

Program Complot
(Version 2021-1)

by

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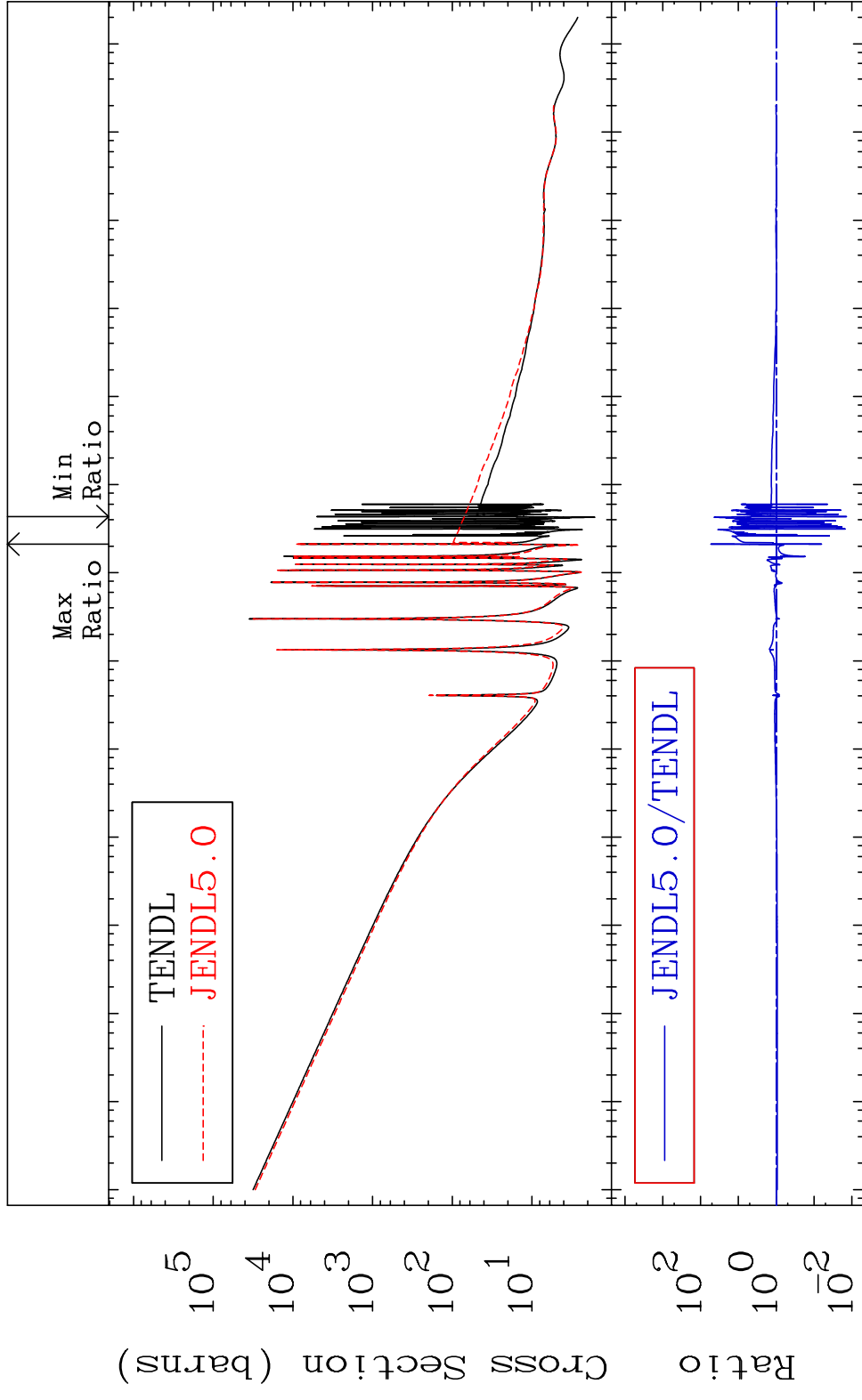
Tele: 925-443-1911

