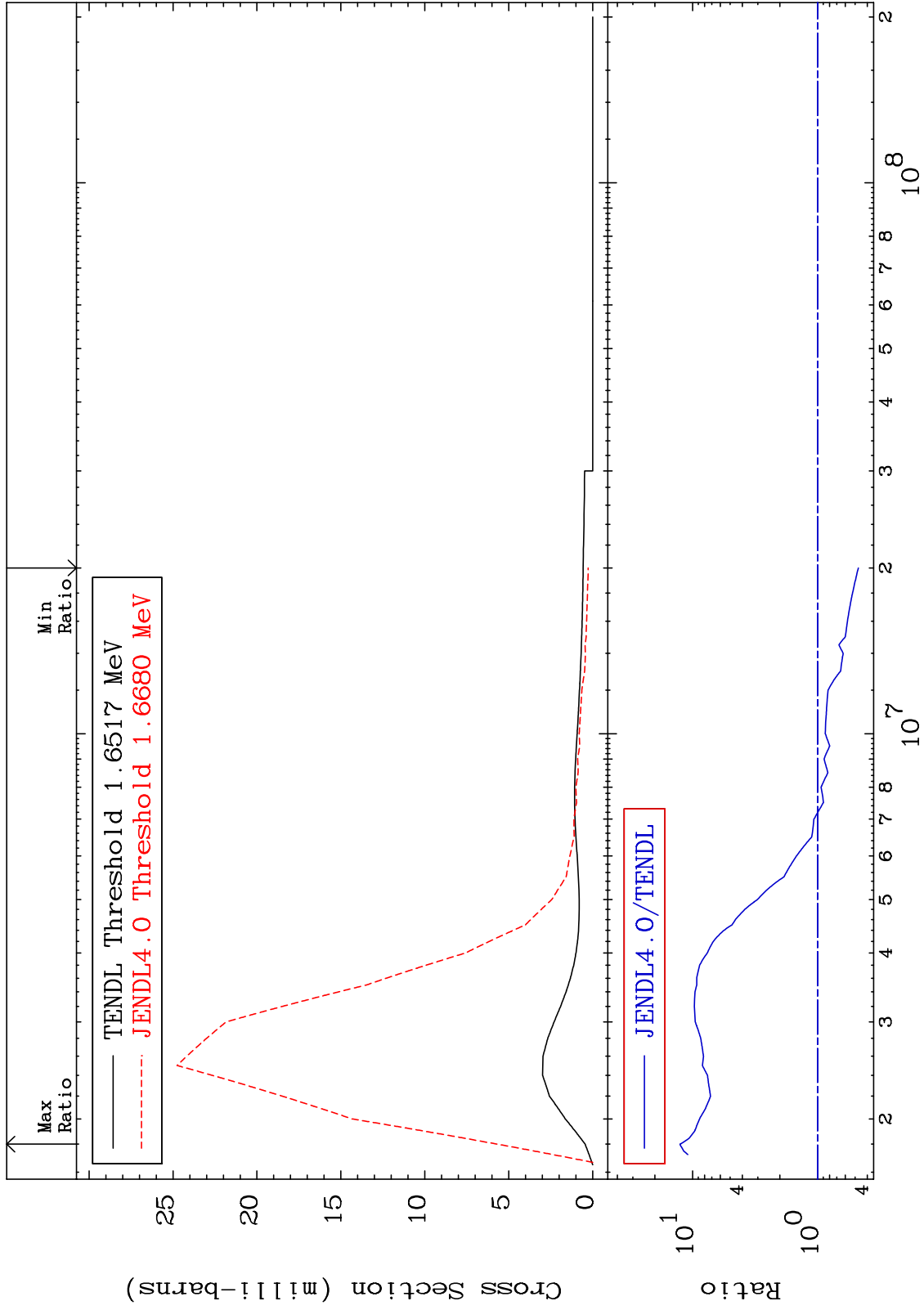
MAT 7225 MT= 78 (n,n') Level Cross Section 72-Hf-174 -97.86 To 9999. %



MAT 7225

MT= 79 (n,n') Level
Cross Section

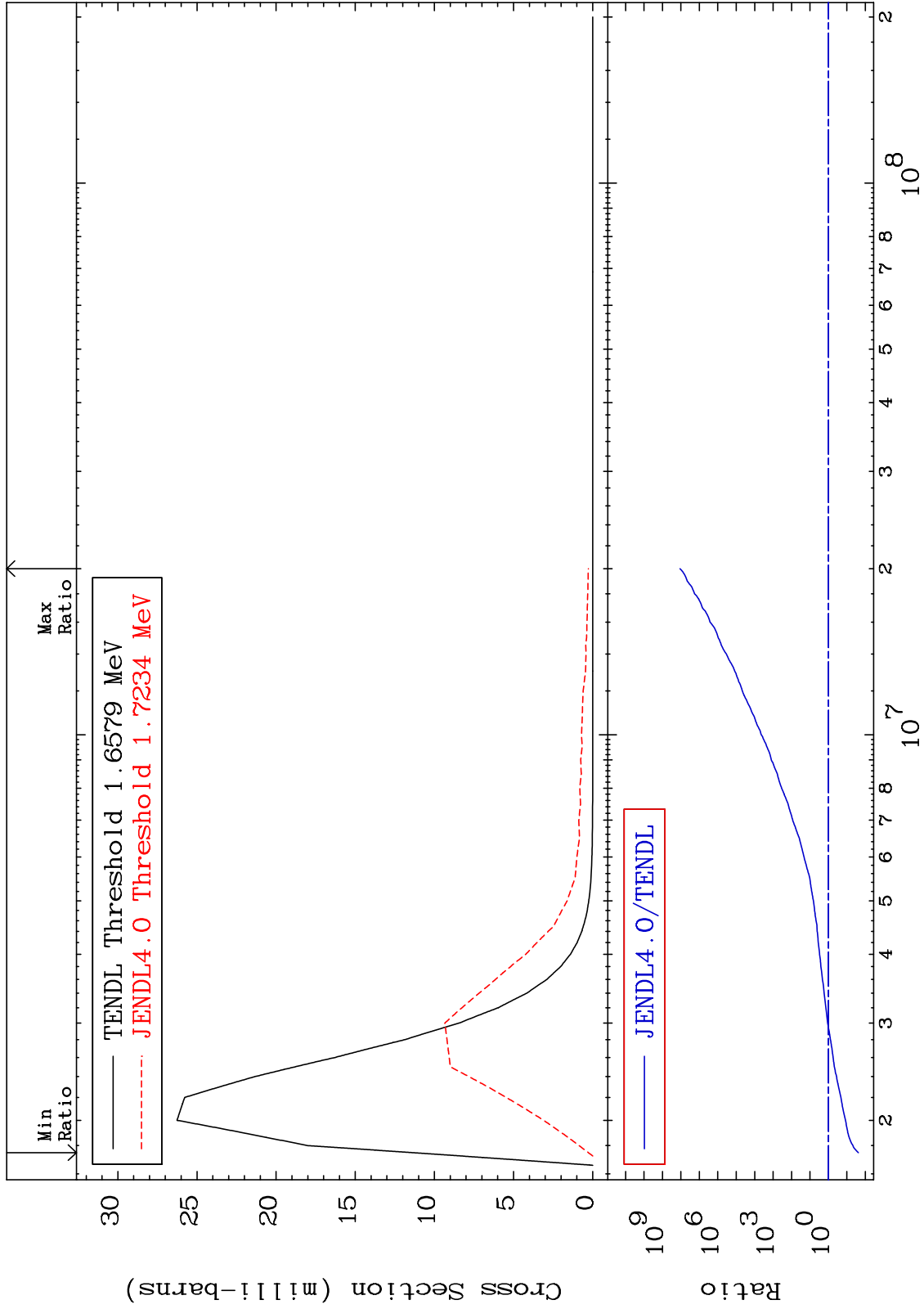
72-Hf-174
-52.93 To 1159. %



MAT 7225

MT= 80 (n,n') Level
Cross Section

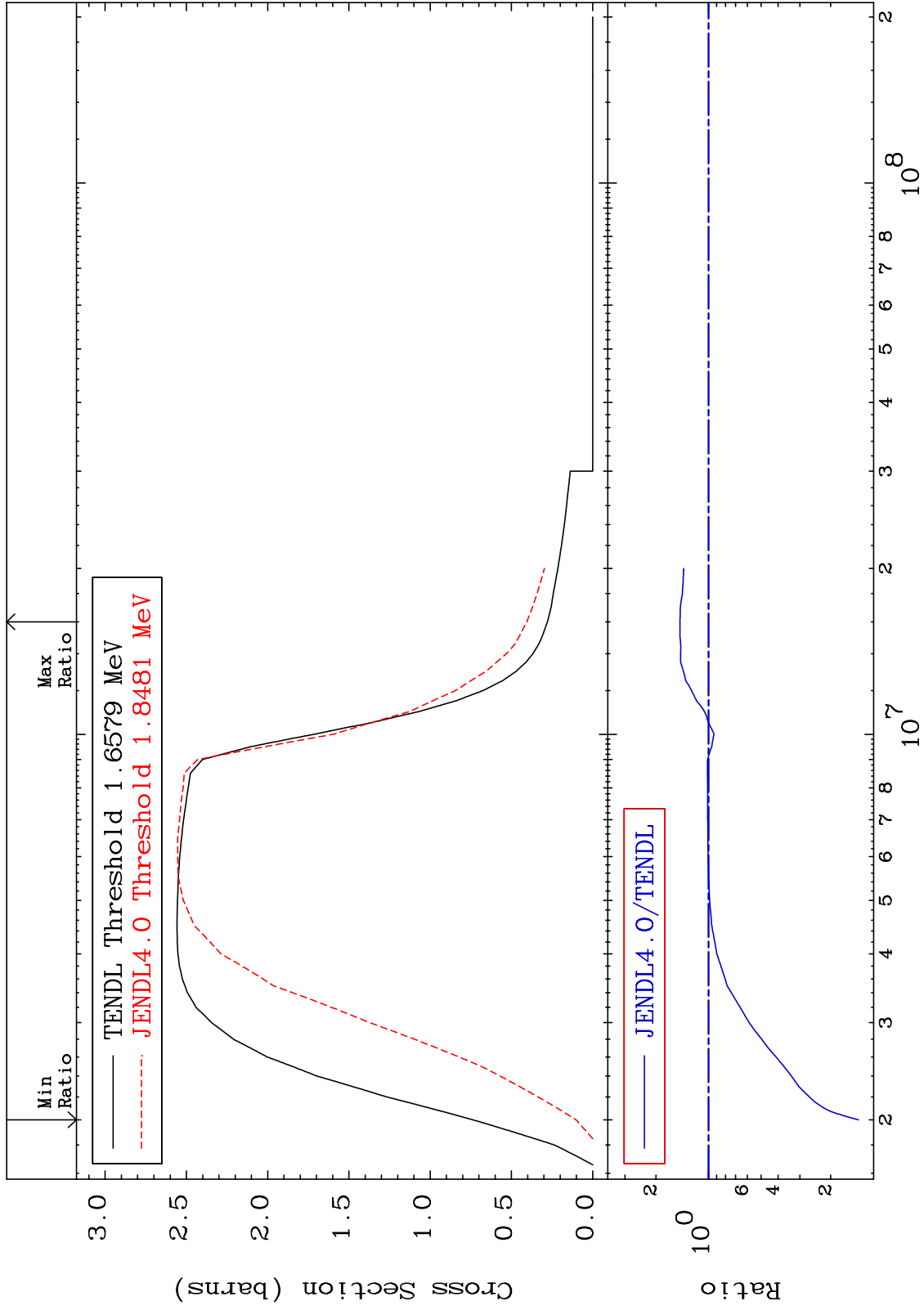
72-Hf-174
-97.63 To 9999. %



MAT 7225

(n, n') Continuum
Cross Section

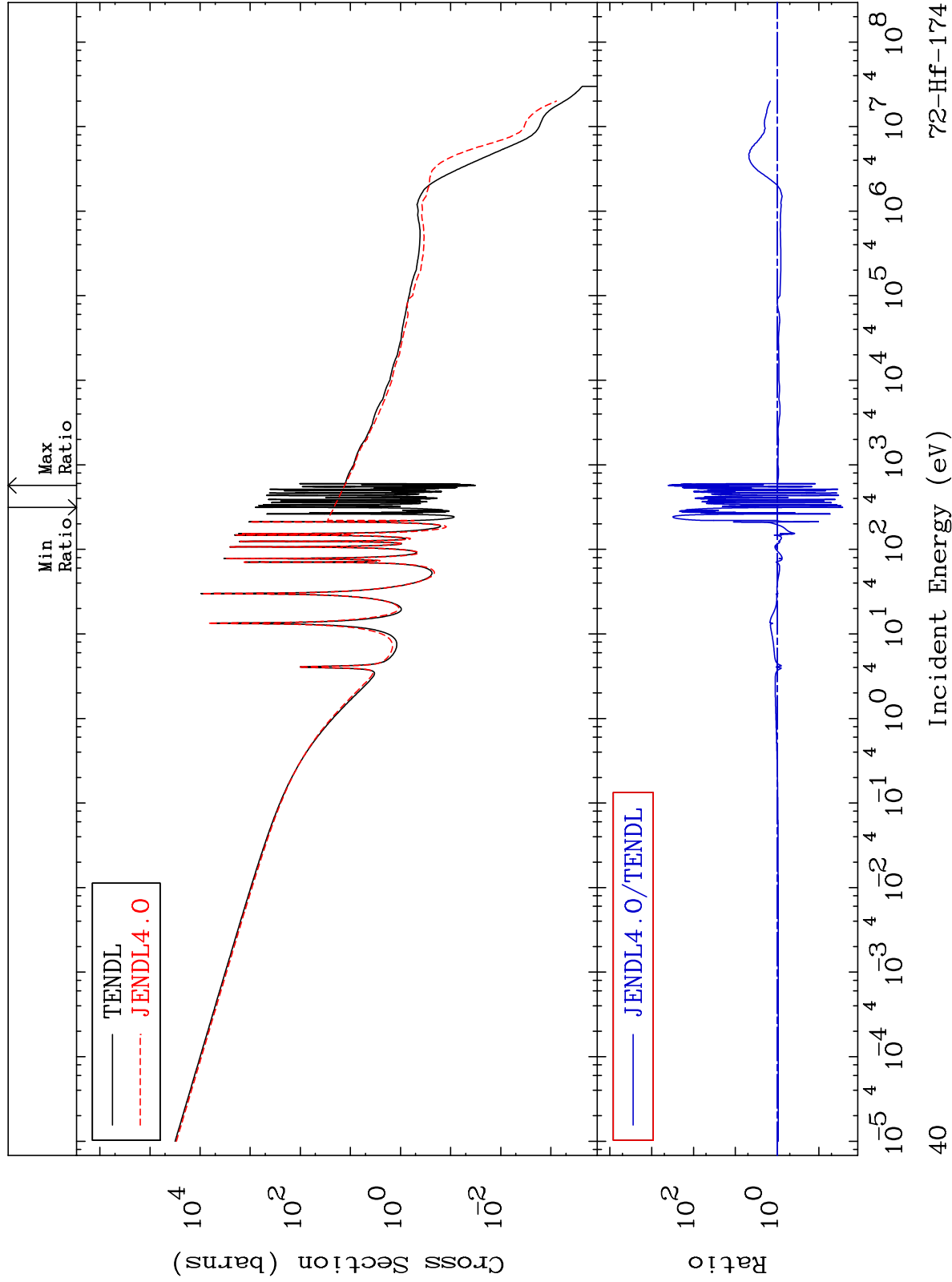
⁷²Hf-174
-86.11 To 45.50 %



MAT 7225

(n, γ)
Cross Section

72-Hf-174
-97.32 To 9999. %



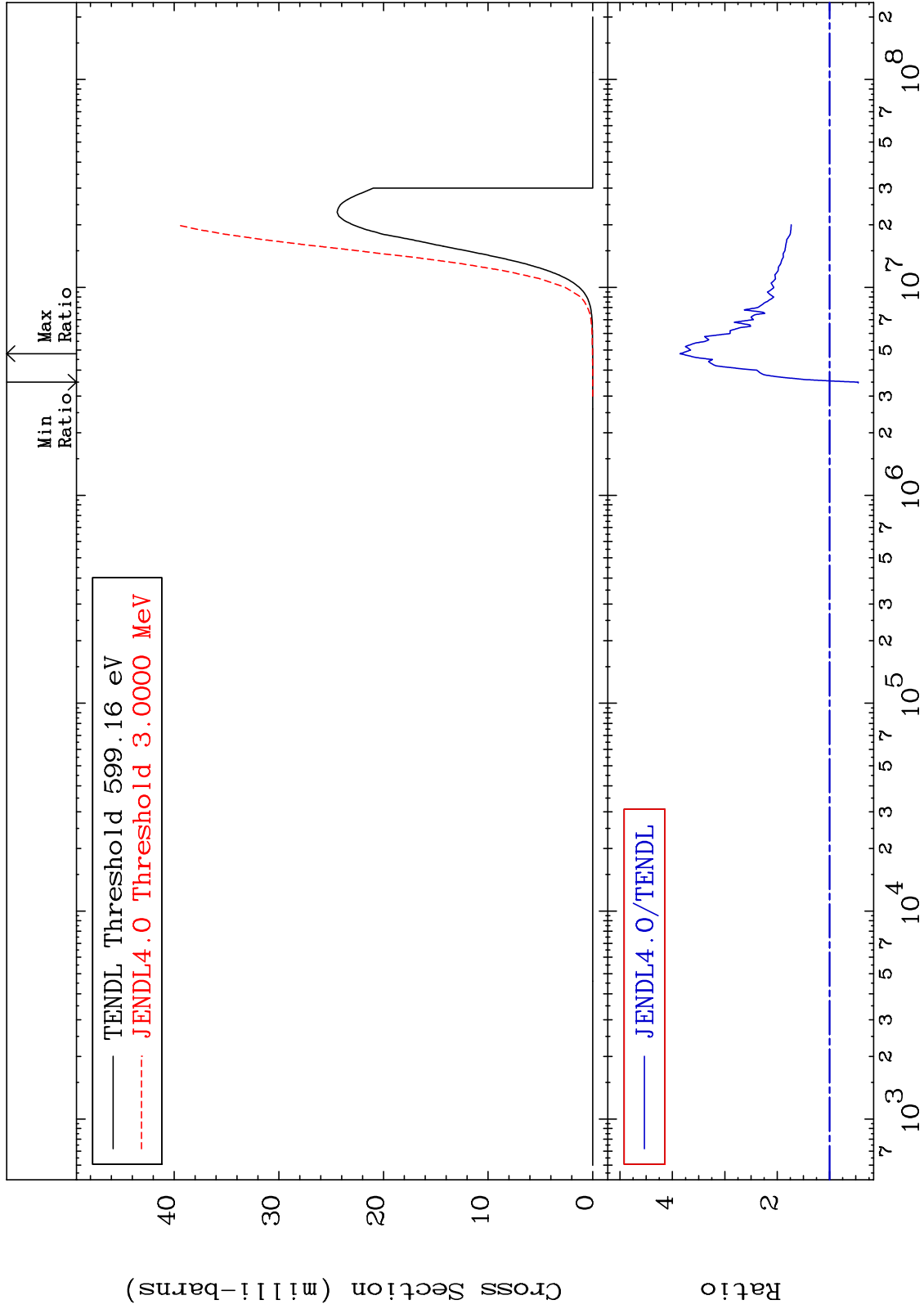
MAT 7225

(n, p)

⁷²Hf-174

Cross Section

-54.89 To 285.5 %



41

Incident Energy (eV)

⁷²Hf-174

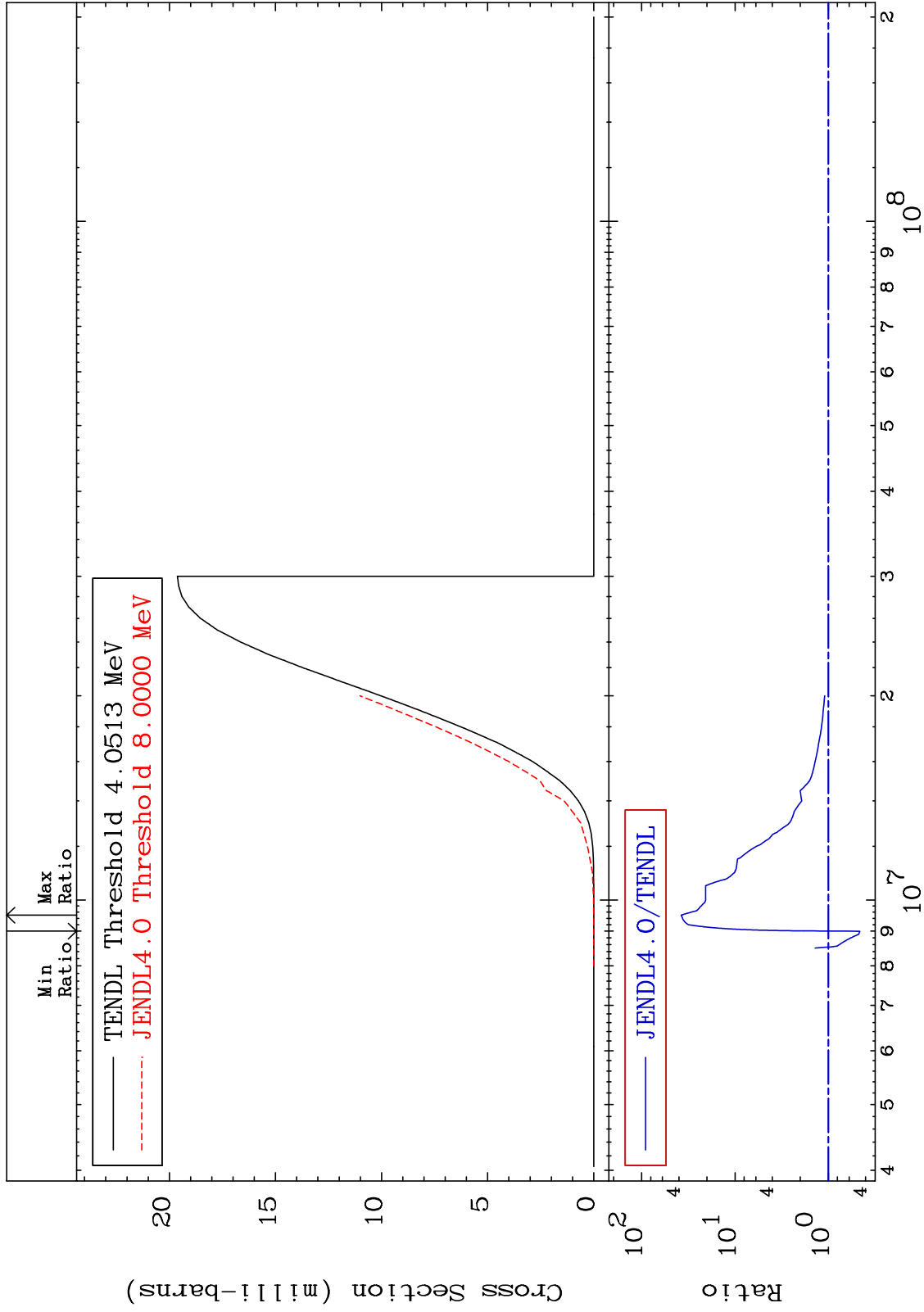
MAT 7225

(n, d)