E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 7225

Total 72-Hf-174
Cross Section -98.60 To 5295. %



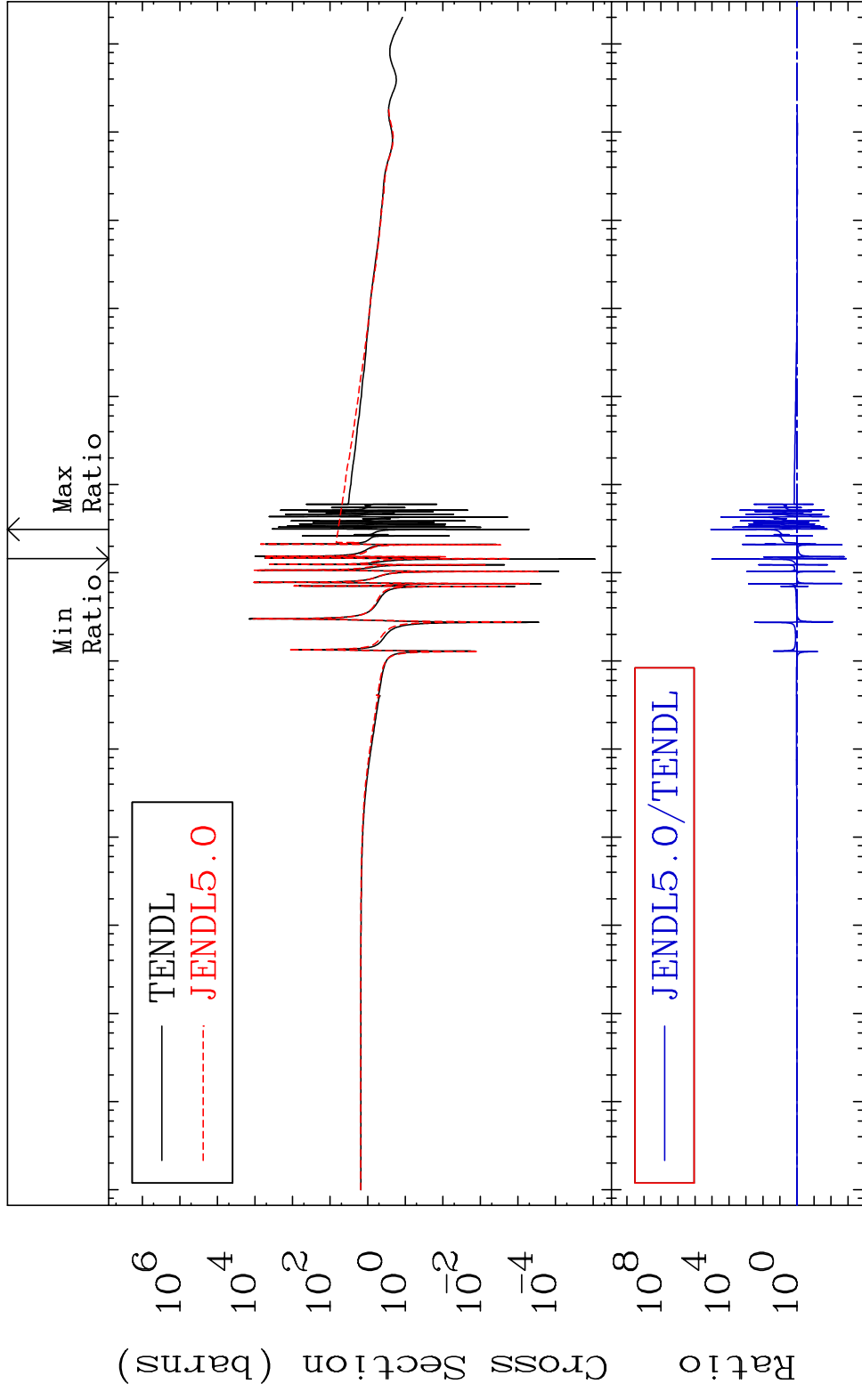
1 Incident Energy (eV) 72-Hf-174

MAT 7225

Elastic

72-Hf-174

Cross Section -99.88 To 9999. %



Cross Section (barns)

Ratio

10⁶
10⁴
10²
10⁰
10⁻²
10⁻⁴
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

2

Incident Energy (eV)