72-Hf-174

Cross Section

-54.02 To 3674. %



42

Incident Energy (eV)

72-Hf-174

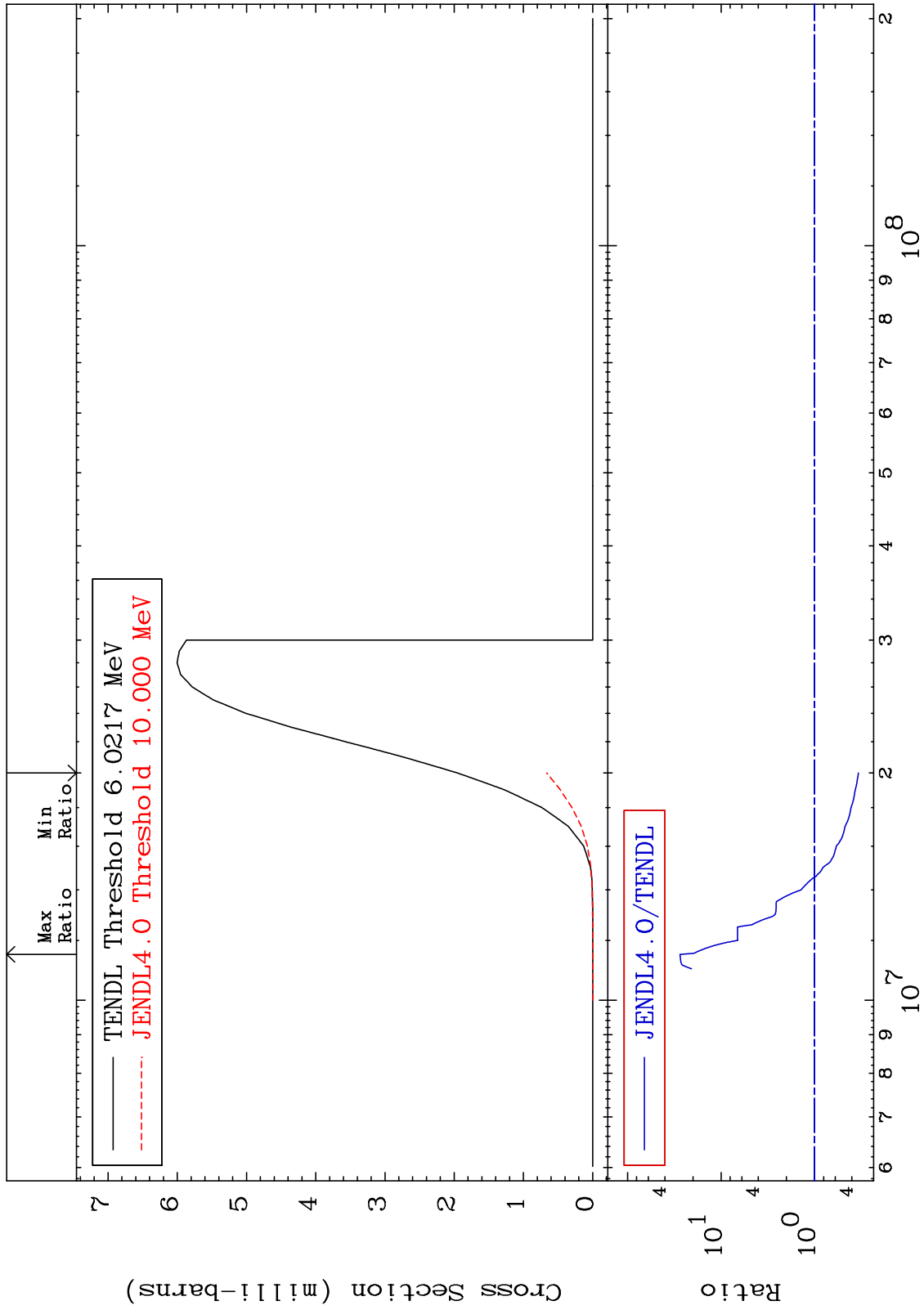
MAT 7225

(n, t)

72-Hf-174

Cross Section

-66.01 To 2650. %



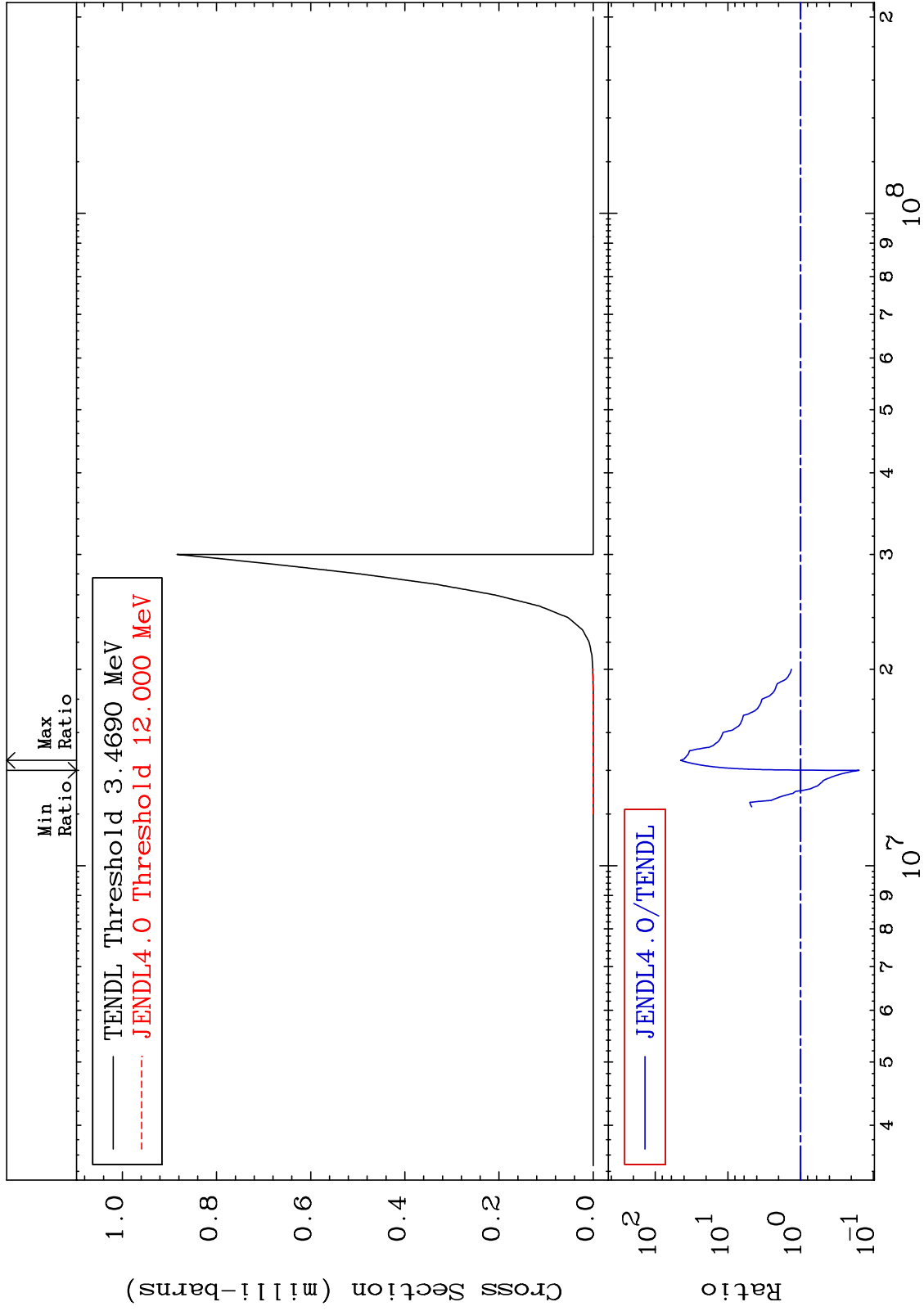
MAT 7225

(n, He-3)

72-Hf-174

Cross Section

-84.40 To 4369. %



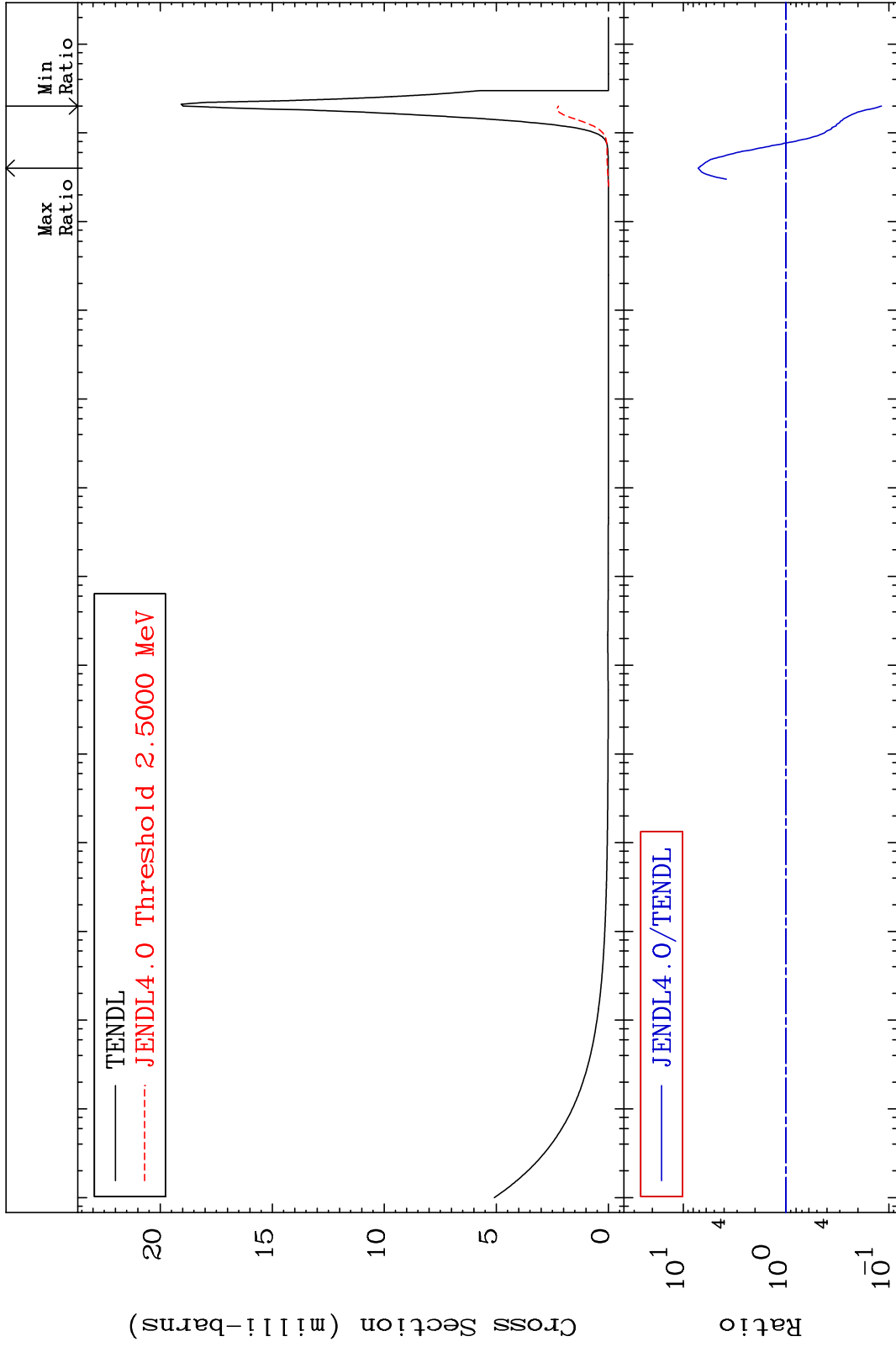
MAT 7225

(n, α)

72-Hf-174

Cross Section

-88.23 To 616.2 %



45

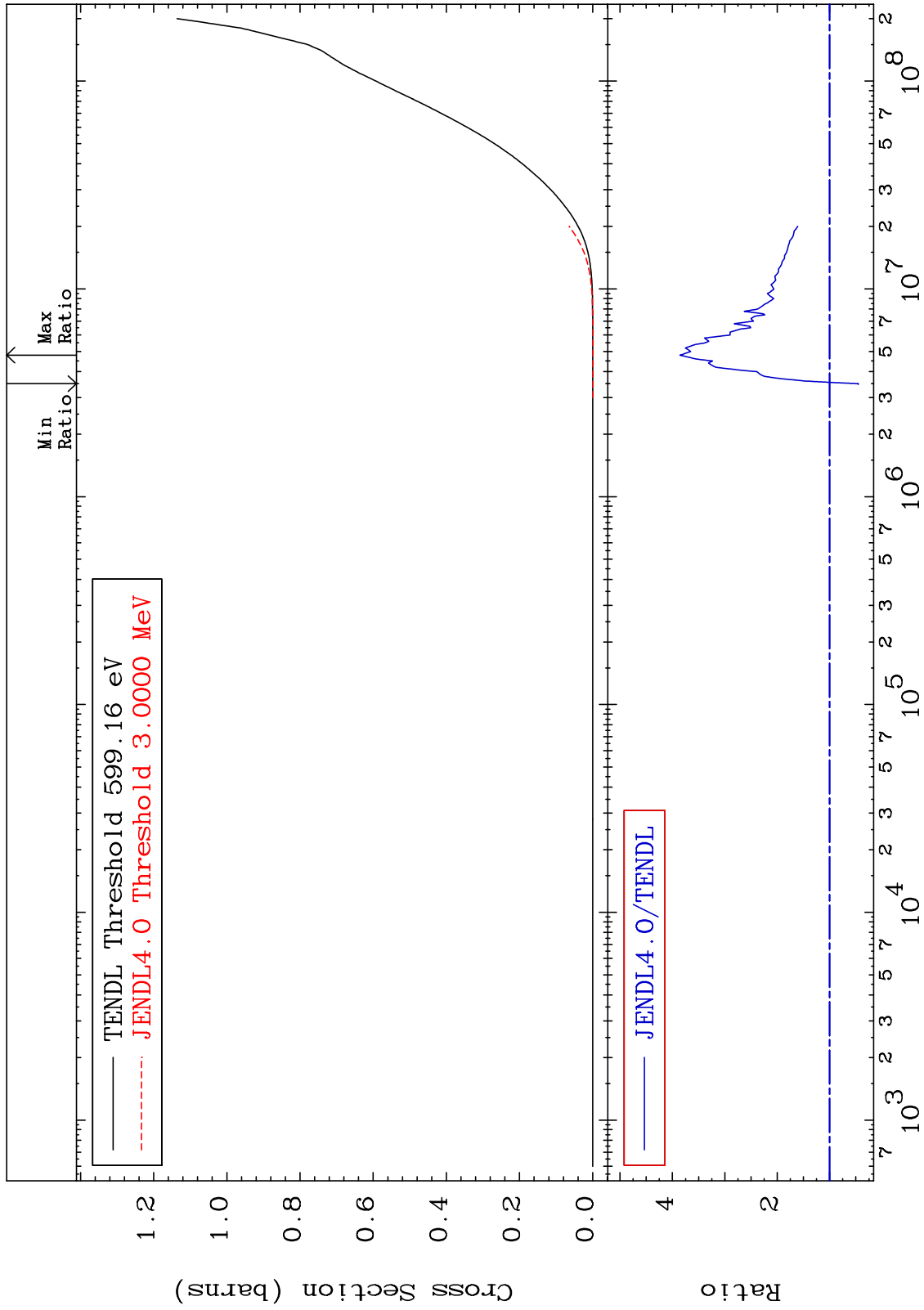
Incident Energy (eV)

72-Hf-174

MAT 7225

Hydrogen Production
Cross Section

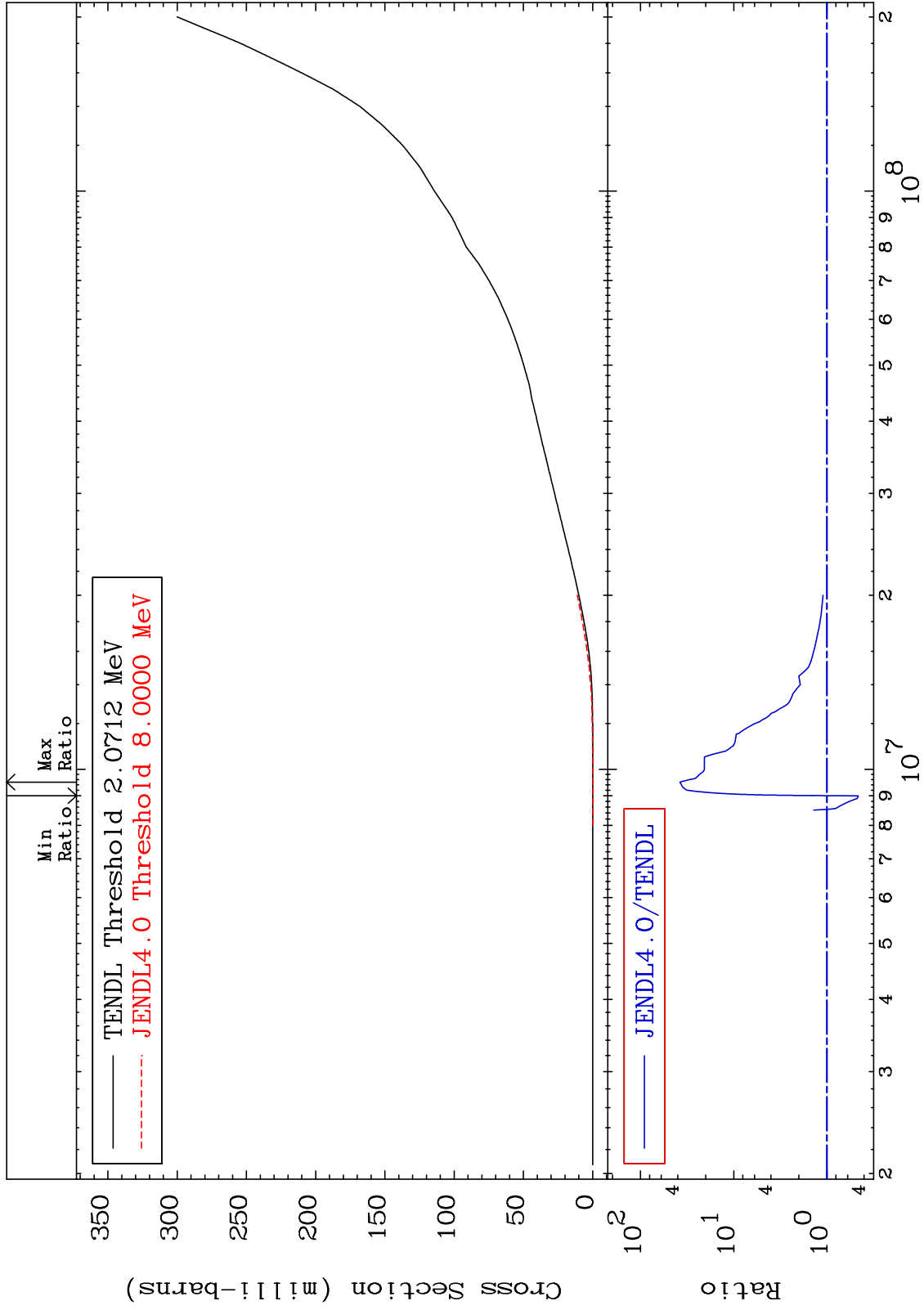
72-Hf-174
-54.89 To 285.5 %



MAT 7225

Deuterium Production
Cross Section

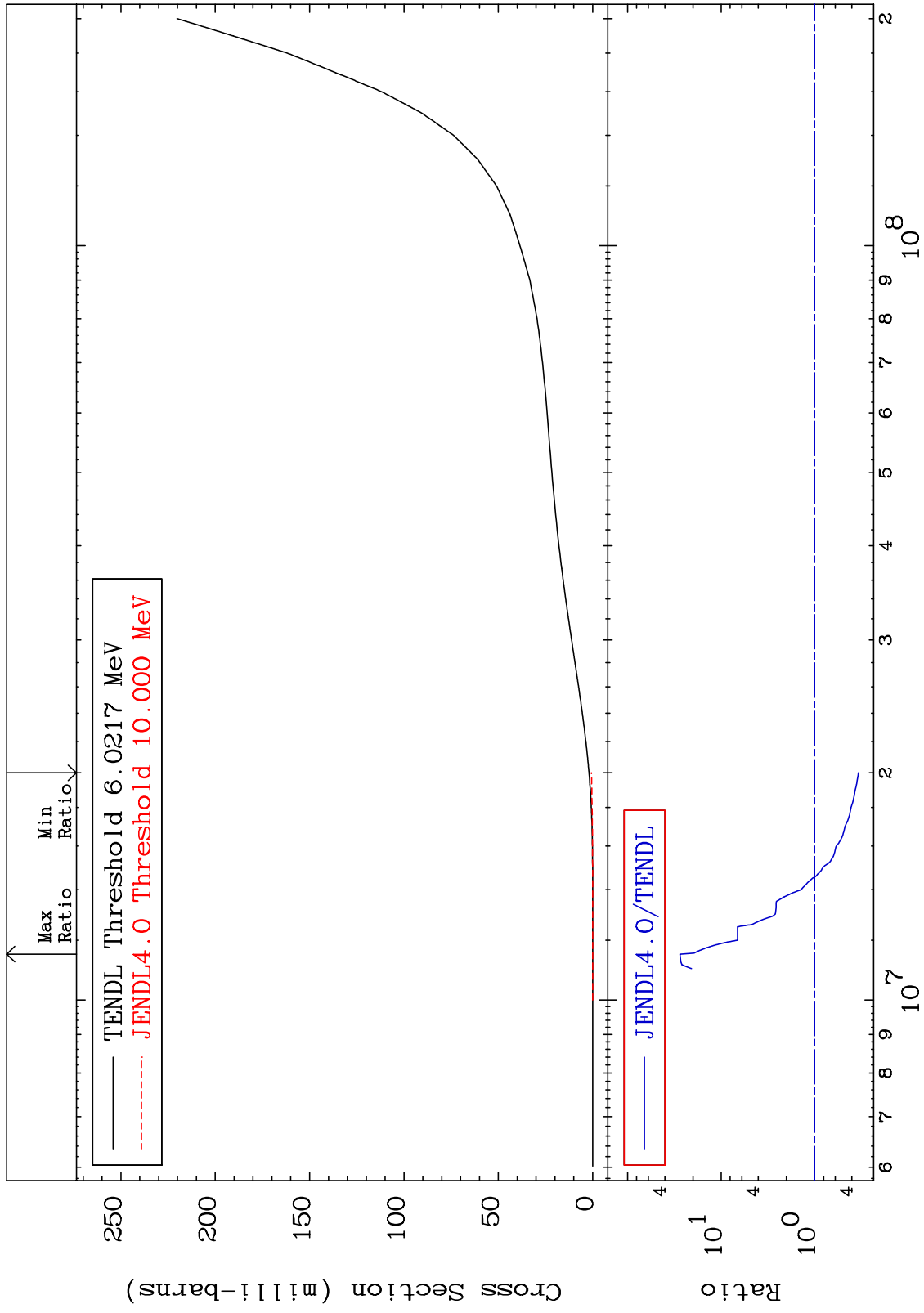
⁷²Hf-174
-54.02 To 3674. %



MAT 7225

Tritium Production
Cross Section

72-Hf-174
-66.02 To 2650. %



48

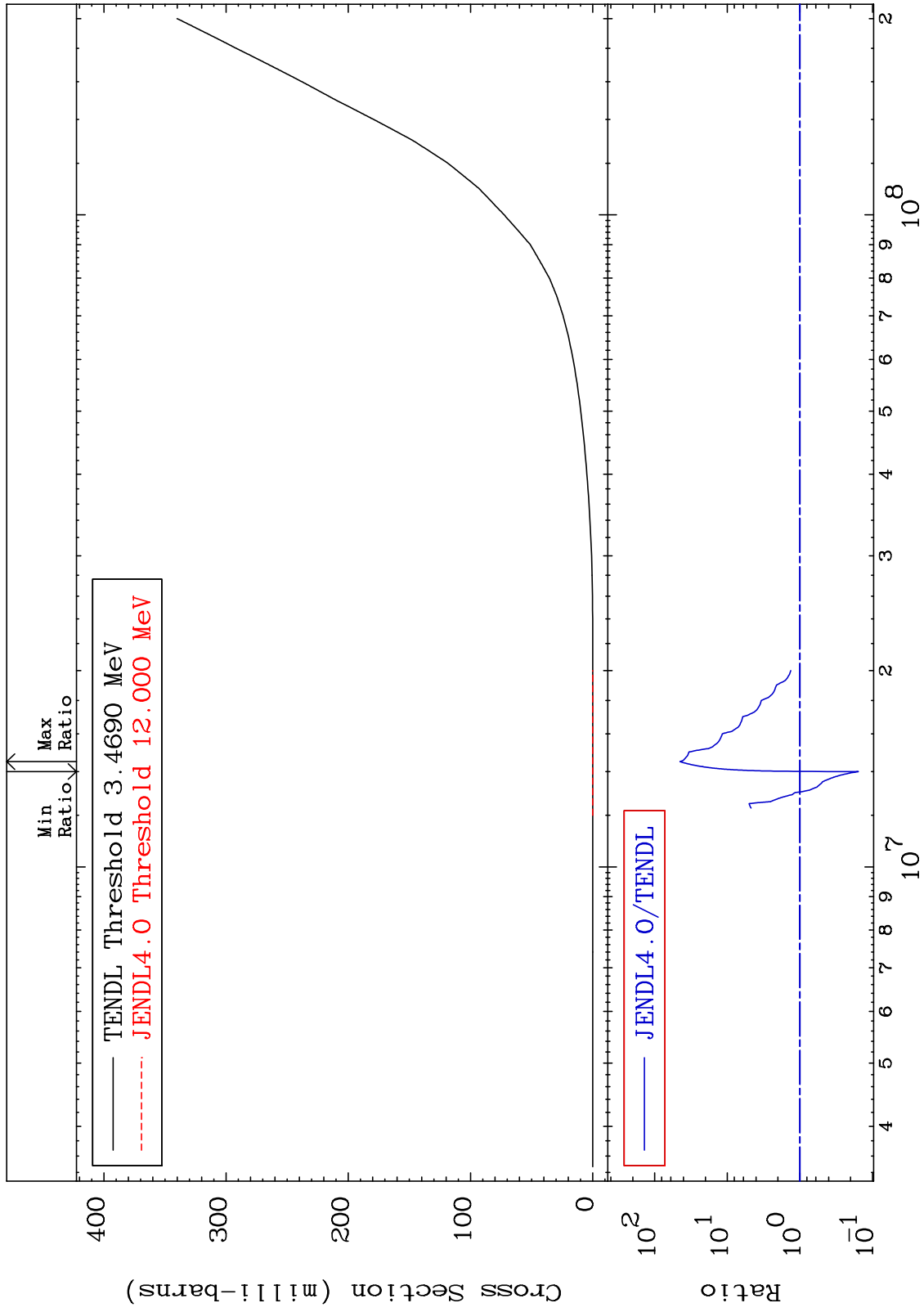
Incident Energy (eV)

72-Hf-174

MAT 7225

He-3 Production
Cross Section

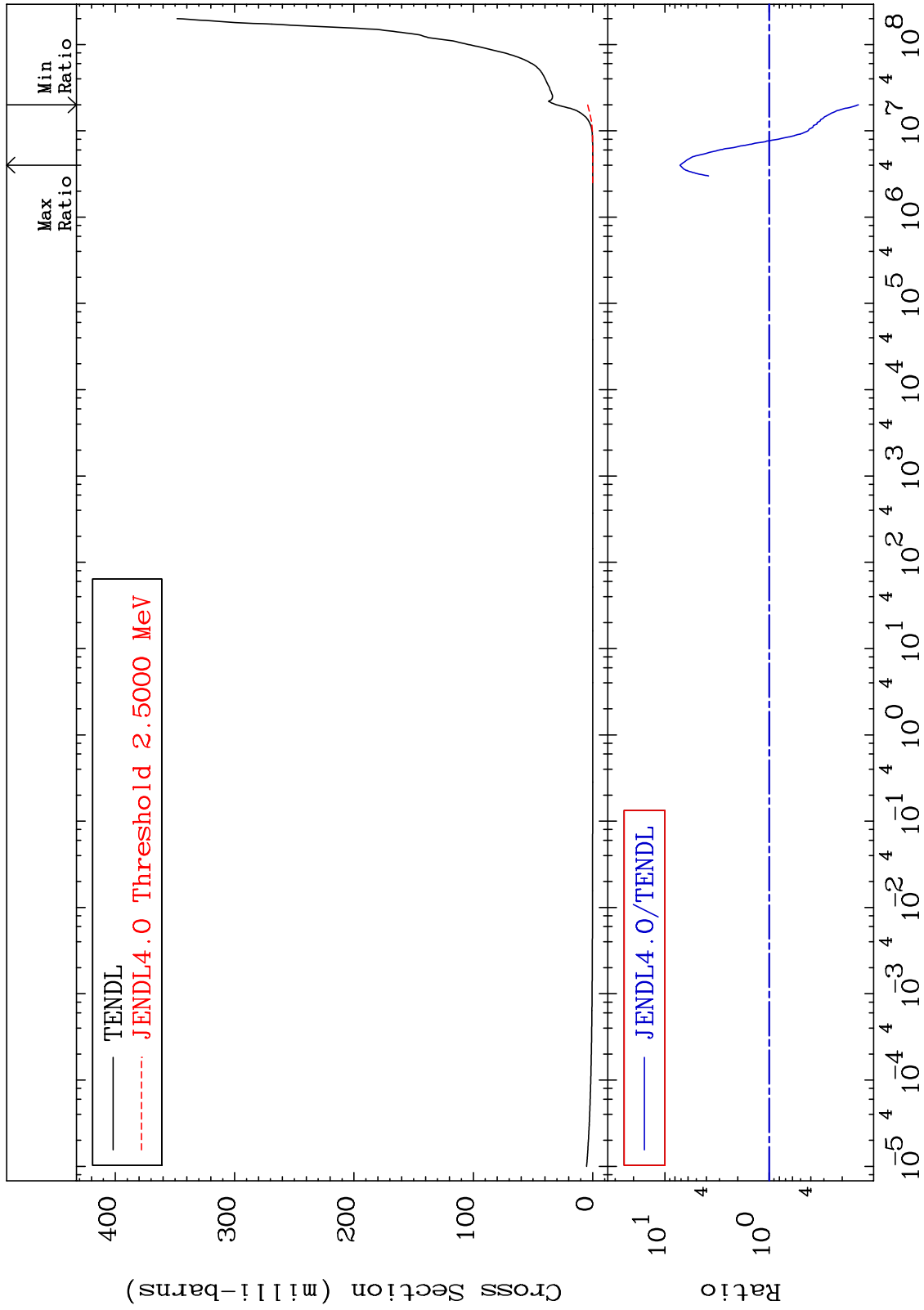
⁷²Hf-174
-84.40 To 4369. %



MAT 7225

He-4 Production
Cross Section

72-Hf-174
-86.01 To 616.2 %



50

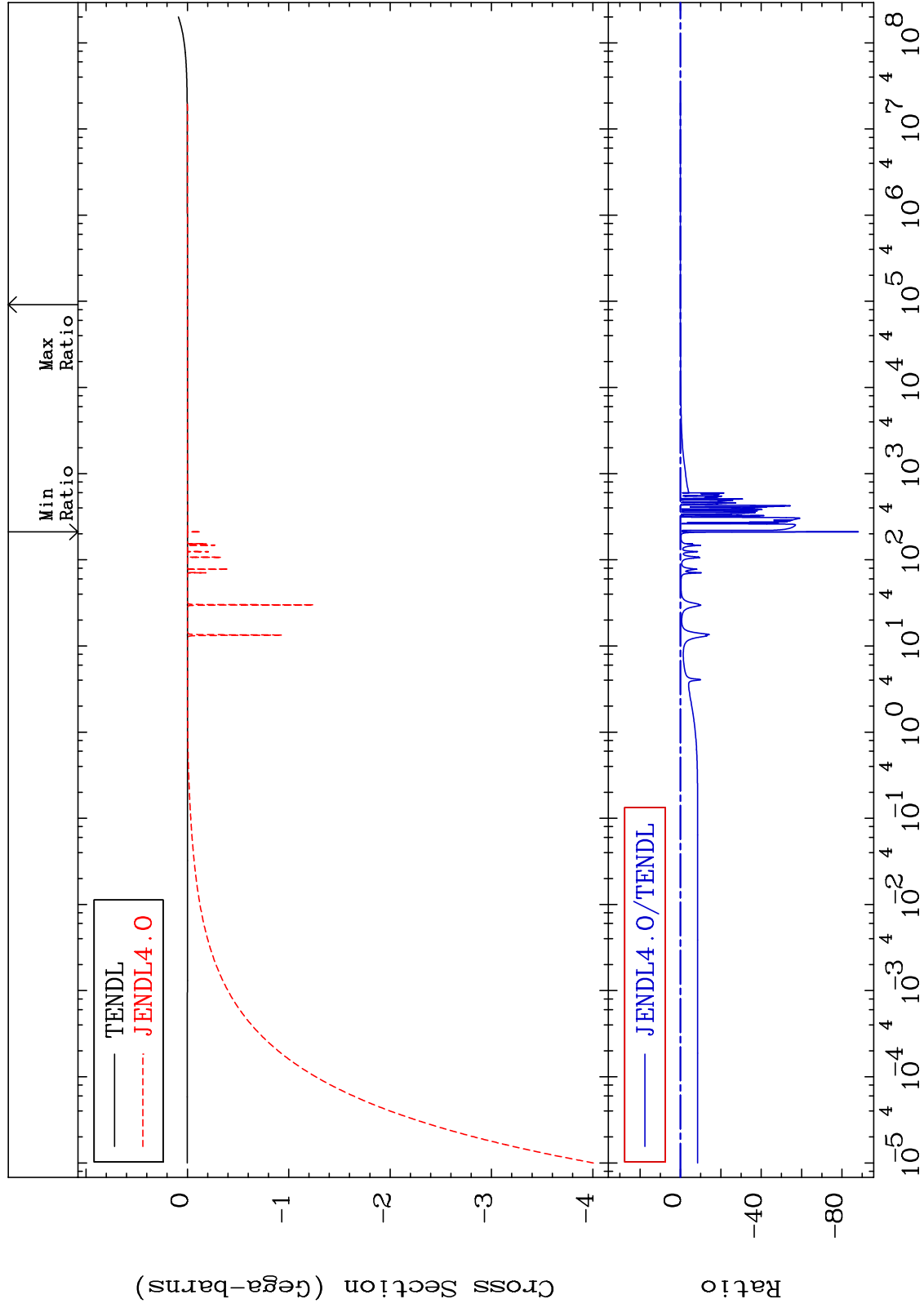
Incident Energy (eV)