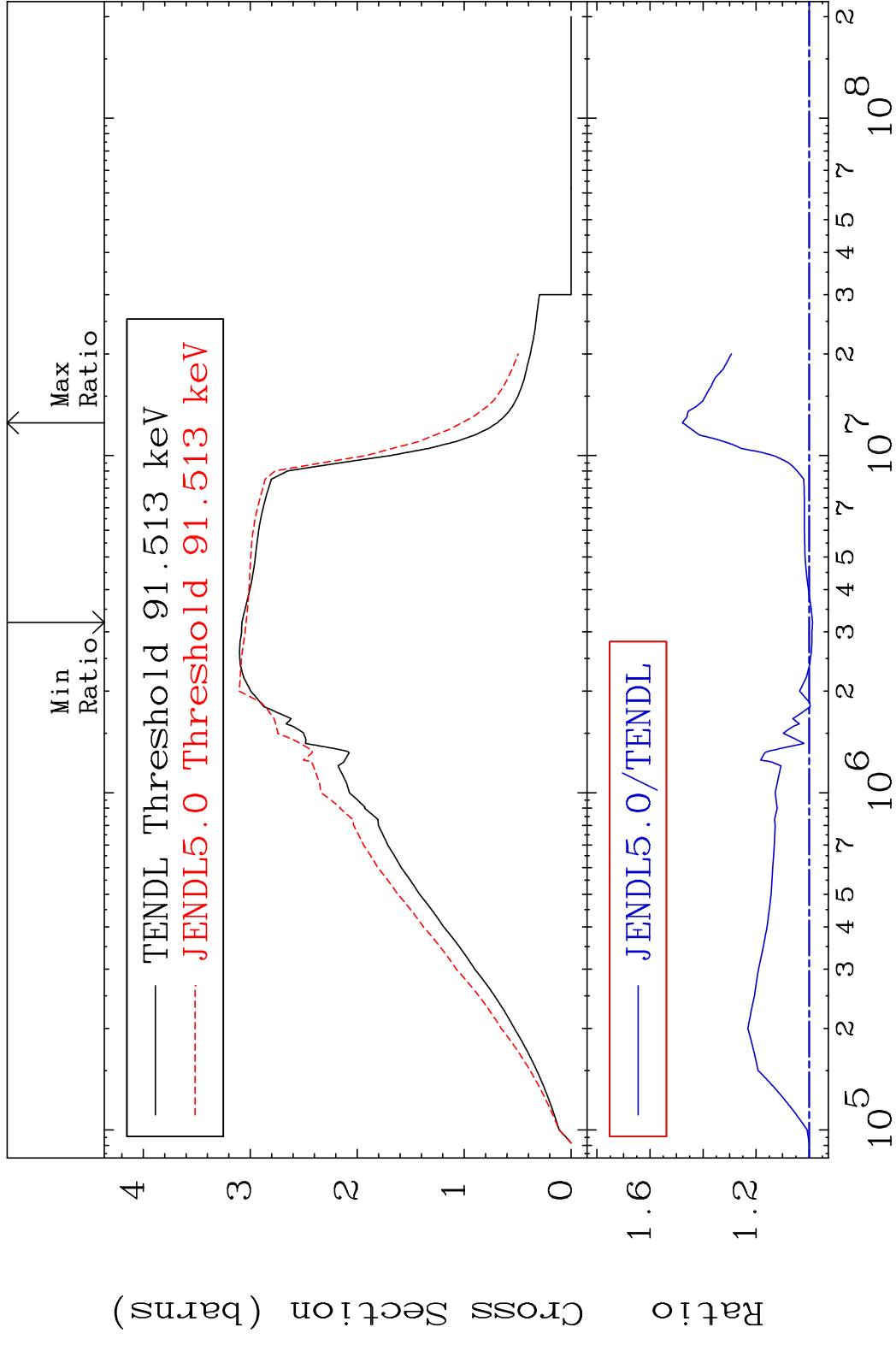
72-Hf-174

MAT 7225

Inelastic

72-Hf-174

Cross Section -1.297 To 47.80 %



3

Incident Energy (eV)

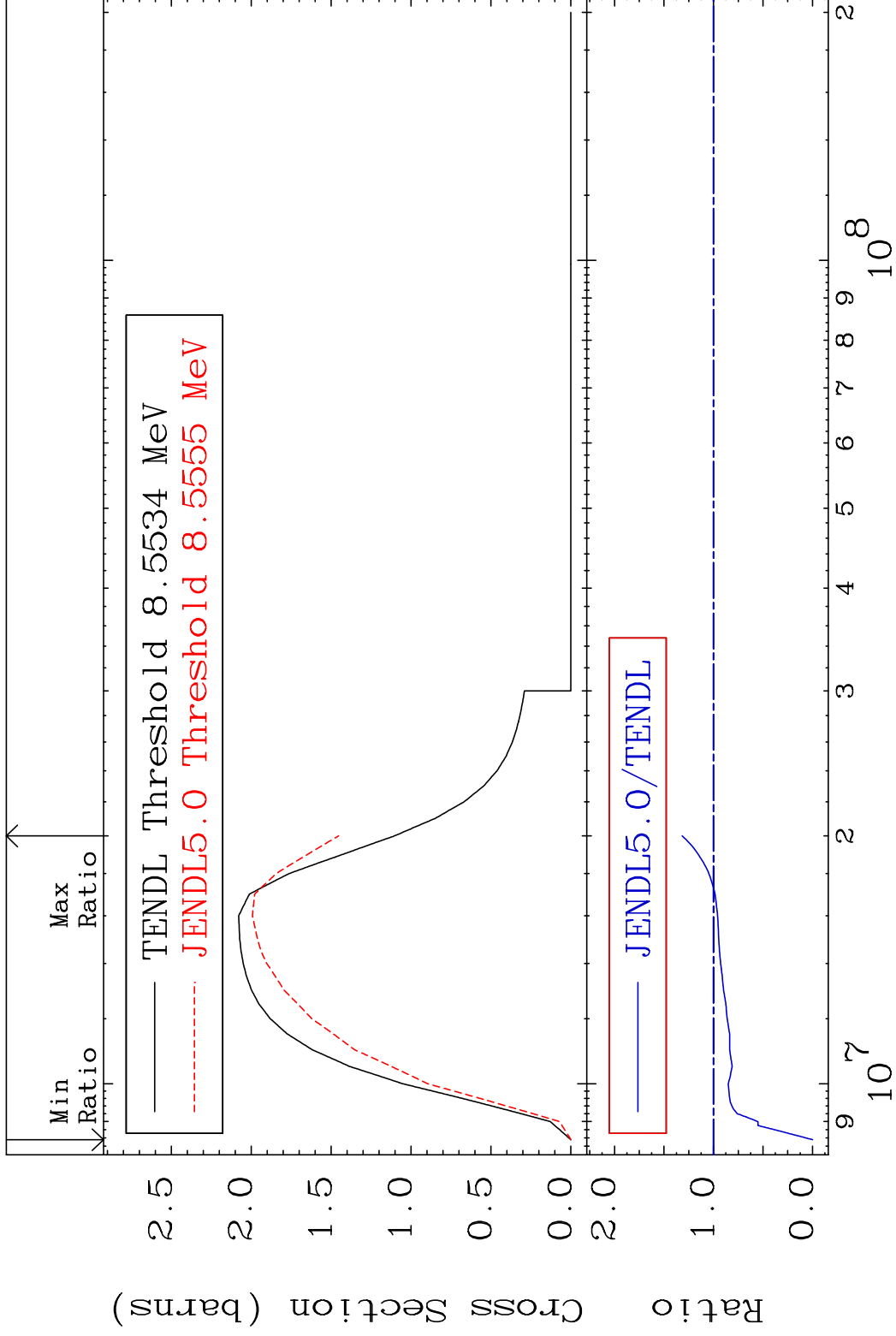
72-Hf-174

MAT 7225

(n,2n)

72-Hf-174

Cross Section -100.0 To 31.67 %



4

Incident Energy (eV)

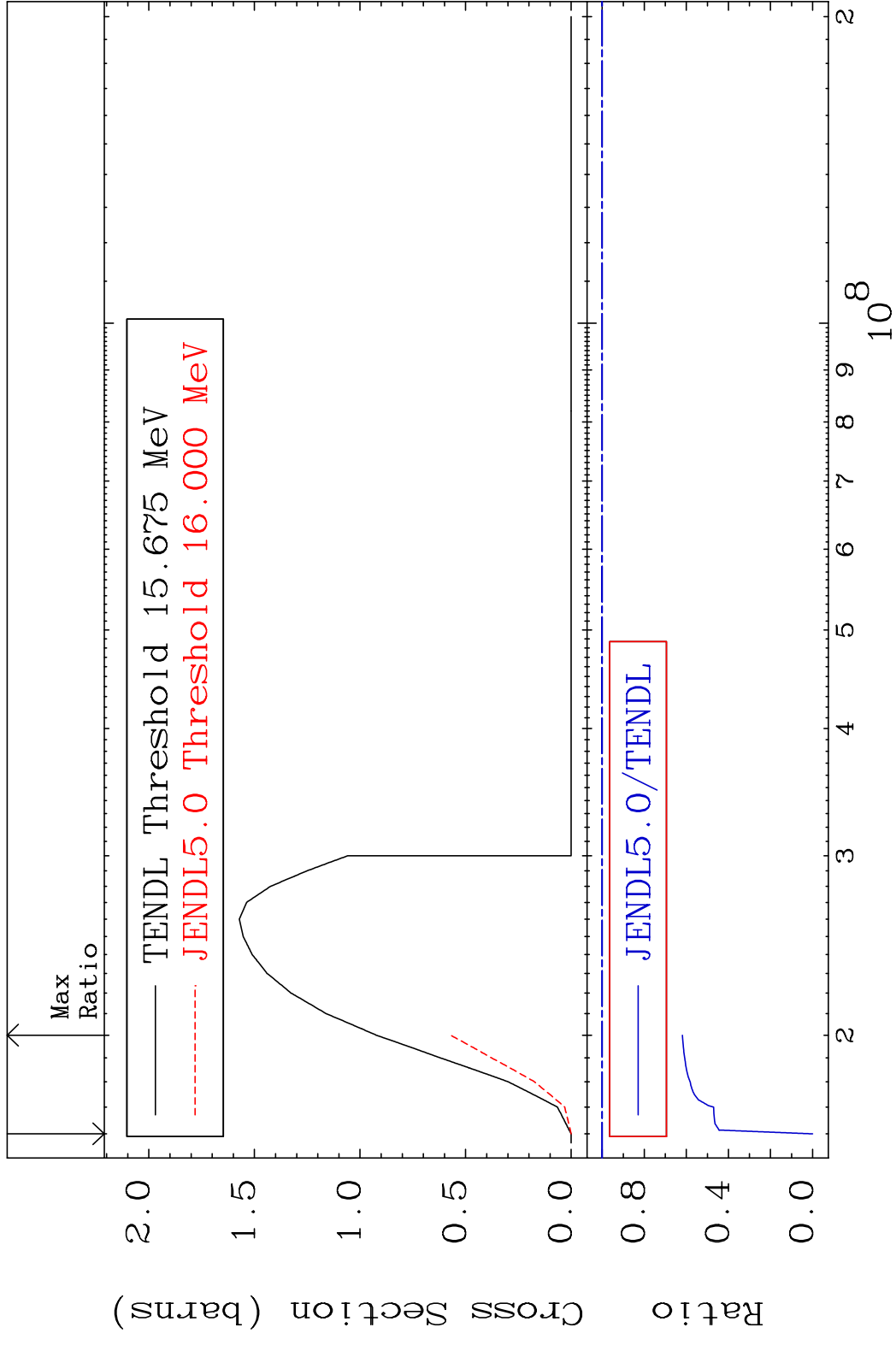
72-Hf-174

MAT 7225

(n,3n)