72-Hf-174

MAT 7225

Kerma total (eV-barns)
Cross Section

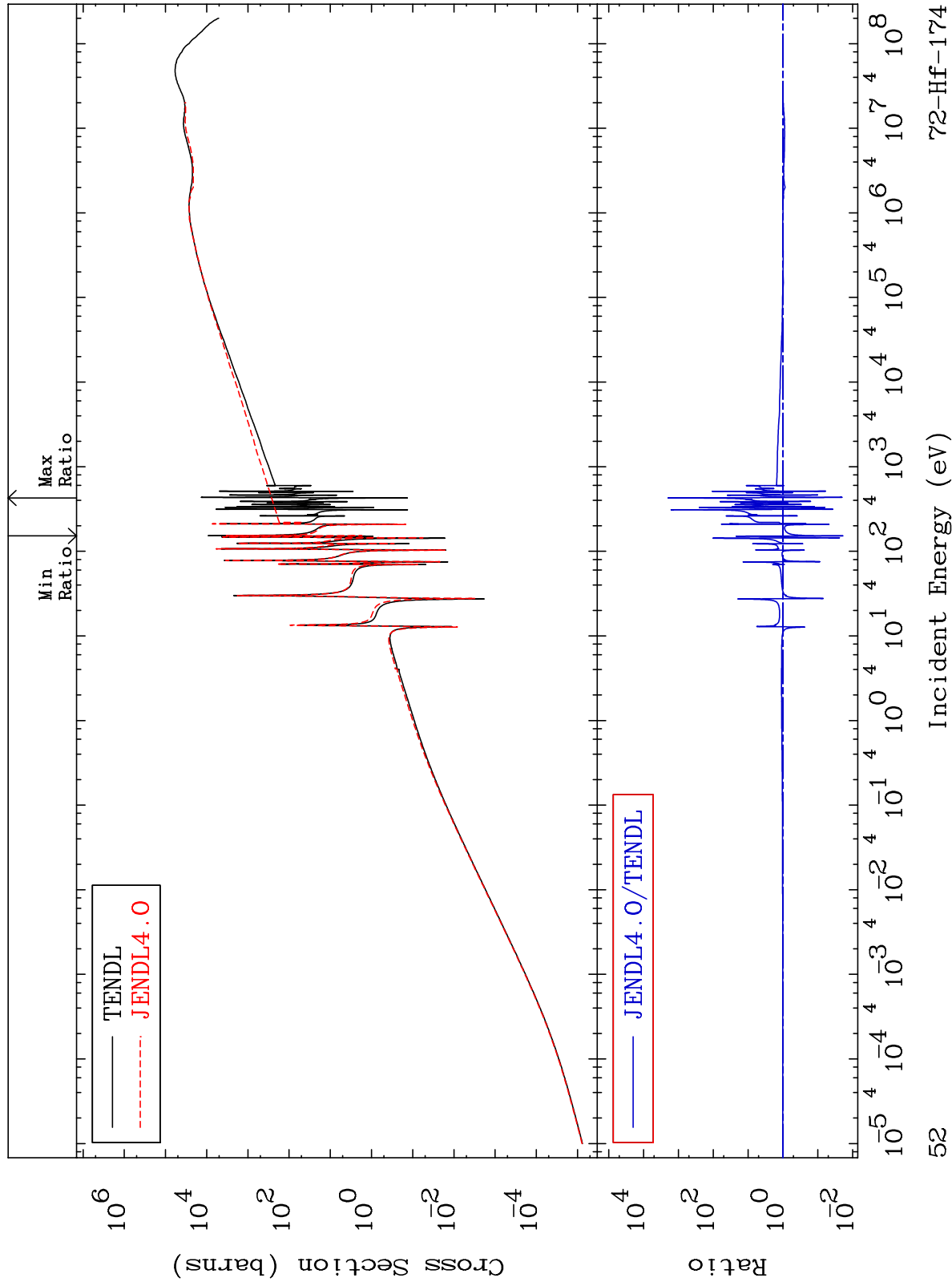
72-Hf-174
-9999. To 649.6 %



MAT 7225

Kerma elastic
Cross Section

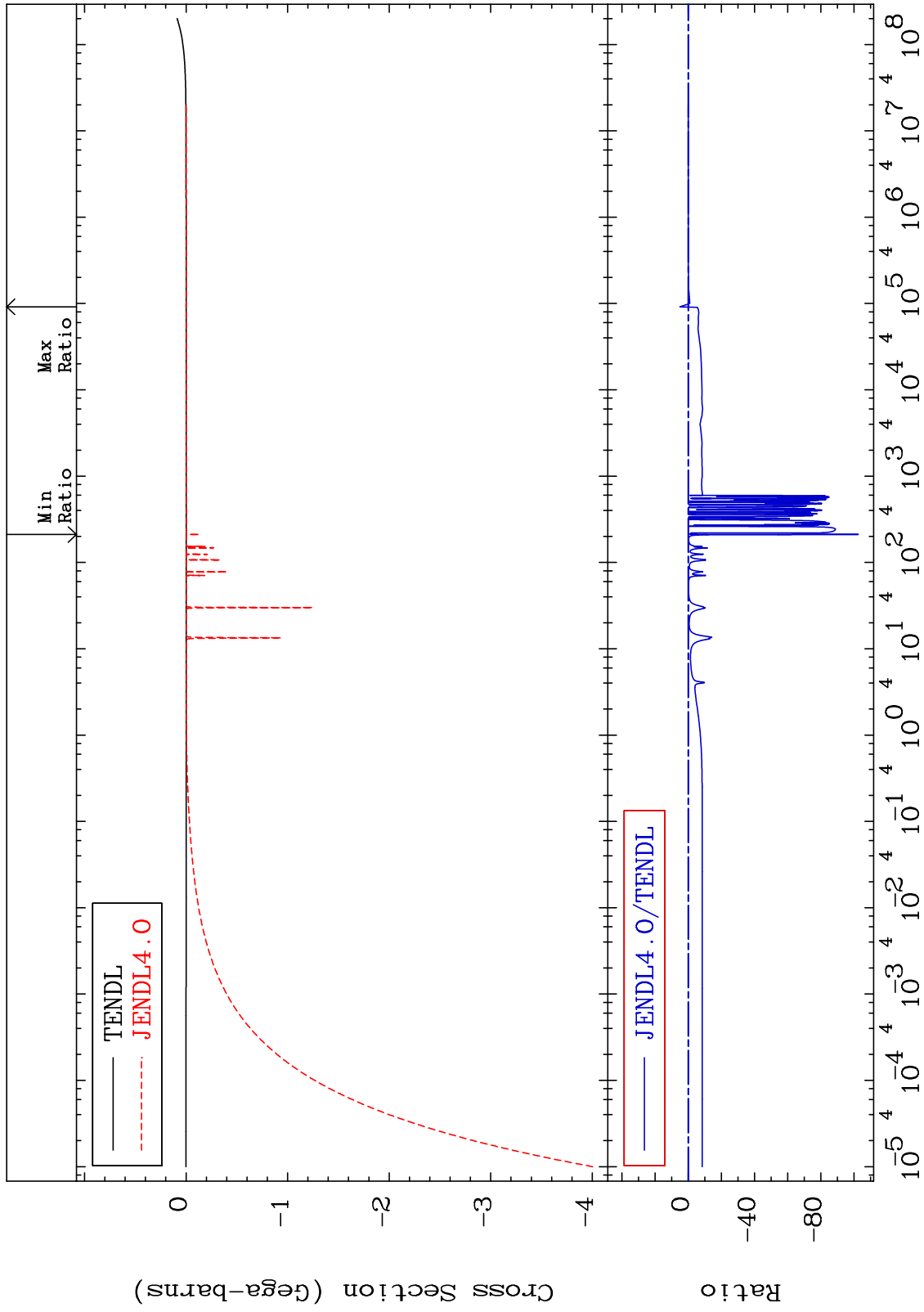
72-Hf-174
-98.08 To 9999. %



MAT 7225

Kerma non-elastic (all but mt2)
Cross Section

72-Hf-174
-9999. To 9999. %



53

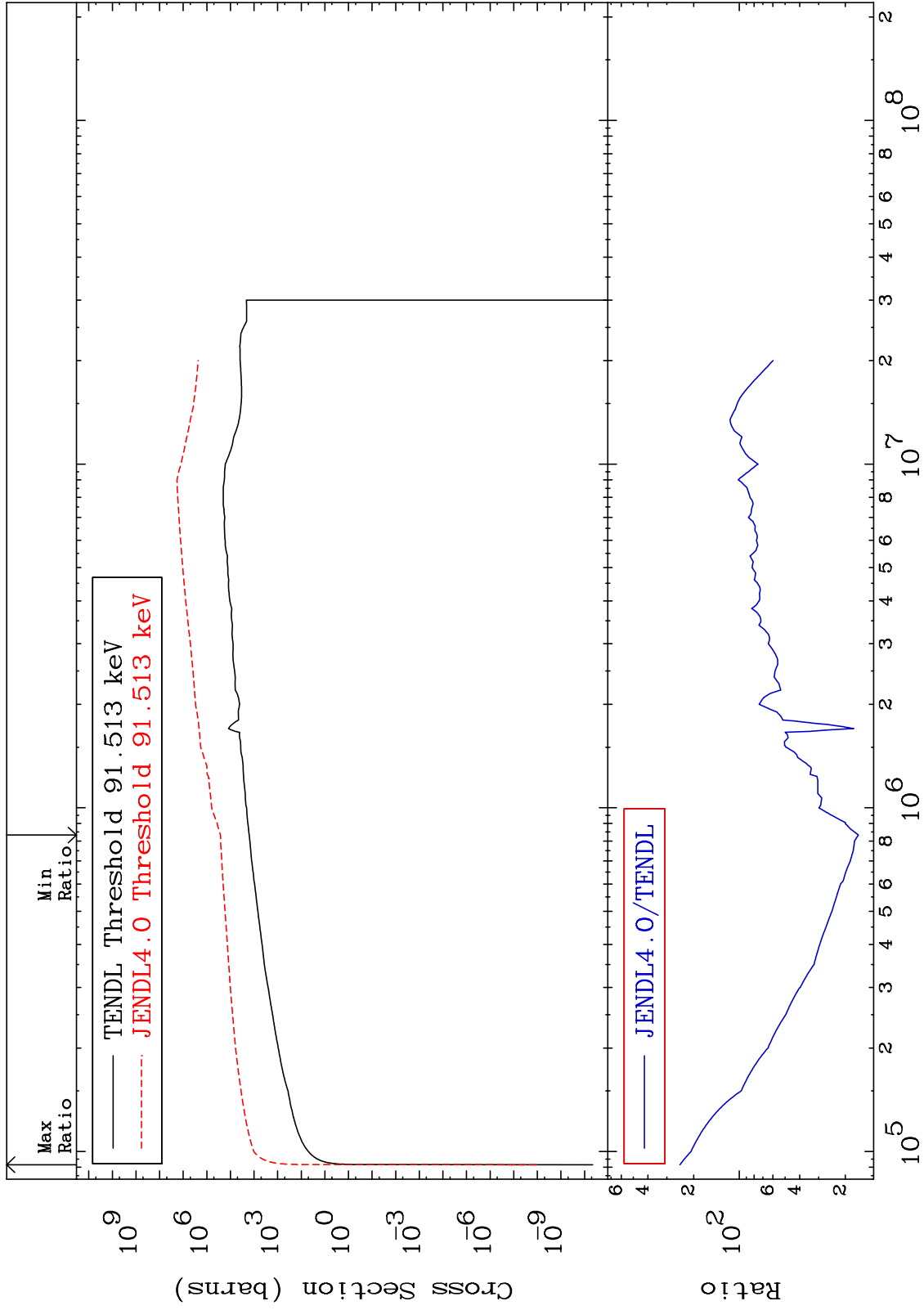
Incident Energy (eV)

72-Hf-174

MAT 7225

Kerma inelastic (mt51-91)
Cross Section

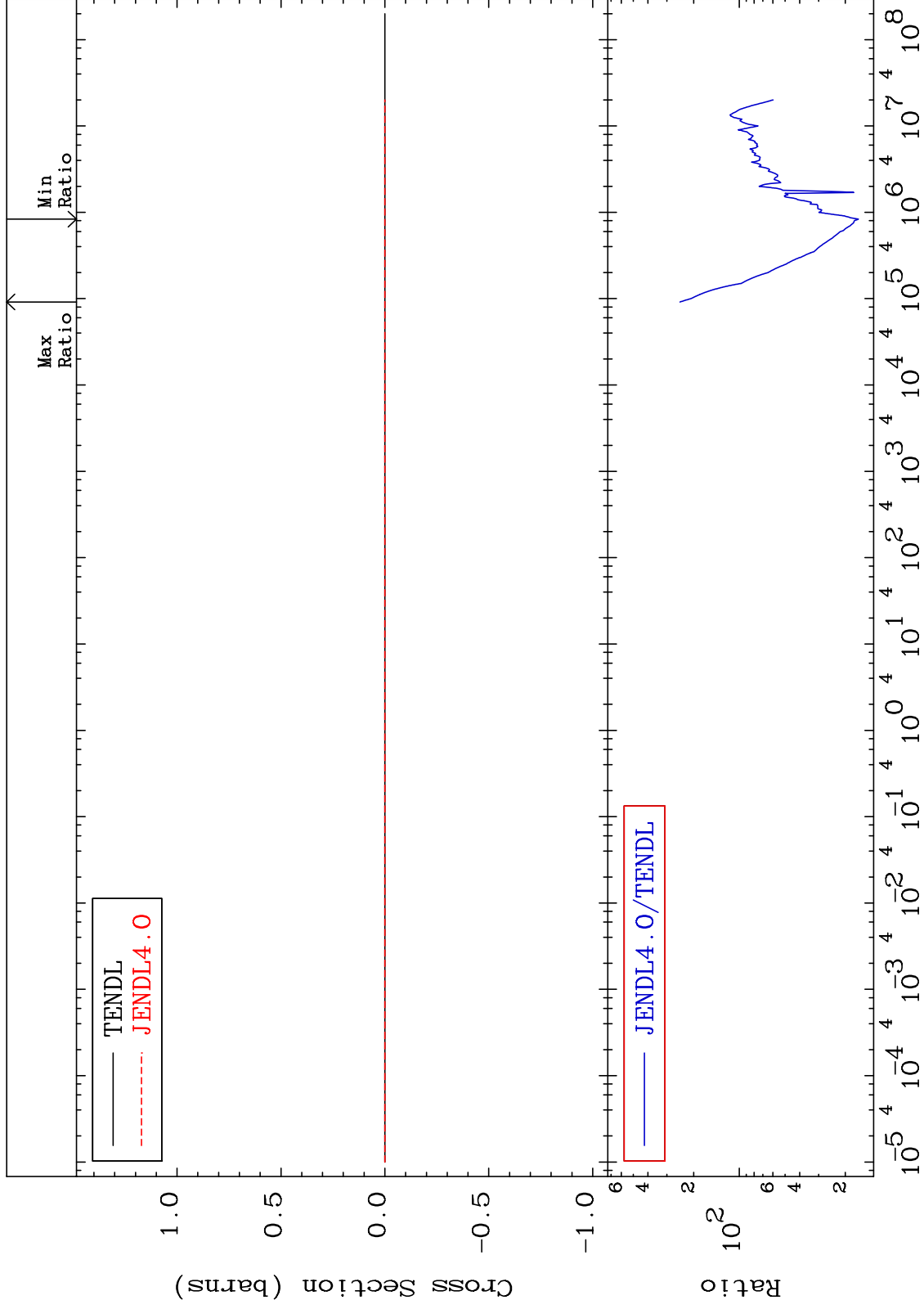
72-Hf-174
1541. To 9999. %



MAT 7225

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

72-Hf-174
1541. To 9999. %



55

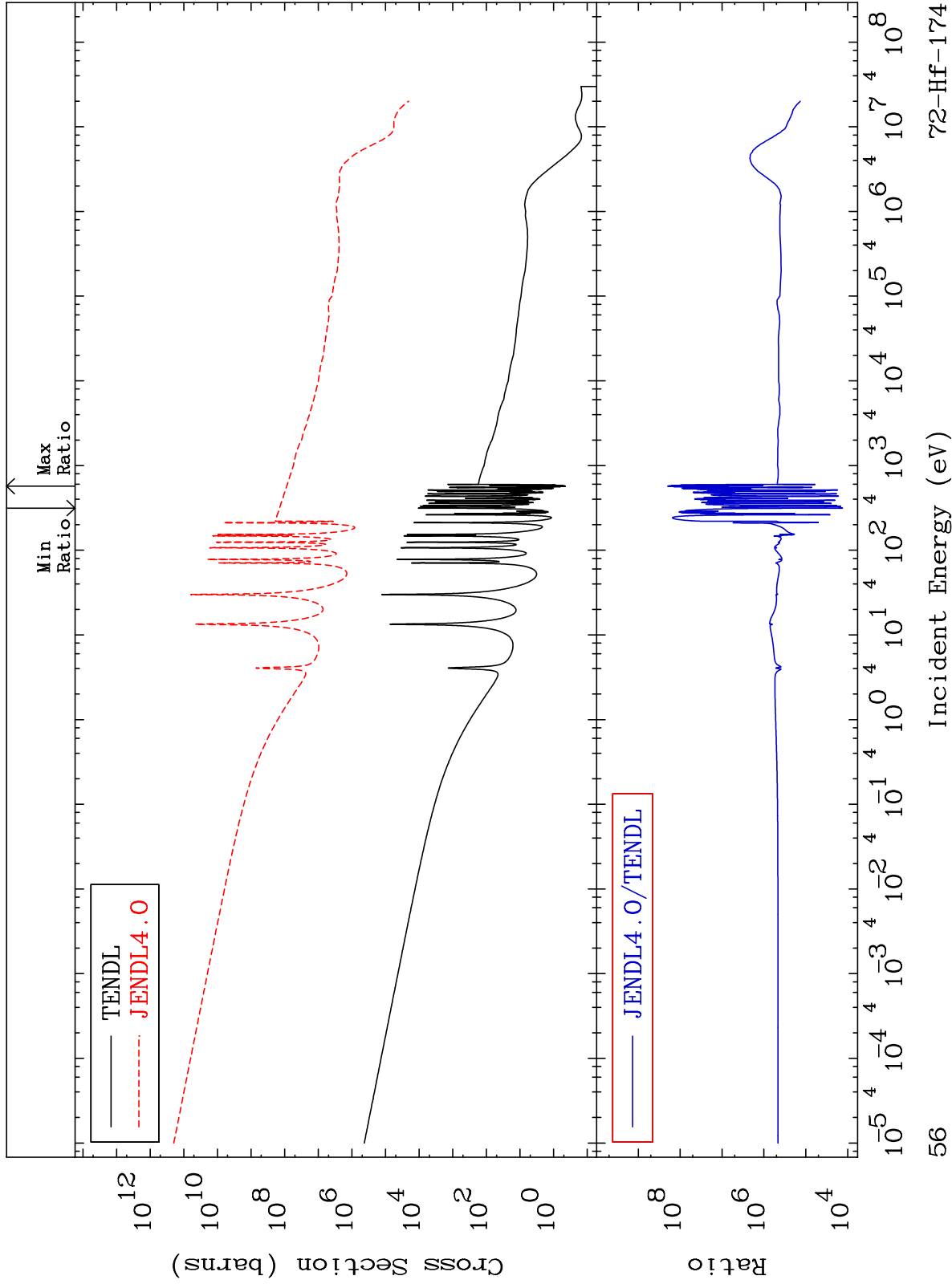
Incident Energy (eV)

72-Hf-174

MAT 7225

Kerma capture (mt102)
Cross Section

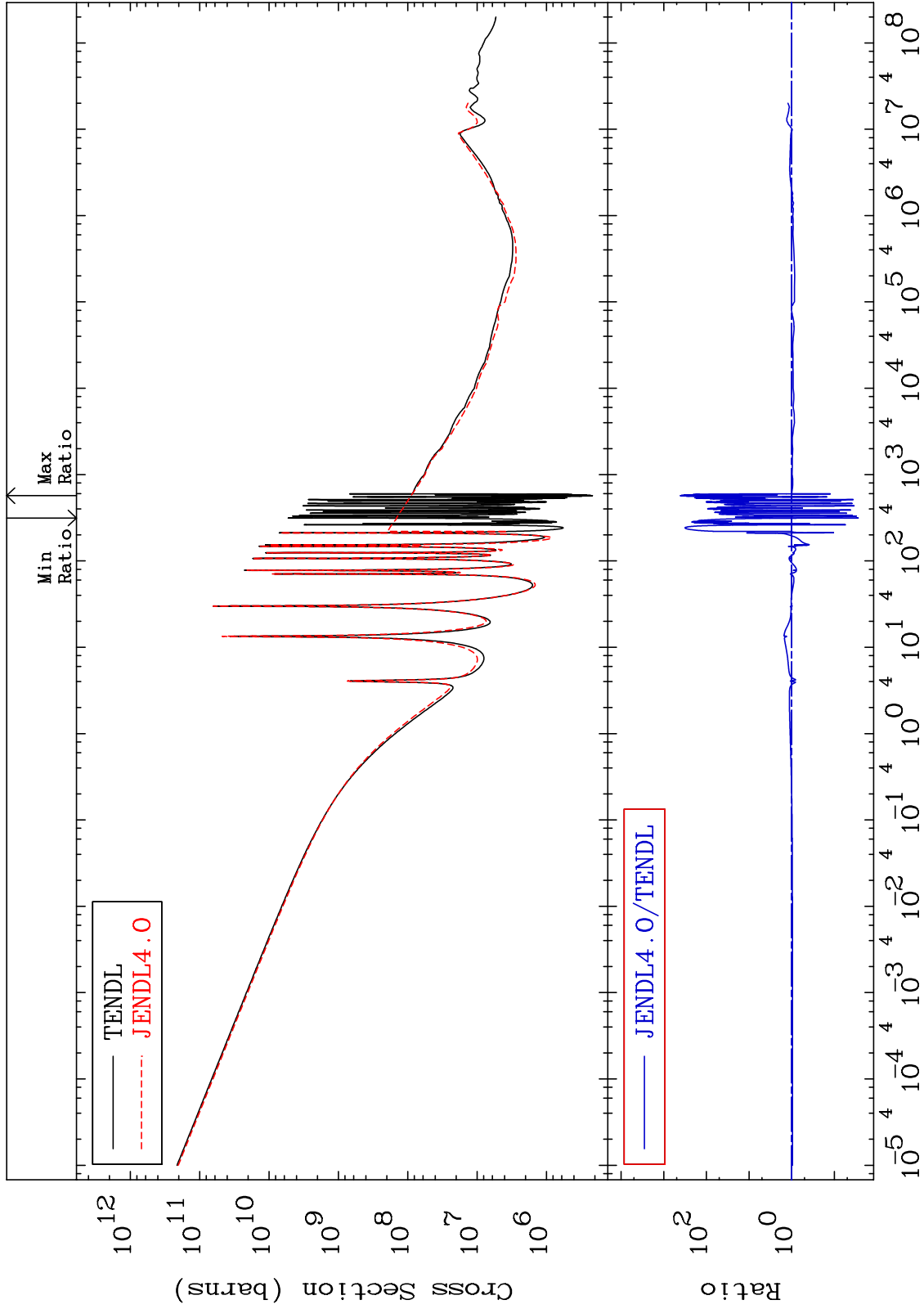
72-Hf-174
9999. To 9999. %



MAT 7225

Total photon (eV-barns)
Cross Section

72-Hf-174
-97.26 To 9999. %



57

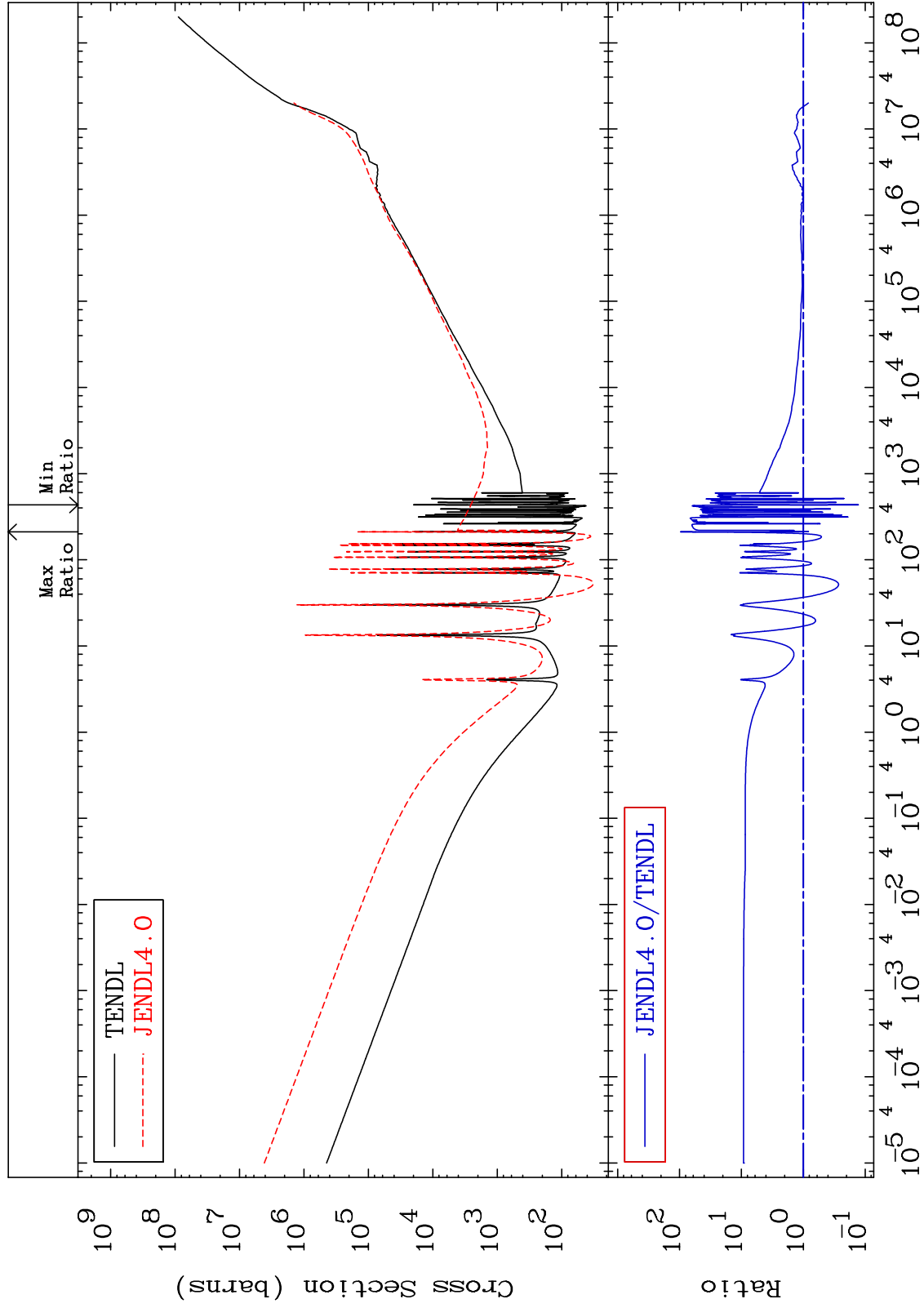
Incident Energy (eV)