72-Hf-174

Cross Section -100.0 To -38.11%

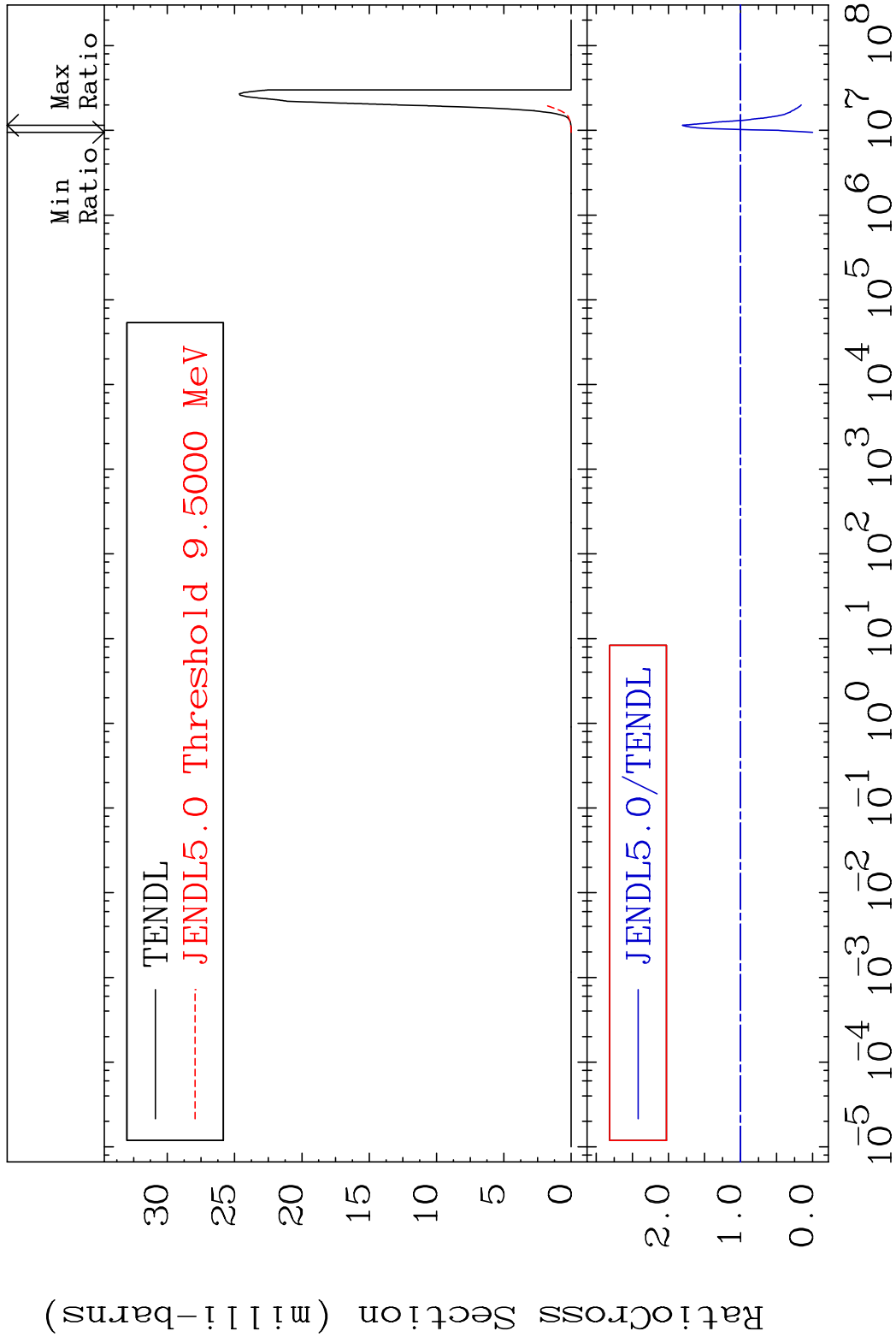


MAT 7225

(n, n') α

72-Hf-174

Cross Section -100.0 To 80.61 %



6

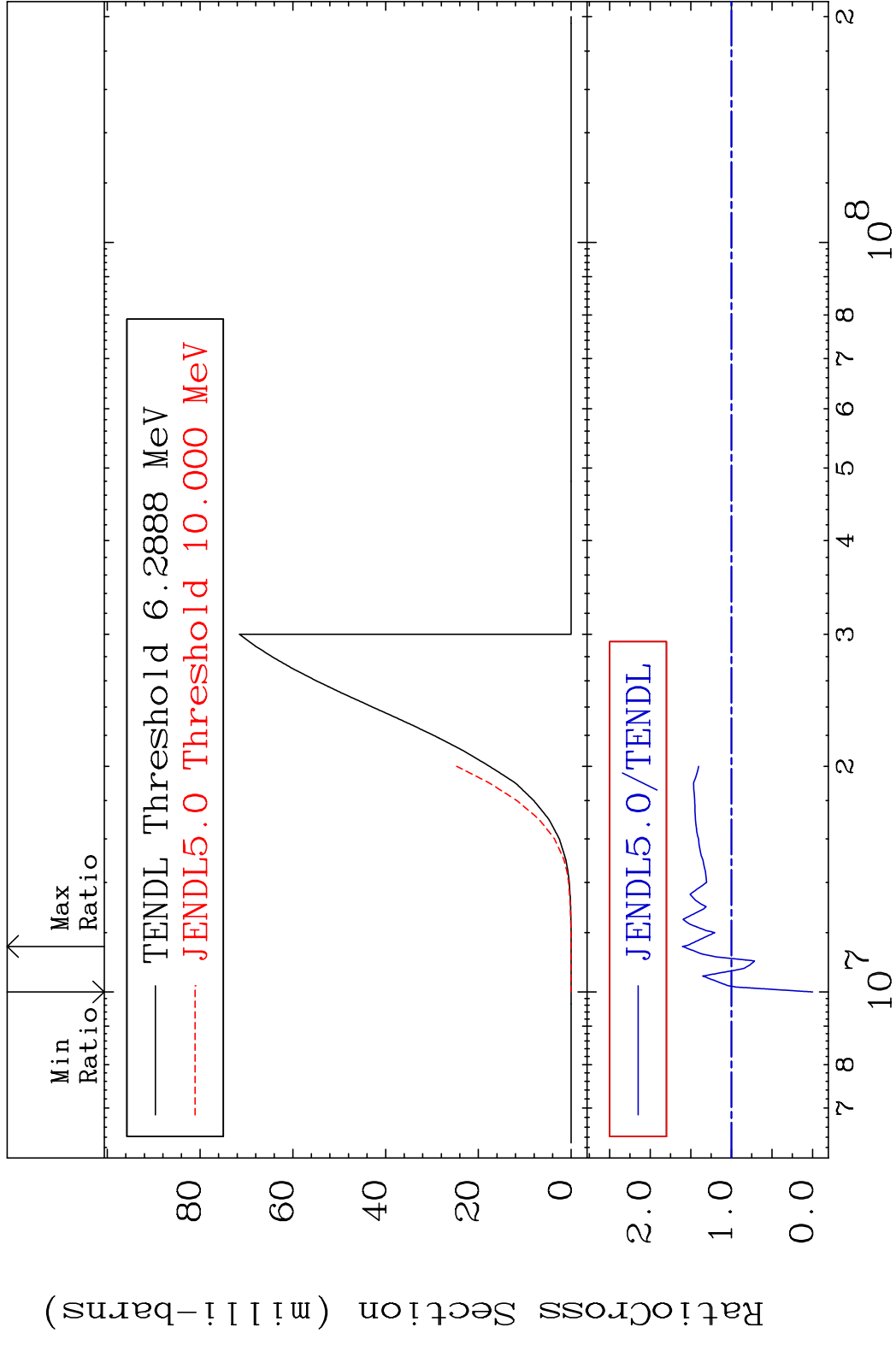
Incident Energy (eV)

72-Hf-174

MAT 7225

(n, n') p 72-Hf-174

Cross Section -100.0 To 60.34 %

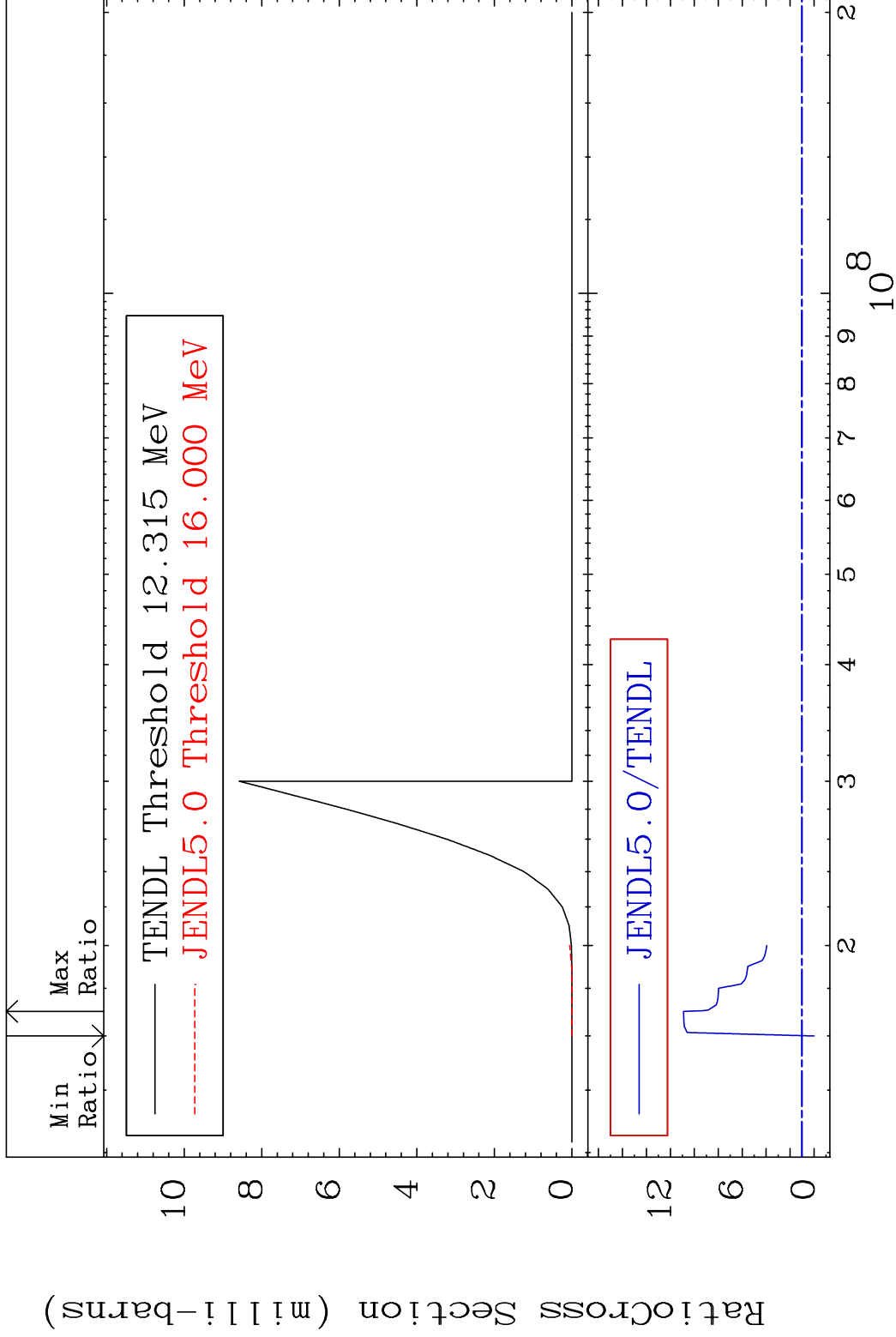


MAT 7225

(n, n') d

72-Hf-174