72-Hf-174

MAT 7225

Total kinematic kerma (high limit)
Cross Section

72-Hf-174
-87.19 To 9563. %



58

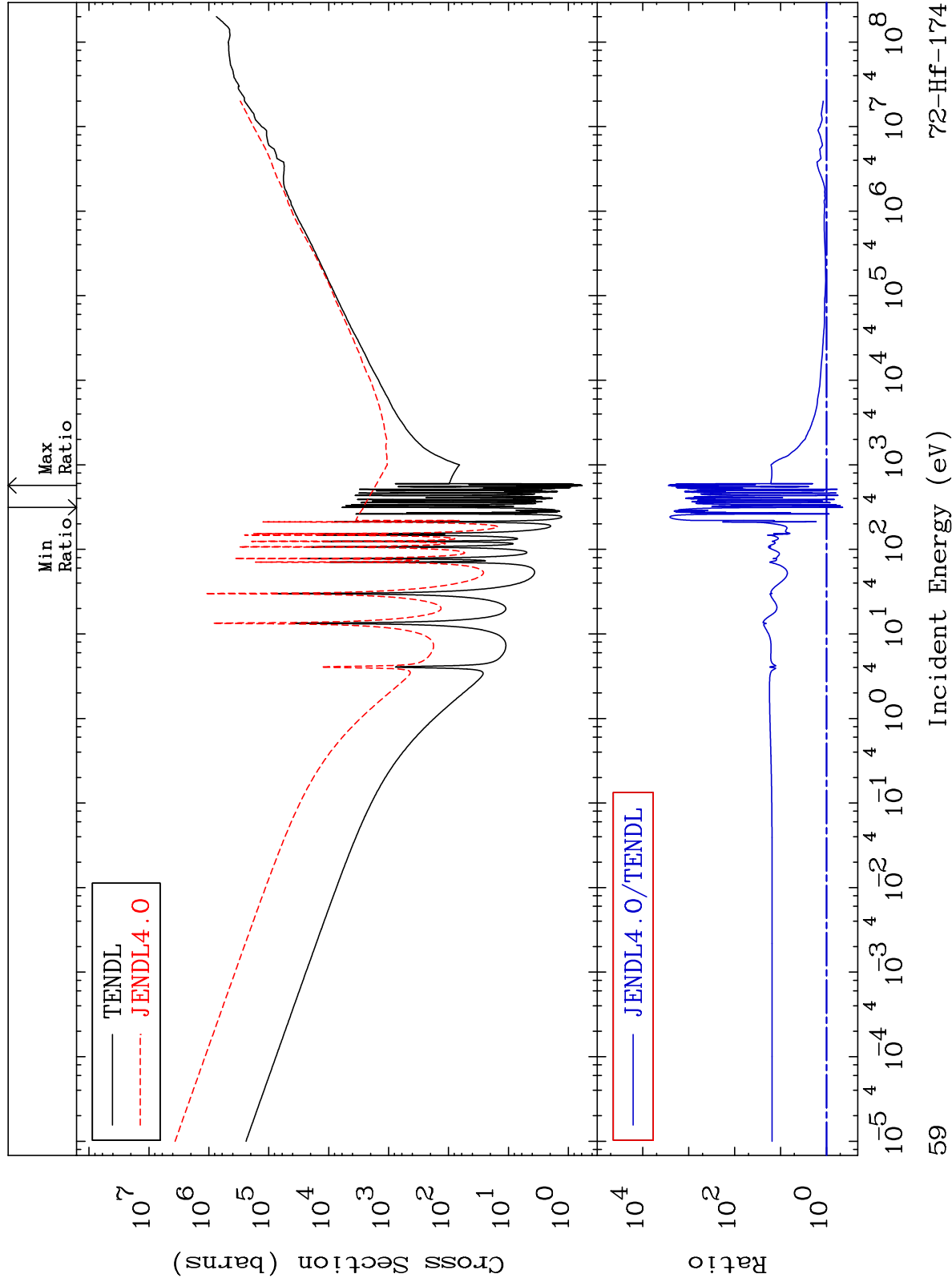
Incident Energy (eV)

72-Hf-174

MAT 7225

Dpa total (eV-barns)
Cross Section

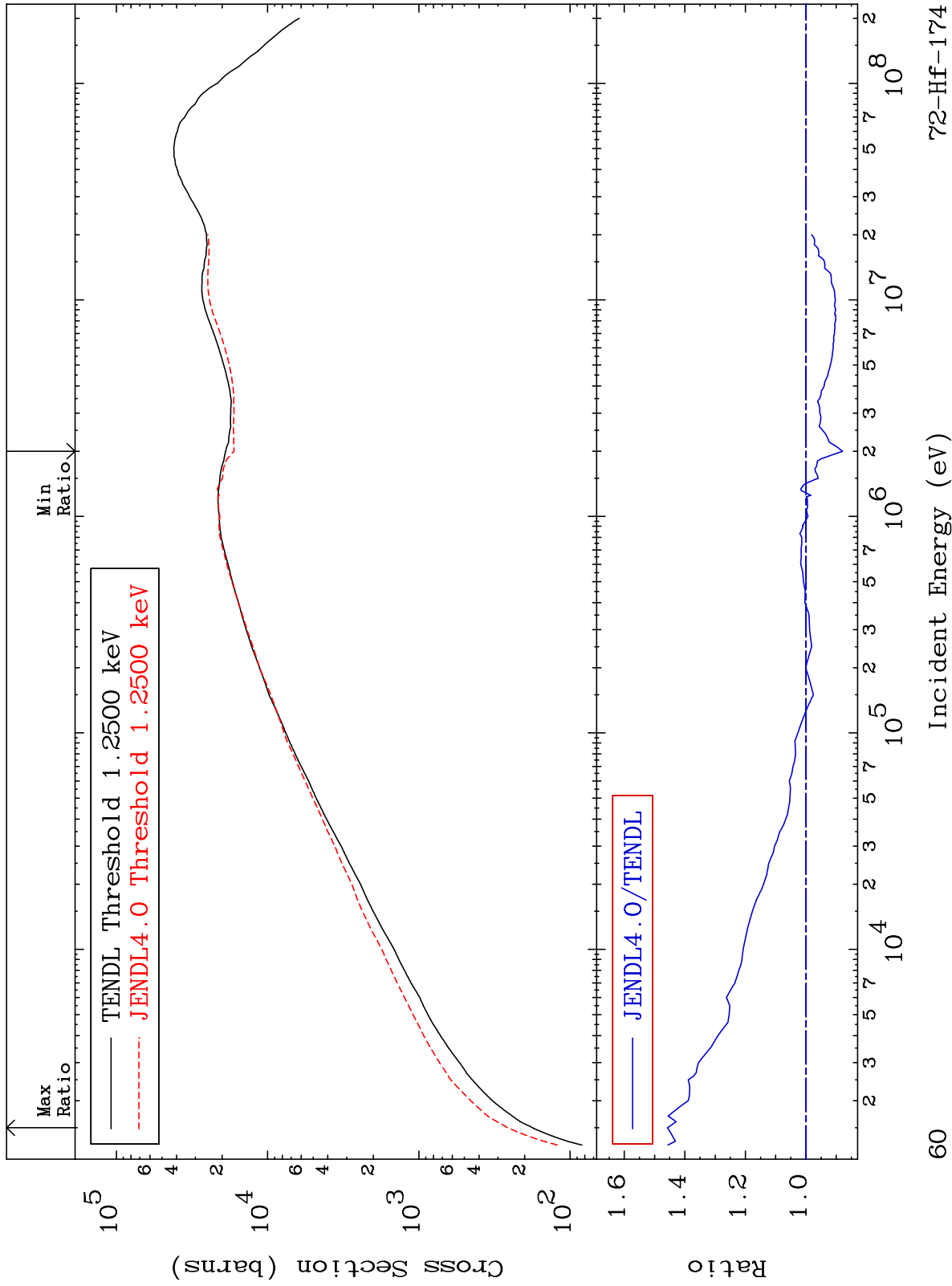
72-Hf-174
-56.05 To 9999. %



MAT 7225

Dpa elastic (mt2)
Cross Section

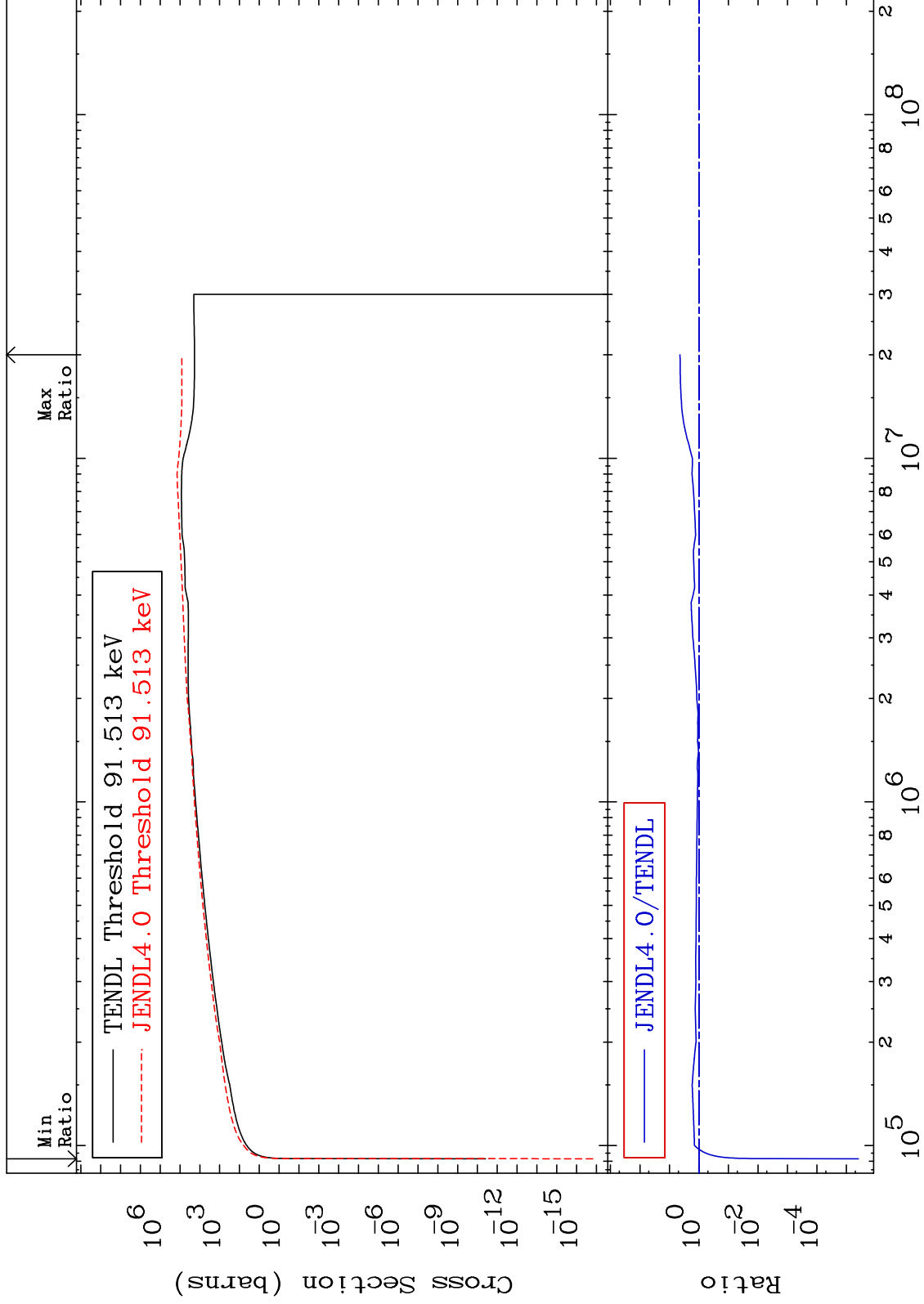
72-Hf-174
-12.11 To 45.71 %



MAT 7225

Dpa inelastic (mt51-91)
Cross Section

72-Hf-174
-100.0 To 338.7 %



61

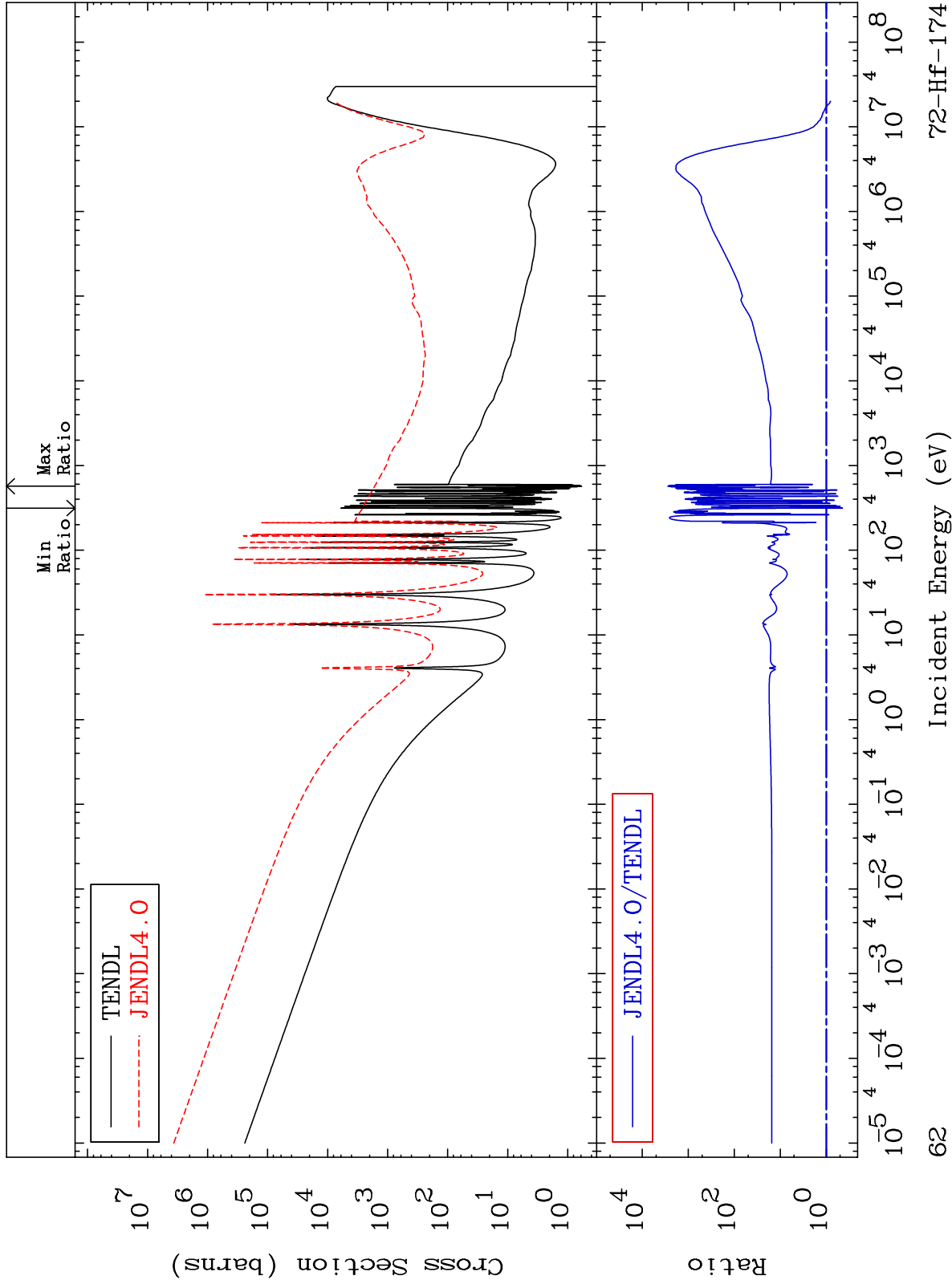
Incident Energy (eV)