Cross Section -100.0 To 990.5 %

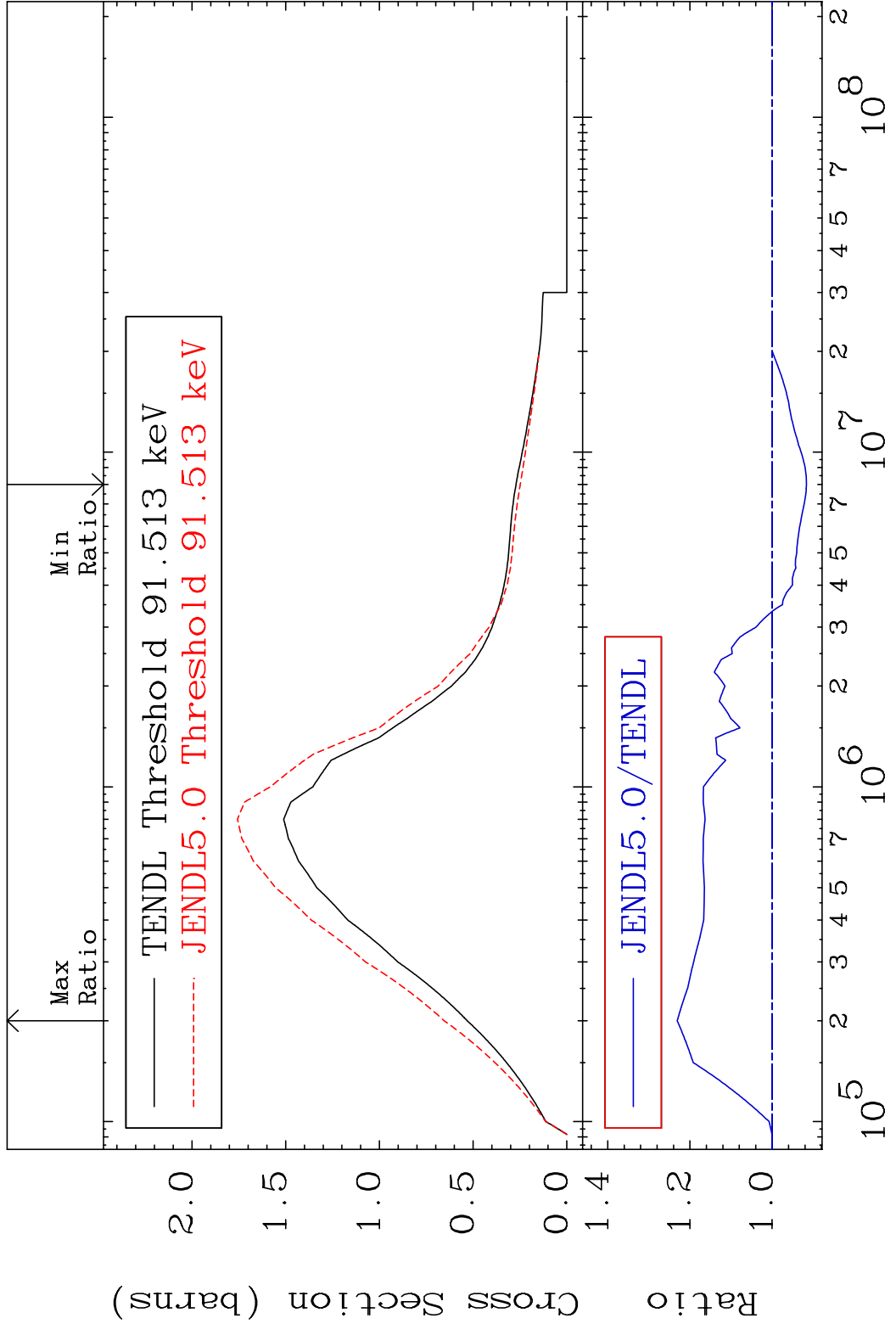


8

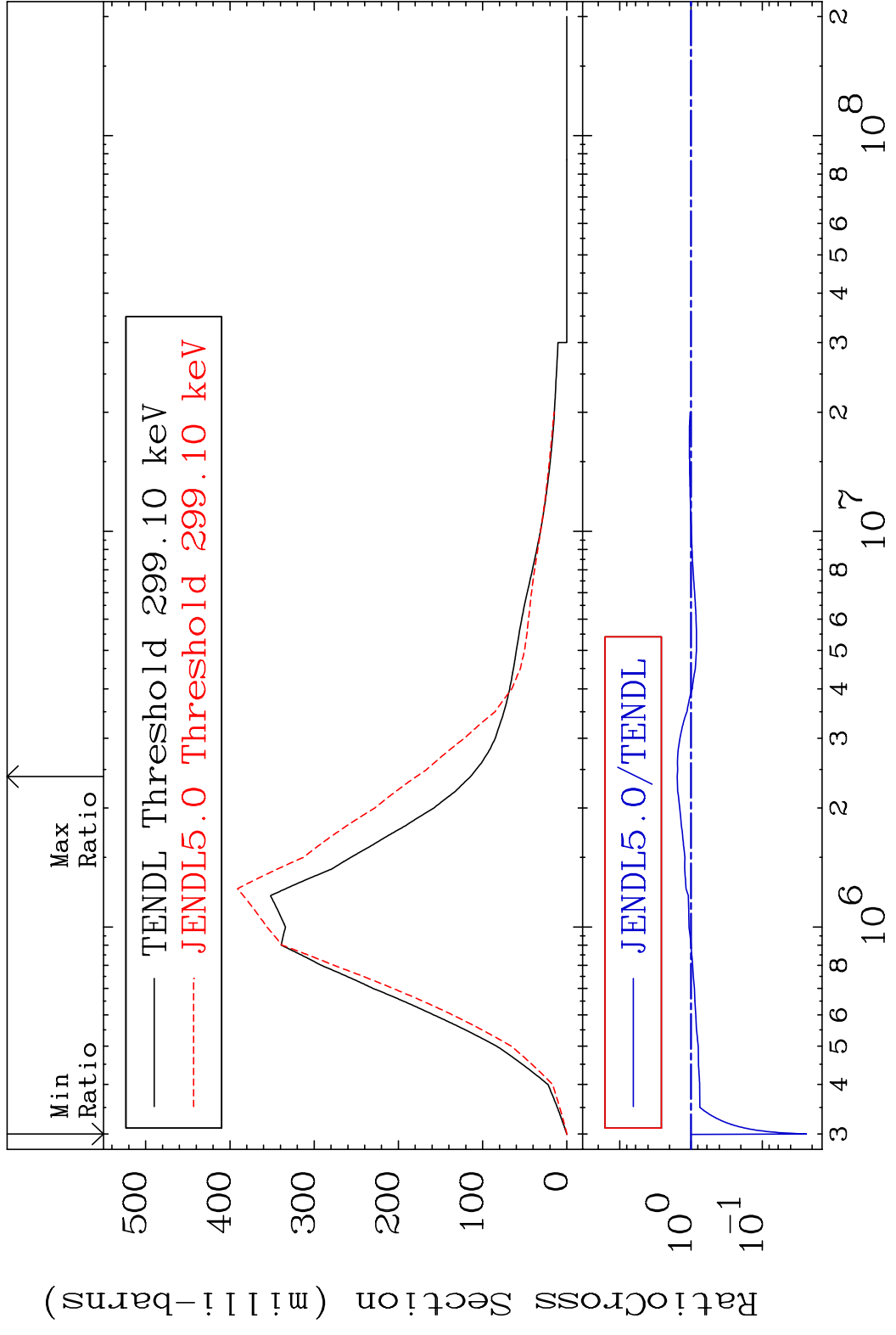
Incident Energy (eV)