72-Hf-174

MAT 7225

Dpa disappearance (mt102 -120)
Cross Section

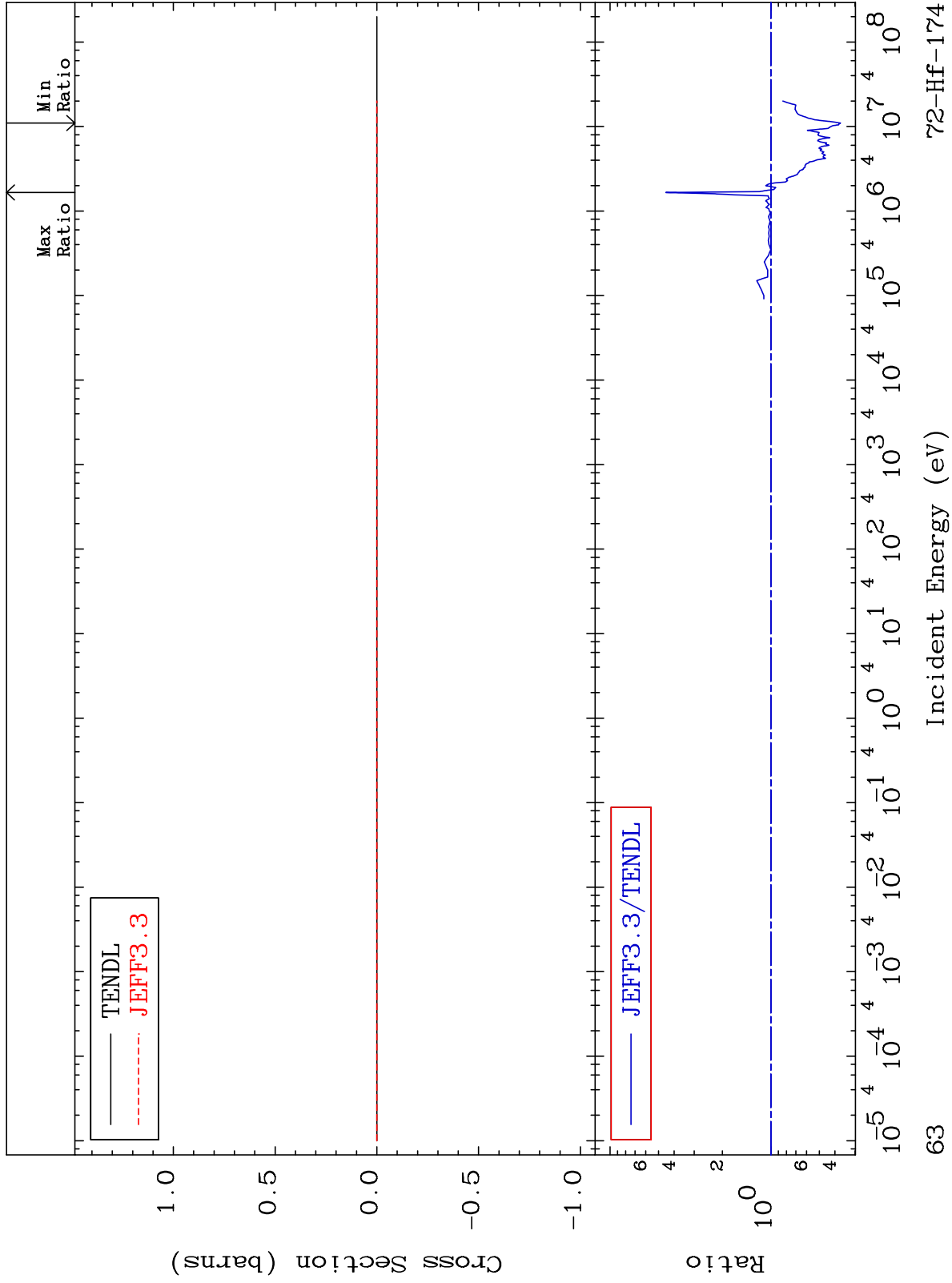
72-Hf-174
-56.05 To 9999. %



MAT 7225

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

72-Hf-174
-63.12 To 350.0 %

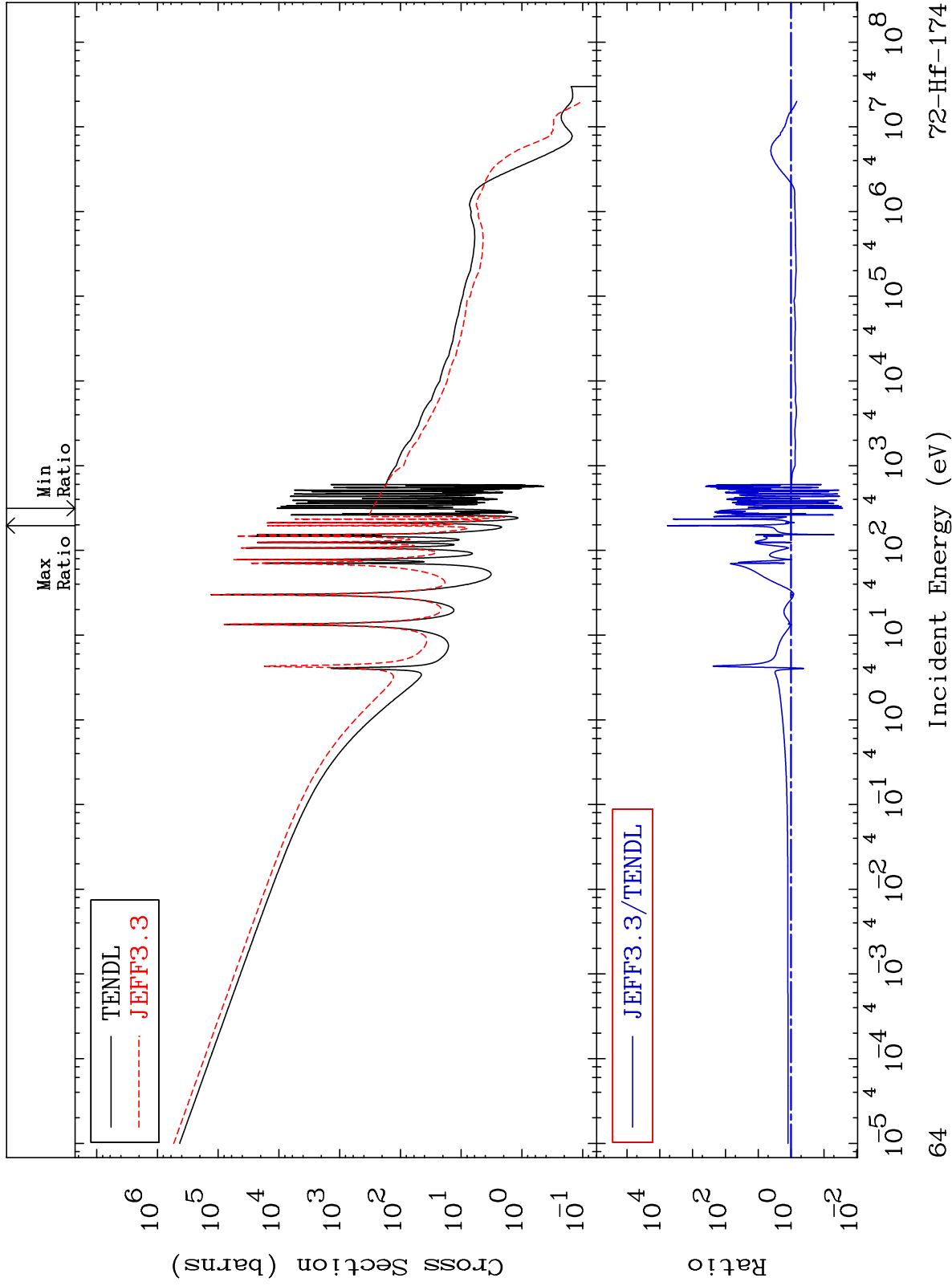


72-Hf-174

MAT 7225

Kerma capture (mt102)
Cross Section

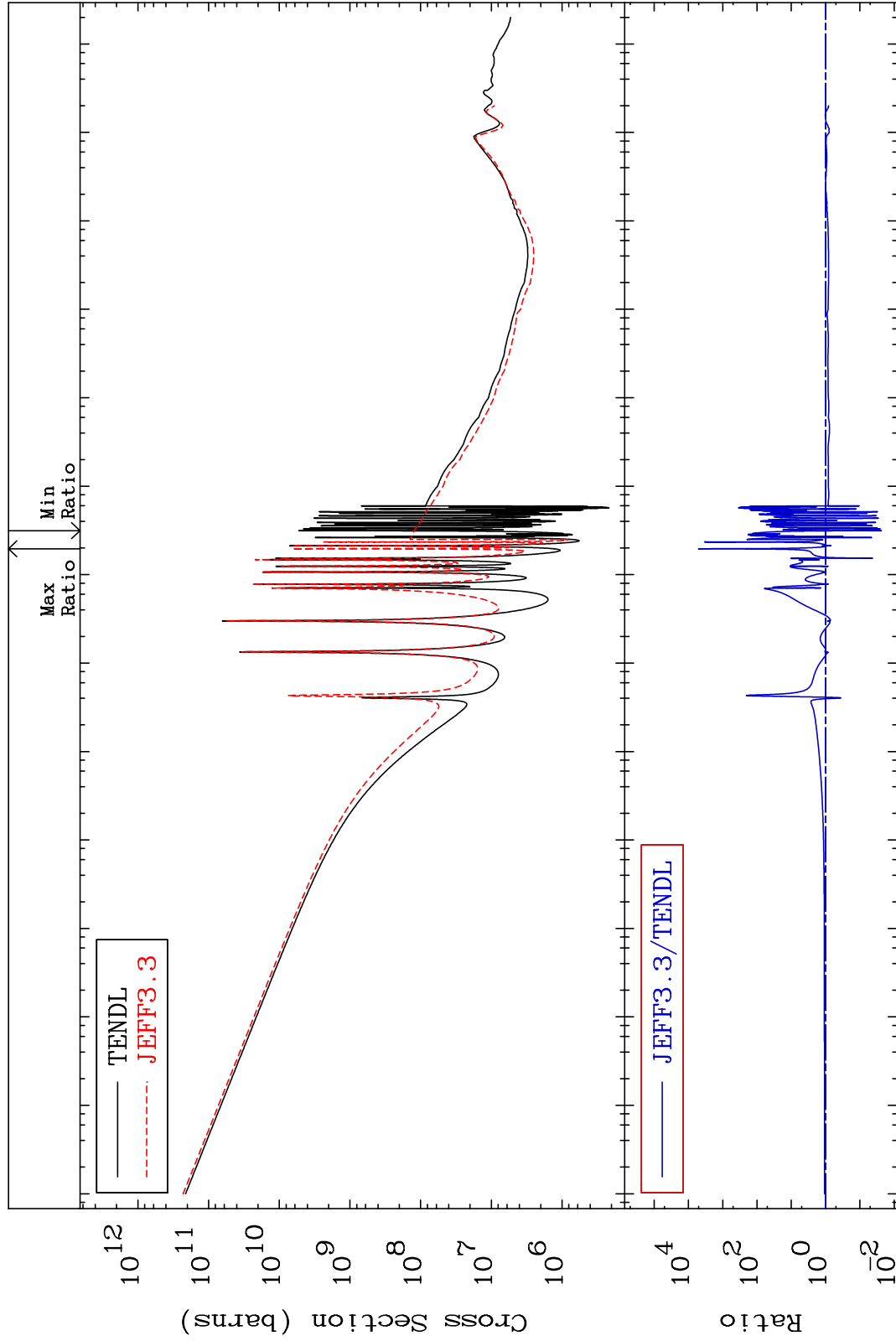
72-Hf-174
-97.31 To 9999. %



MAT 7225

Total photon (eV-barns)
Cross Section

72-Hf-174
-97.67 To 9999. %



65

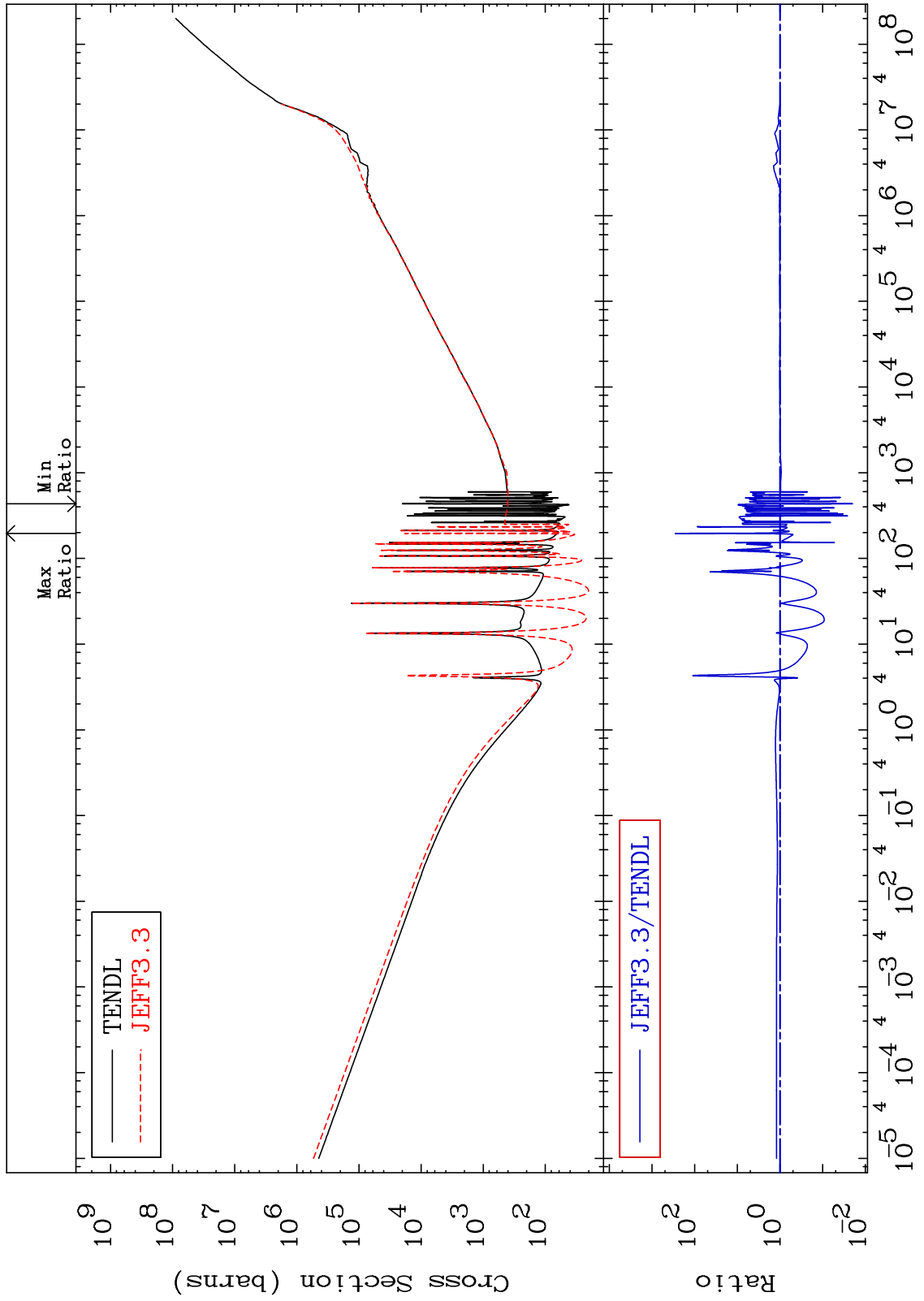
Incident Energy (eV)

72-Hf-174

MAT 7225

Total kinematic kerma (high limit)
Cross Section

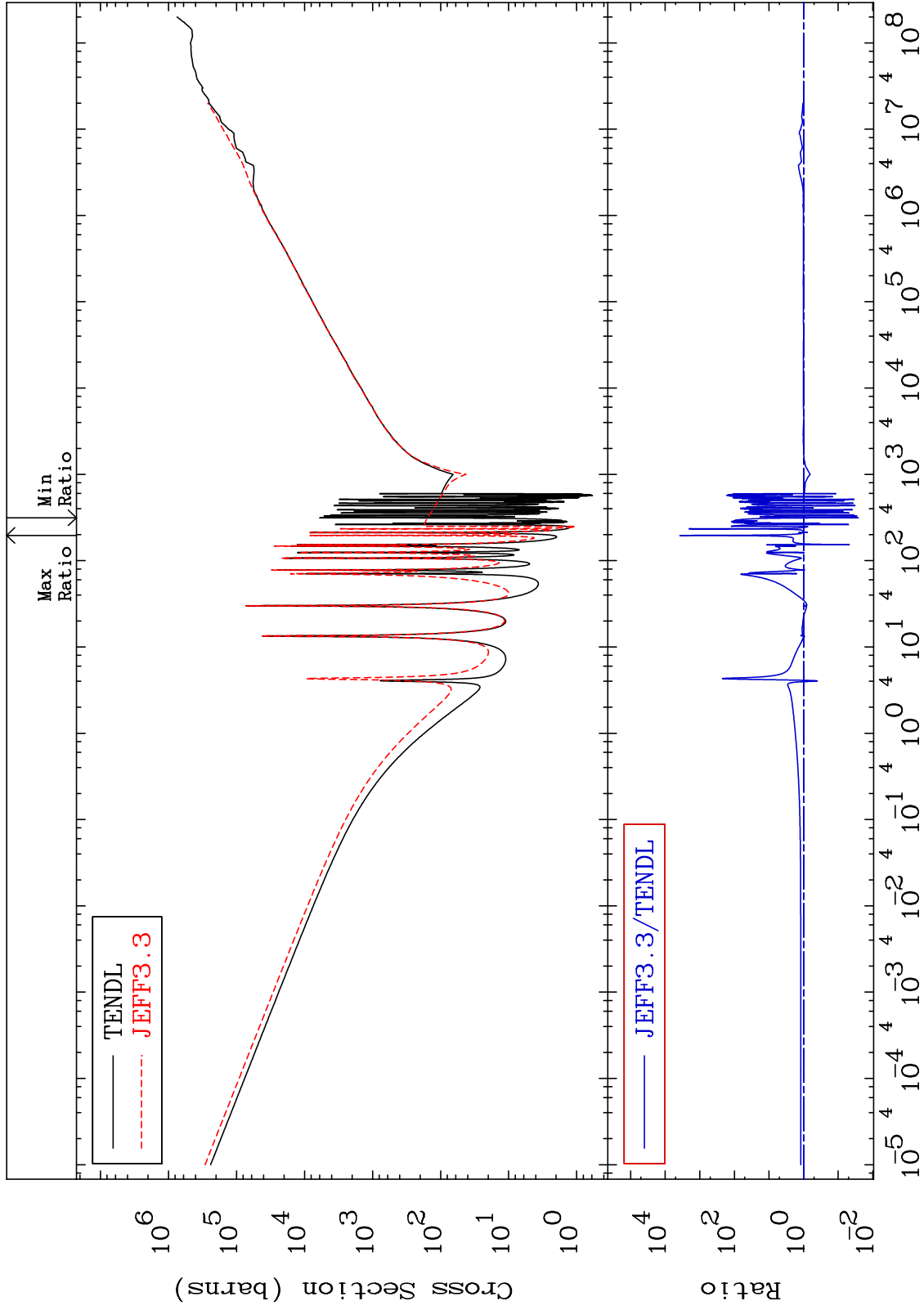
72-Hf-174
-97.98 To 9999. %



MAT 7225

Dpa total (eV-barns)
Cross Section

72-Hf-174
-97.40 To 9999. %



67

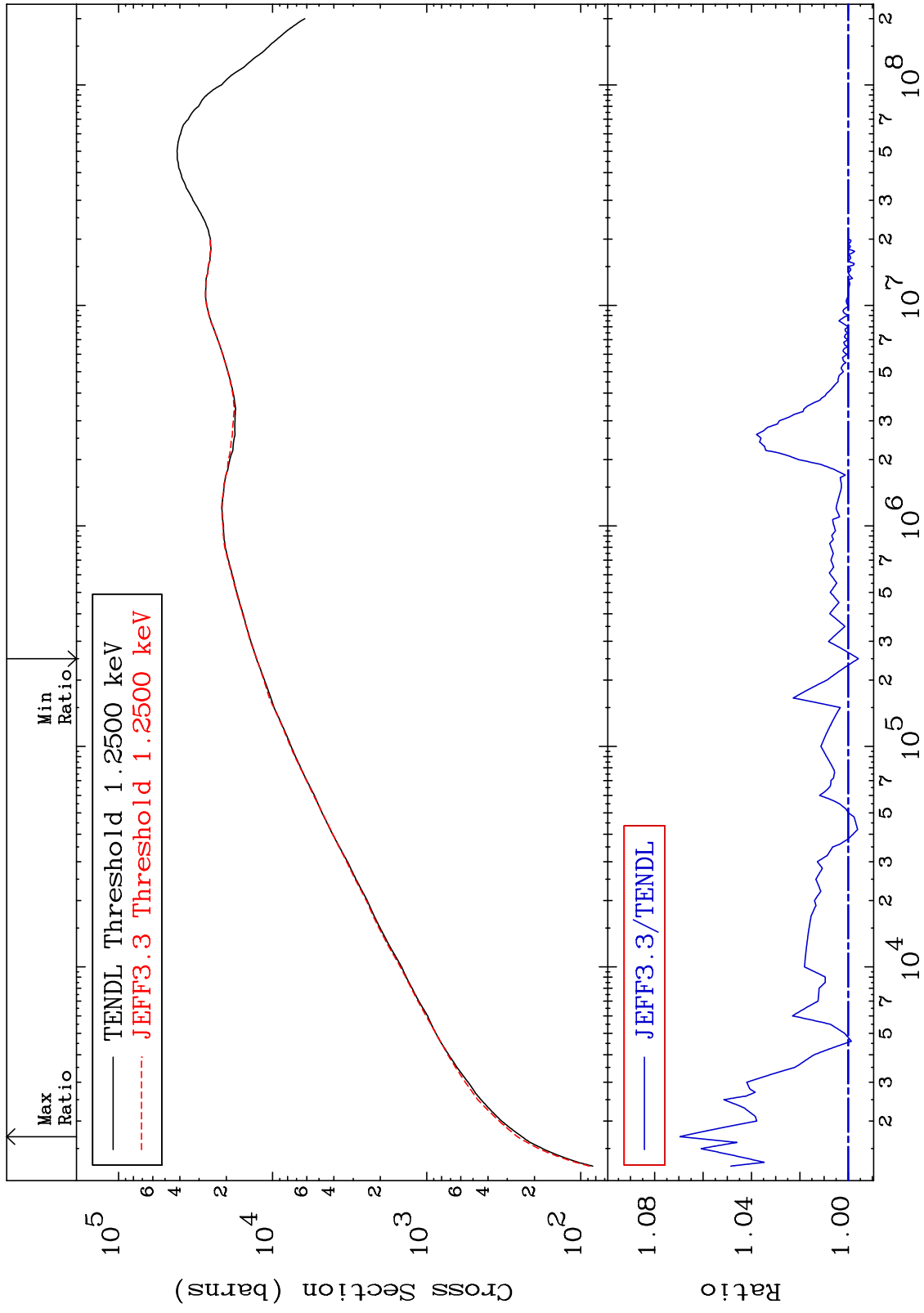
Incident Energy (eV)

72-Hf-174

MAT 7225

Dpa elastic (mt2)
Cross Section

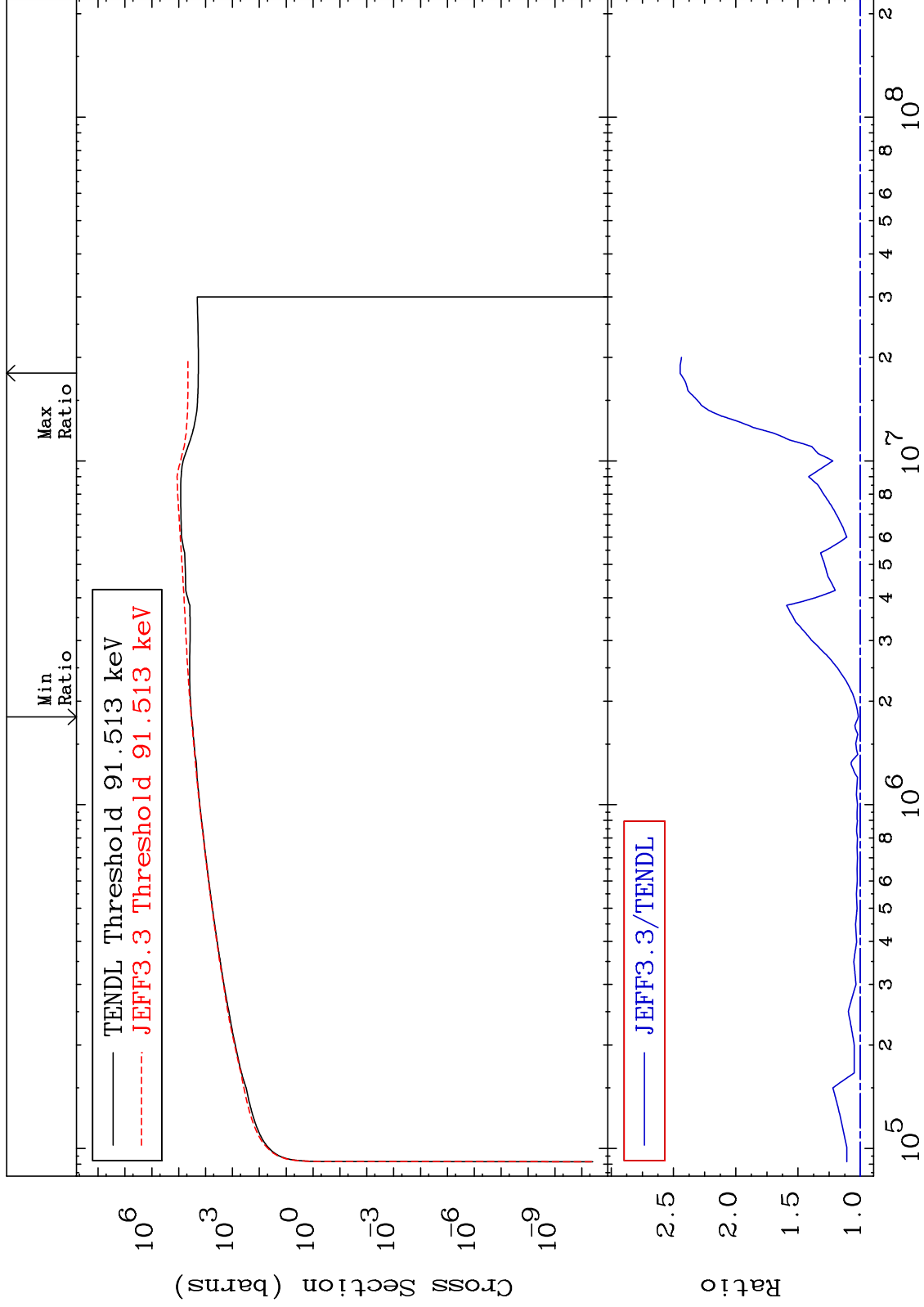
72-Hf-174
-0.420 To 6.955 %



MAT 7225

Dpa inelastic (mt51-91)
Cross Section

72-Hf-174
1.516 To 144.8 %



69

Incident Energy (eV)

72-Hf-174

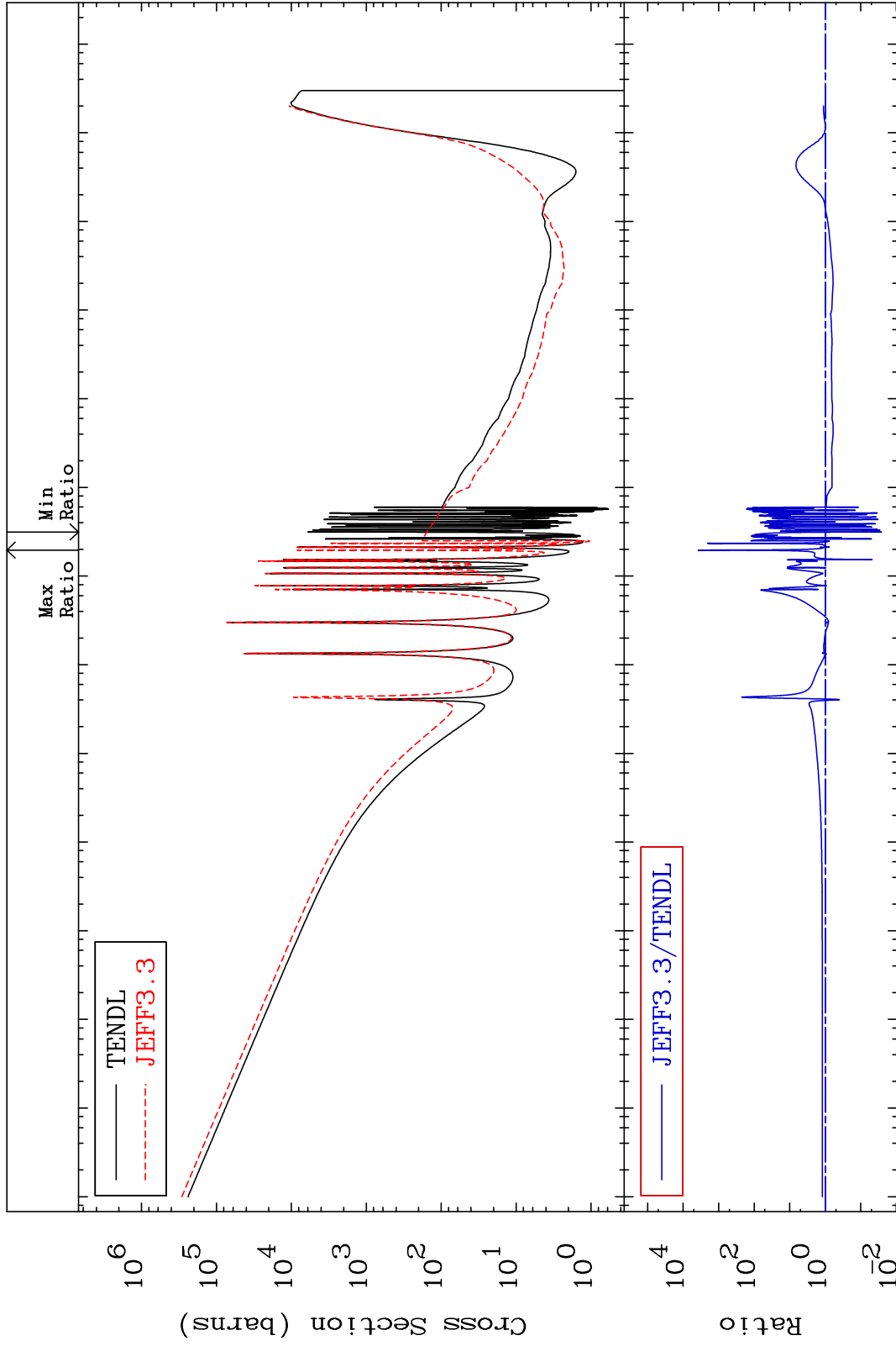
MAT 7225

Dpa disappearance (mt102 -120)

72-Hf-174

-97.40 To 9999. %

Cross Section



70

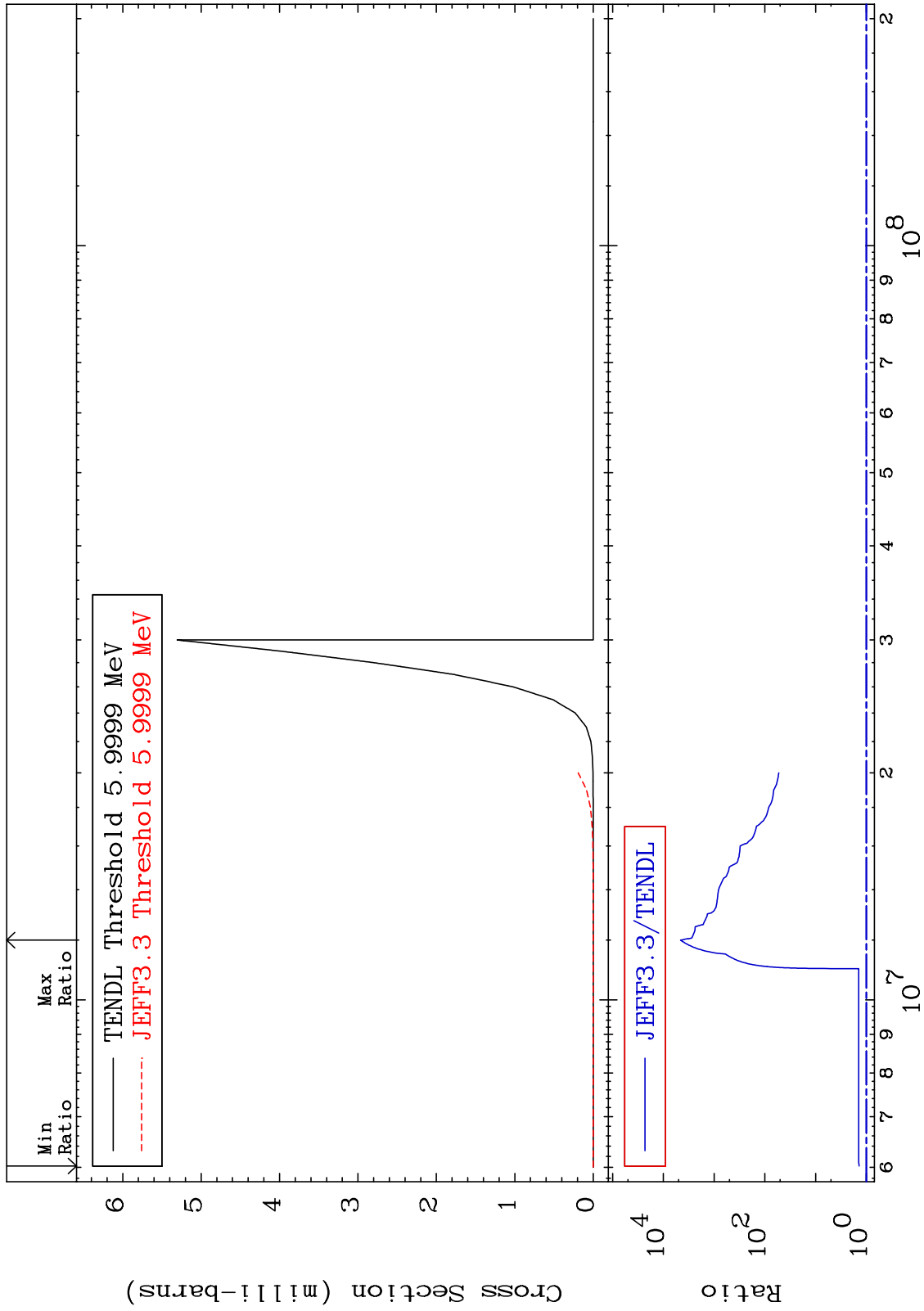
Incident Energy (eV)

72-Hf-174

MAT 7225

(n,2n) α :70-Yb-169g
Radionuclide Production Cross Section 38.76 To 9999. %

72-Hf-174



71

Incident Energy (eV)

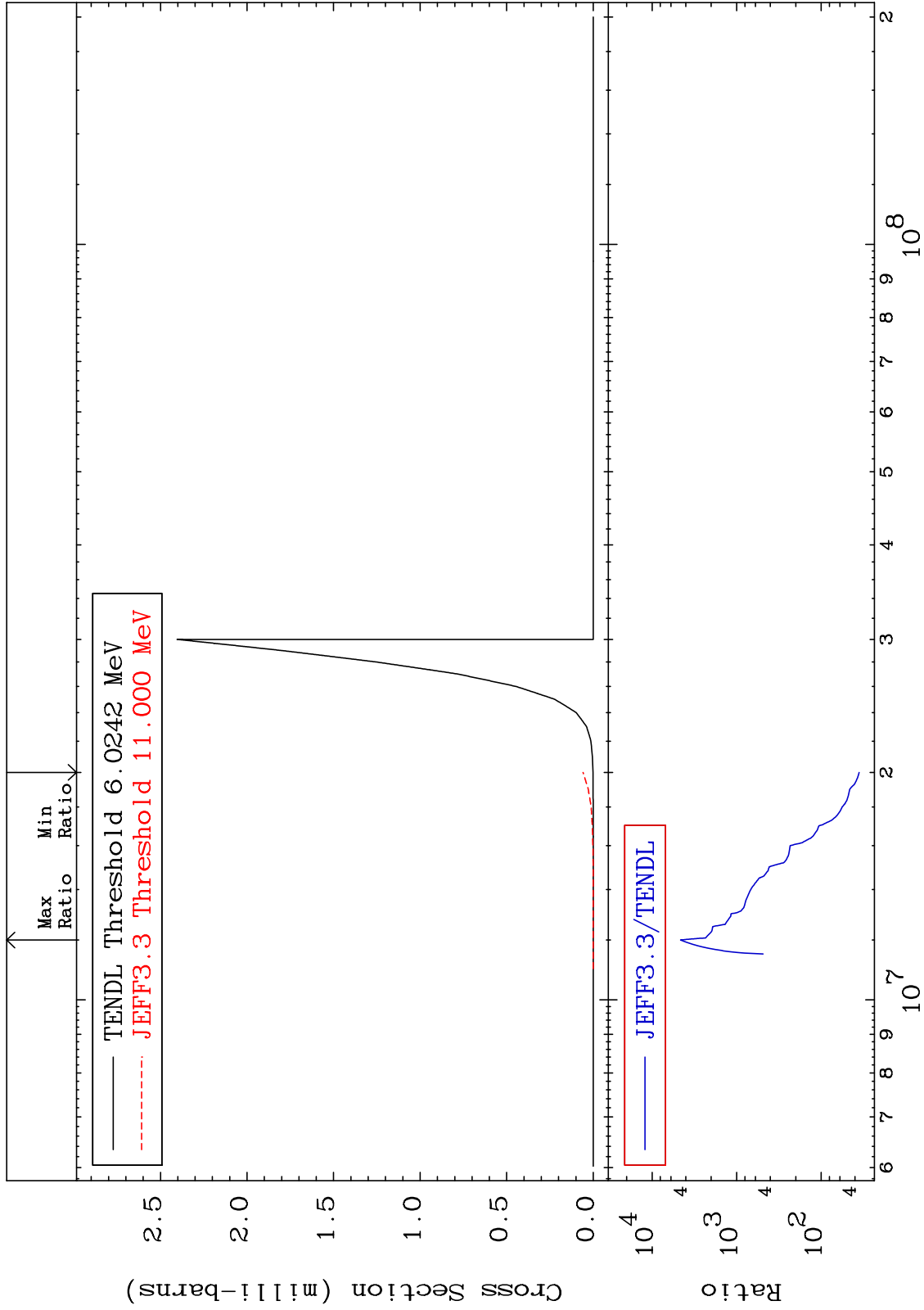
72-Hf-174

MAT 7225

(n,2n) α :70-Yb-169m1

72-Hf-174

Radionuclide Production Cross Section 3459. To 9999. %



72

Incident Energy (eV)

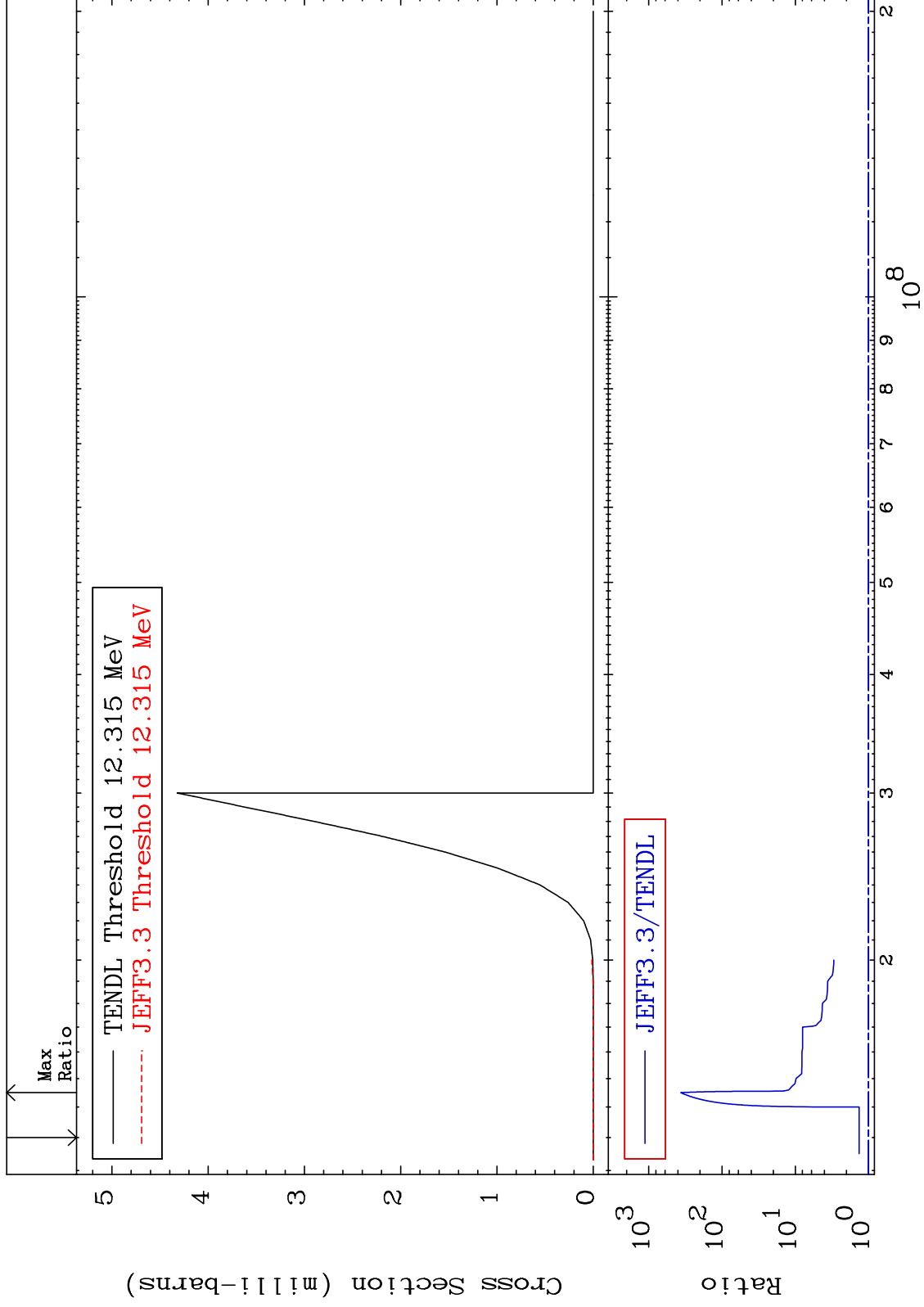
72-Hf-174

MAT 7225

(n, n') d:71-Lu-172g

72-Hf-174

Radionuclide Production Cross Section 34.49 To 9999. %



73

Incident Energy (eV)

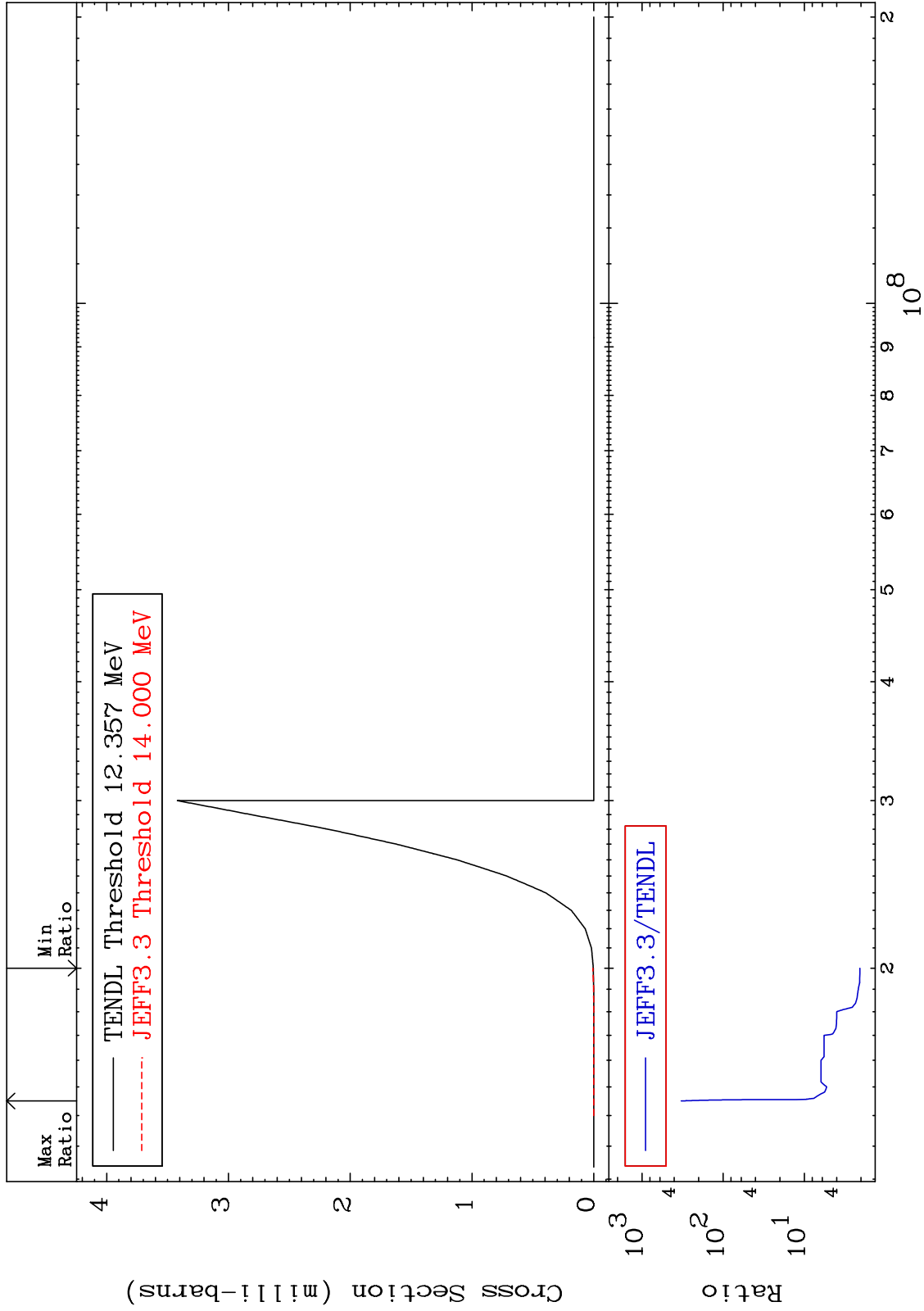
72-Hf-174

MAT 7225

(n, n') d:71-Lu-172m1

72-Hf-174

Radionuclide Production Cross Section 106.6 To 9999. %

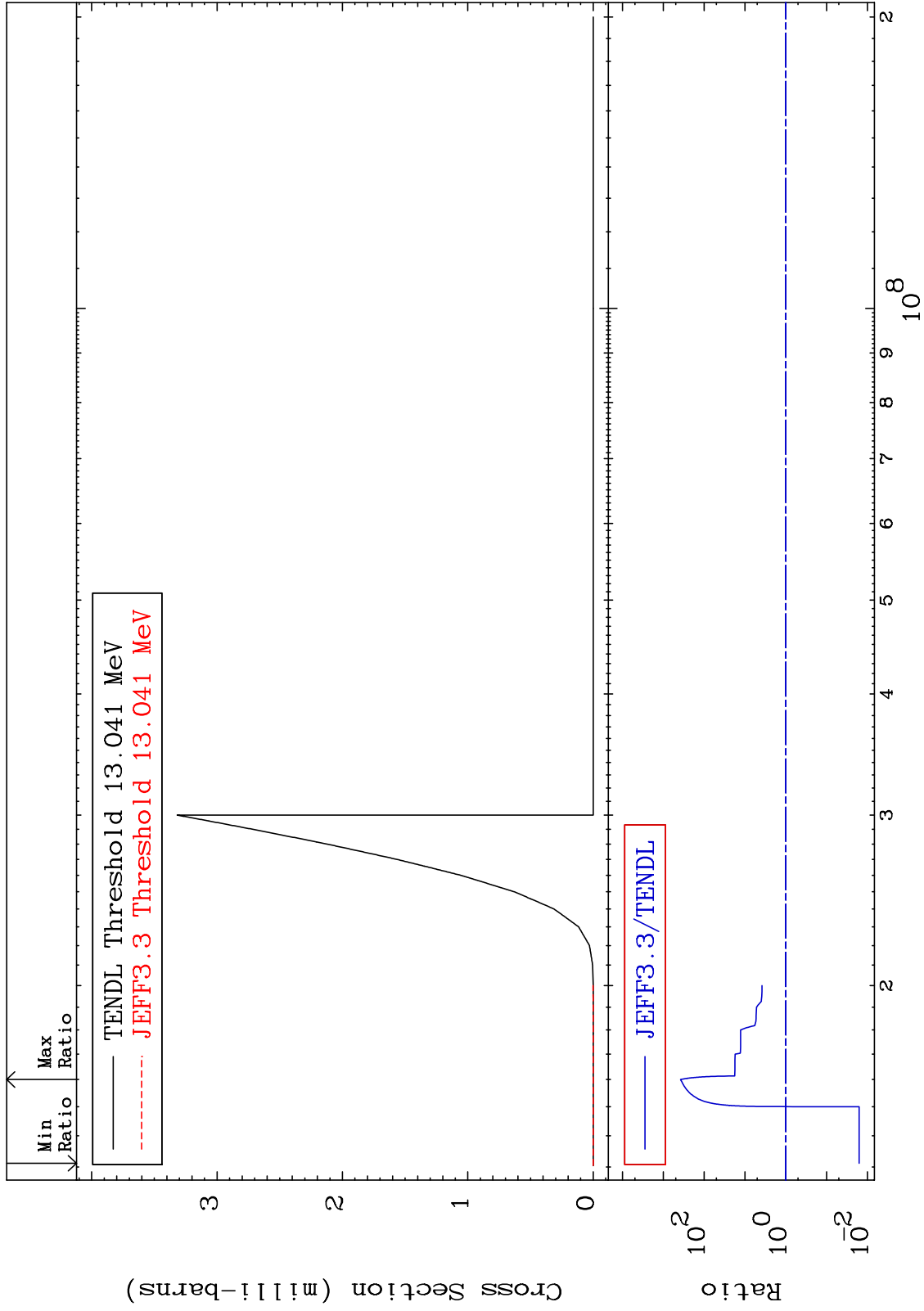


MAT 7225

(n, n') t:71-Lu-171g

72-Hf-174

Radionuclide Production Cross Section -98.41 To 9999. %



75

Incident Energy (eV)

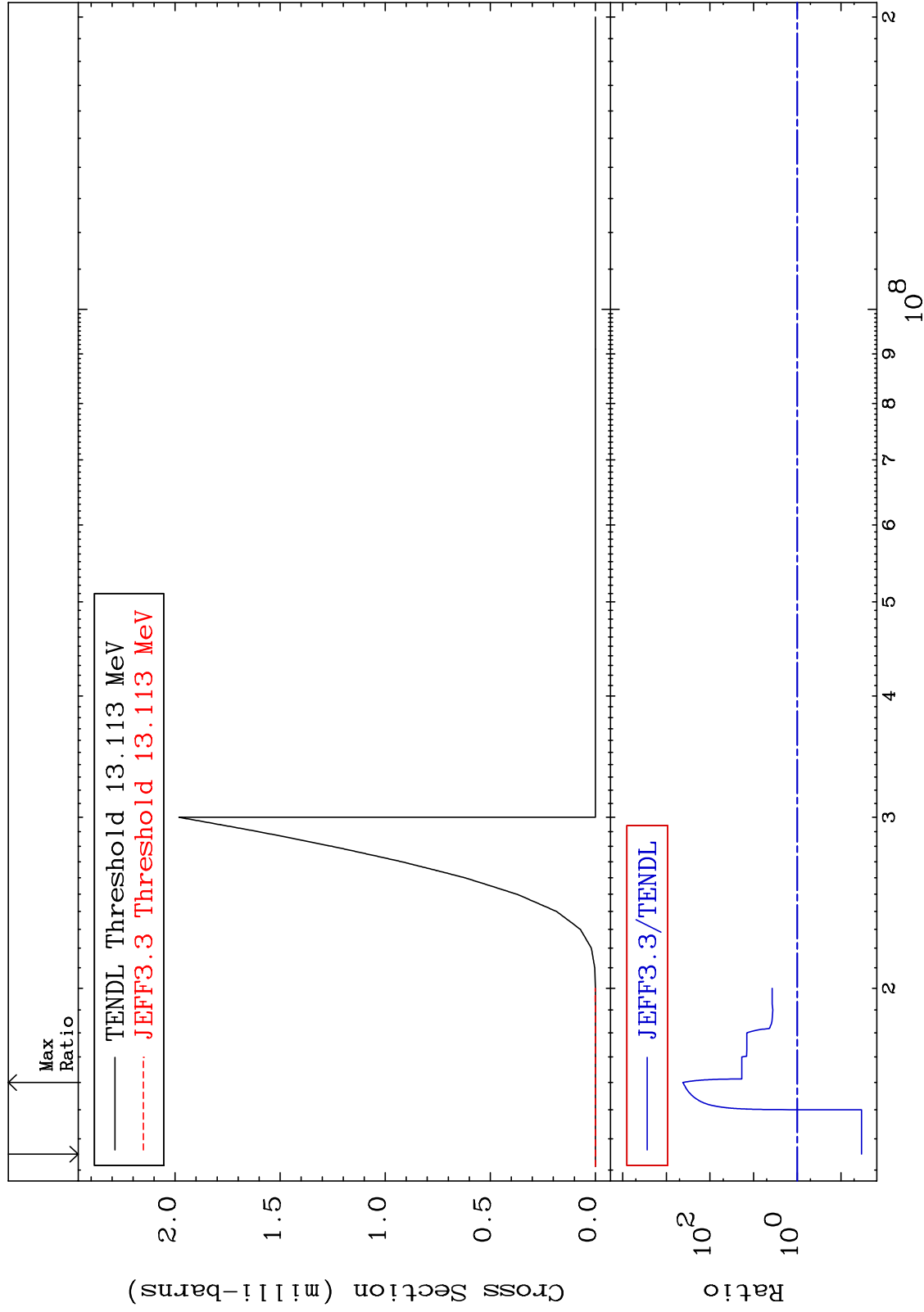
72-Hf-174

MAT 7225

(n, n') t:71-Lu-171m1

72-Hf-174

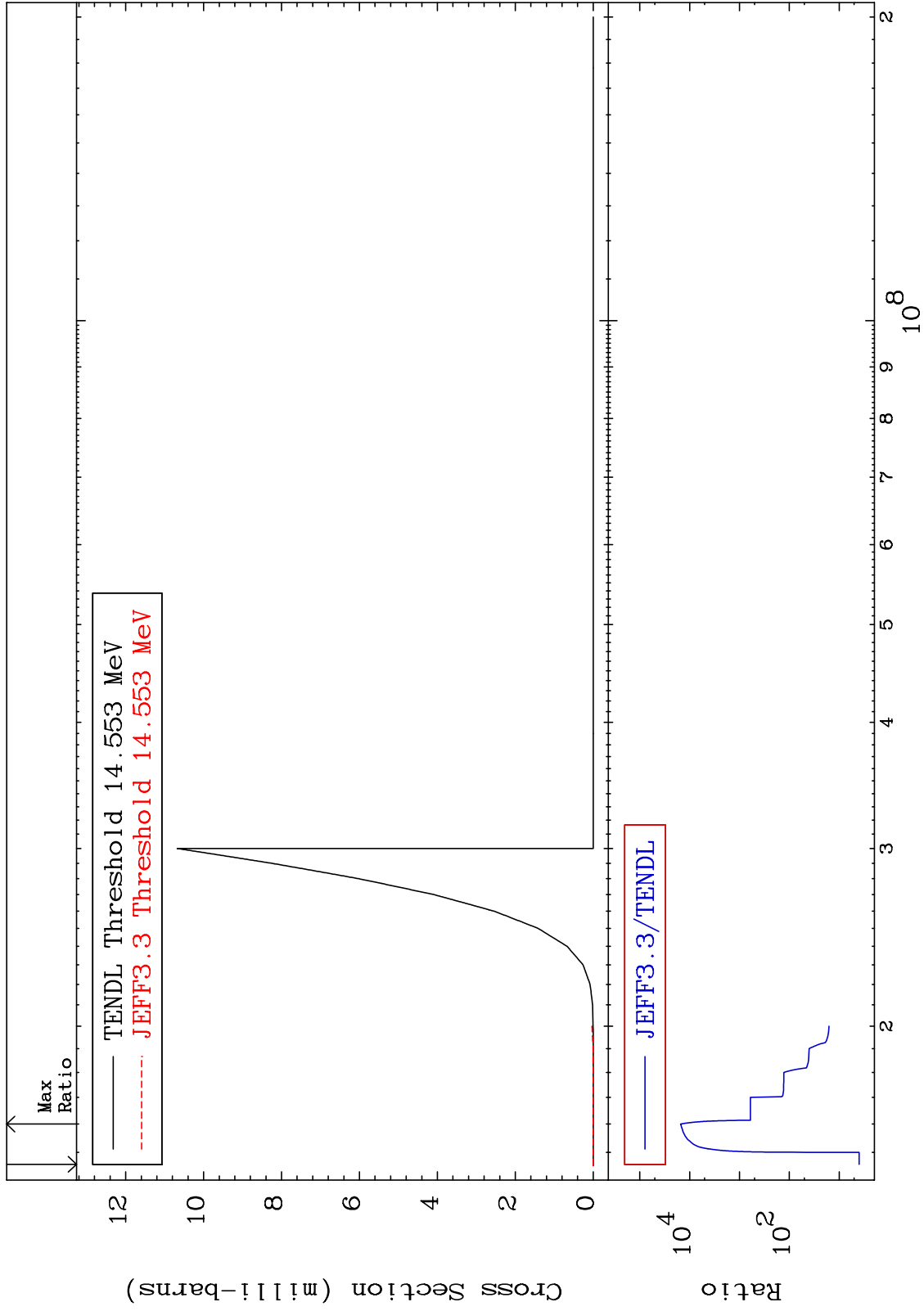
Radionuclide Production Cross Section -96.63 To 9999. %



76

Incident Energy (eV)

72-Hf-174

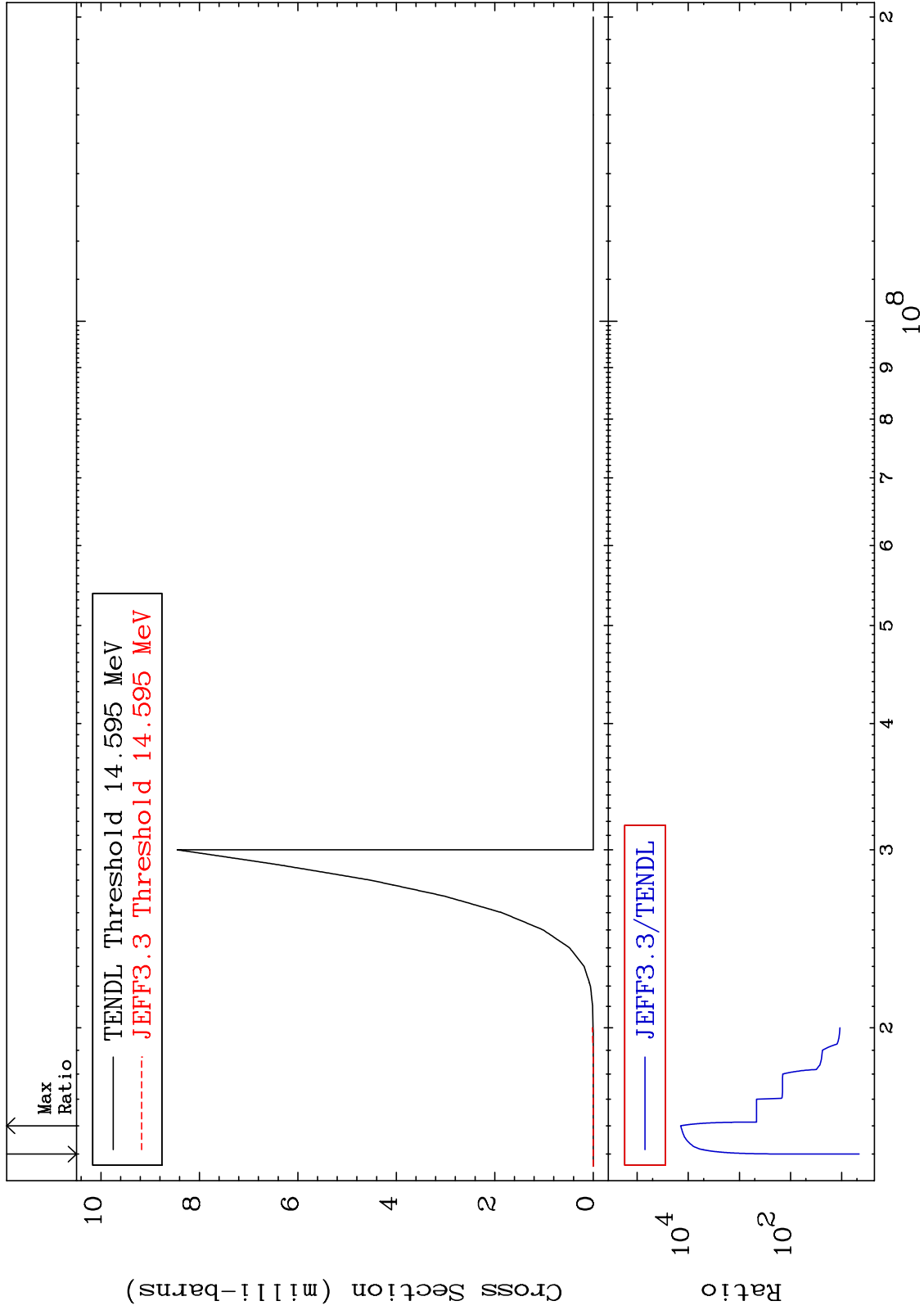


MAT 7225

(n,2n) p:71-Lu-172m1

72-Hf-174

Radionuclide Production Cross Section 354.0 To 9999. %



78

Incident Energy (eV)

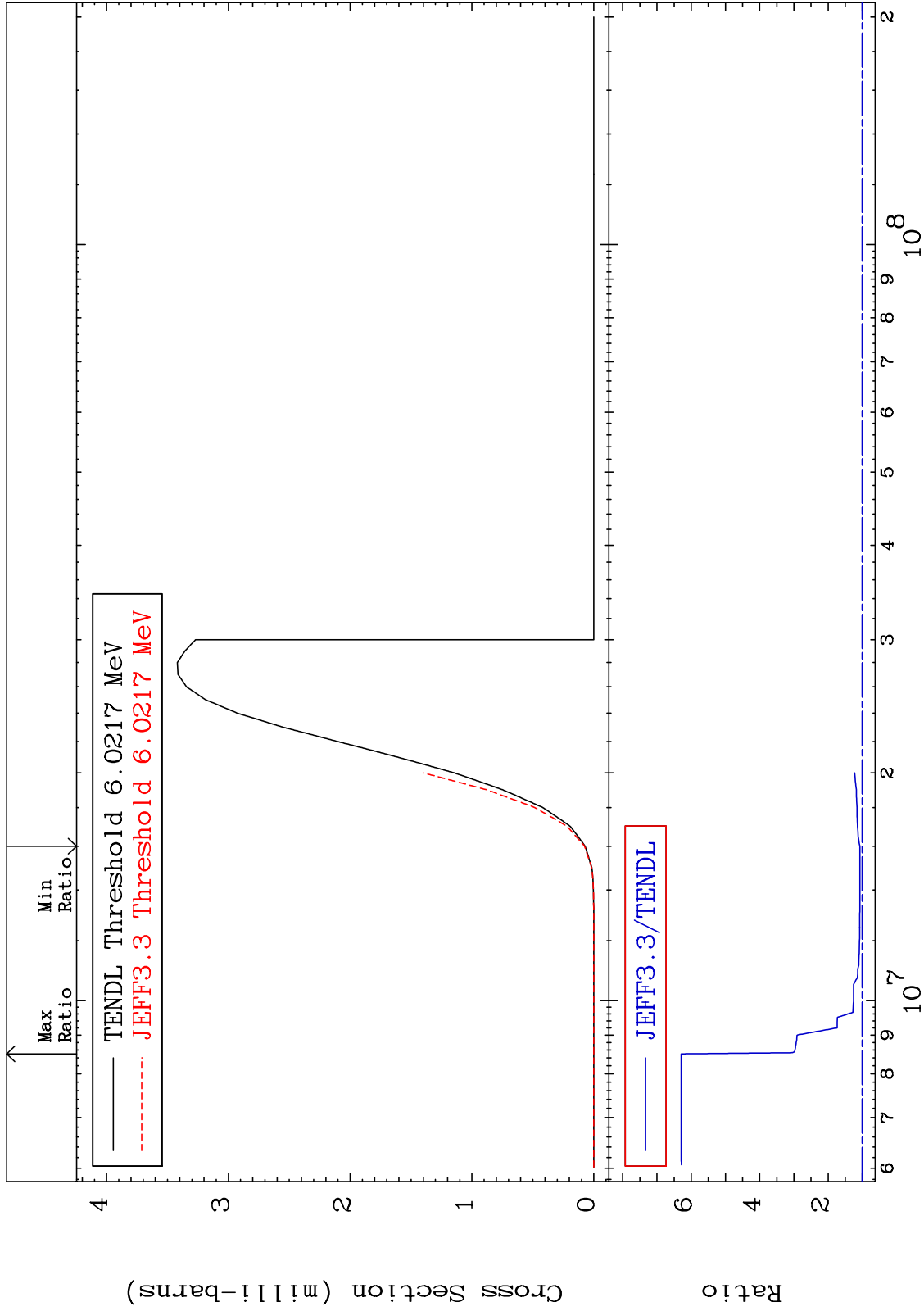
72-Hf-174

MAT 7225

(n, t): 71-Lu-172g

72-Hf-174

Radionuclide Production Cross Section 7.076 To 529.1 %



79

Incident Energy (eV)

72-Hf-174

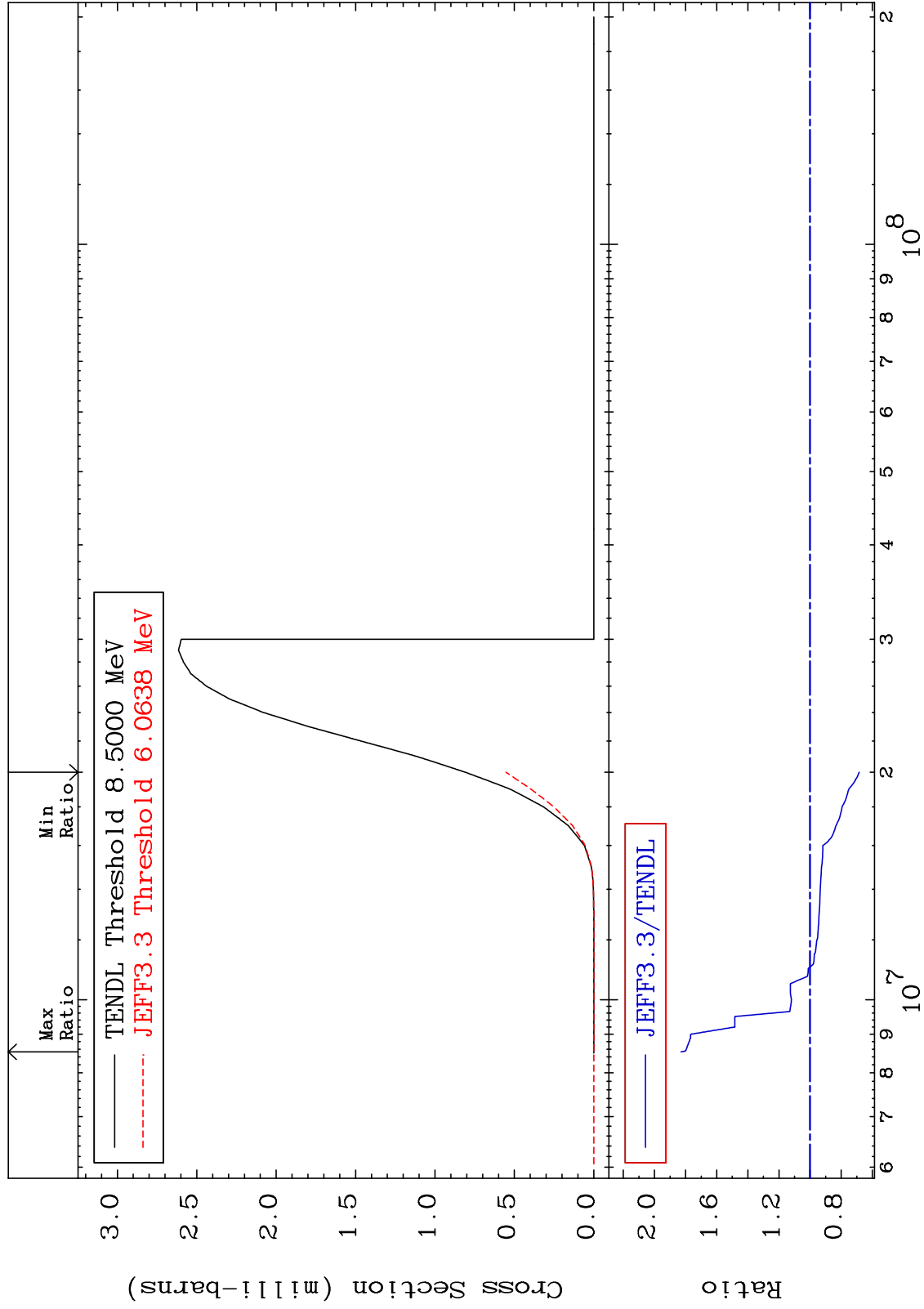
MAT 7225

(n, t): 71-Lu-172m1

72-Hf-174

Radionuclide Production Cross Section

-31.62 To 82.91 %



80

Incident Energy (eV)

72-Hf-174