72-Hf-174

MAT 7225 MT= 51 (n, n') Level 72-Hf-174
 Cross Section -8.334 To 23.11 %

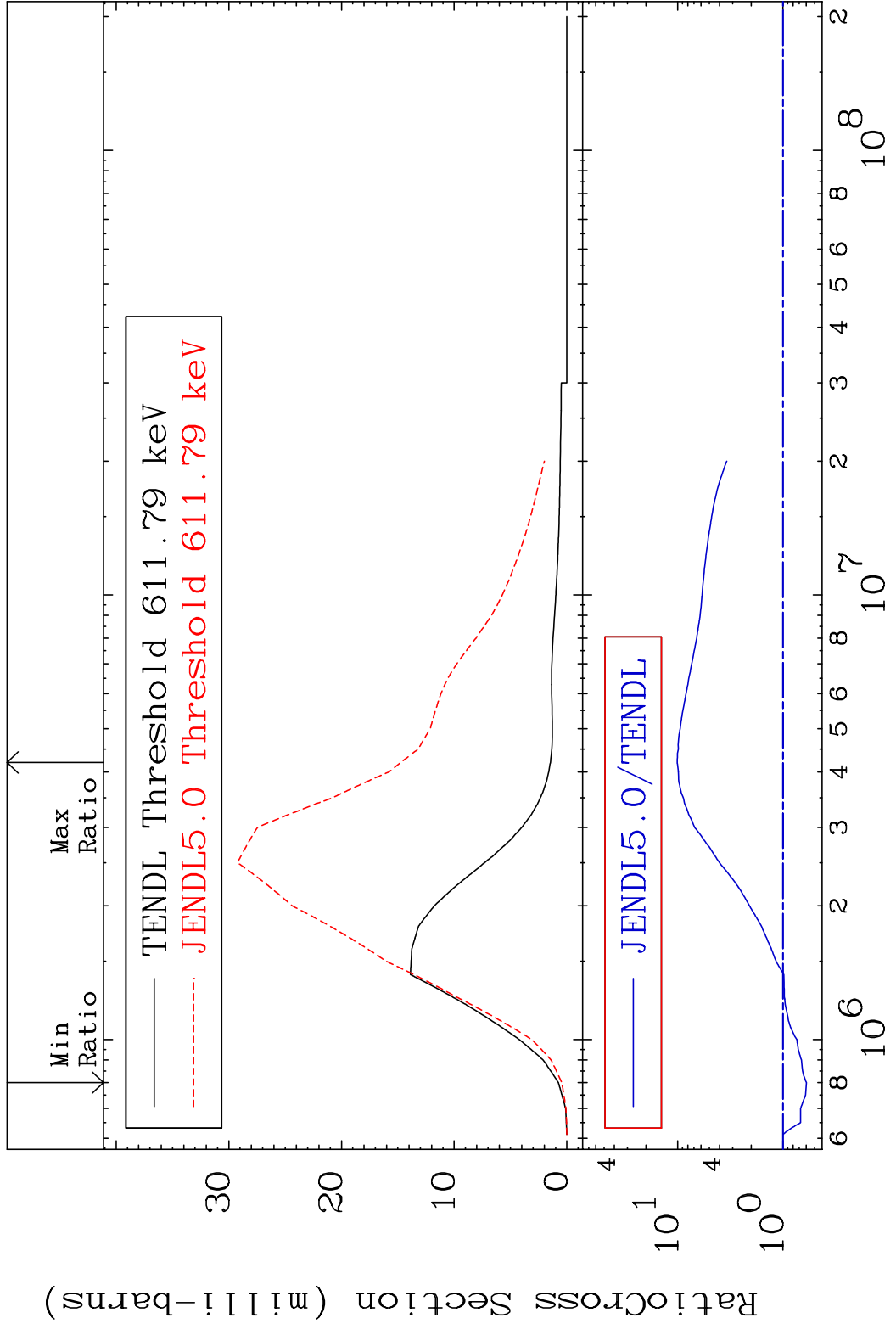


MAT 7225 MT= 52 (n,n') Level 72-Hf-174
 Cross Section -97.60 To 56.32 %

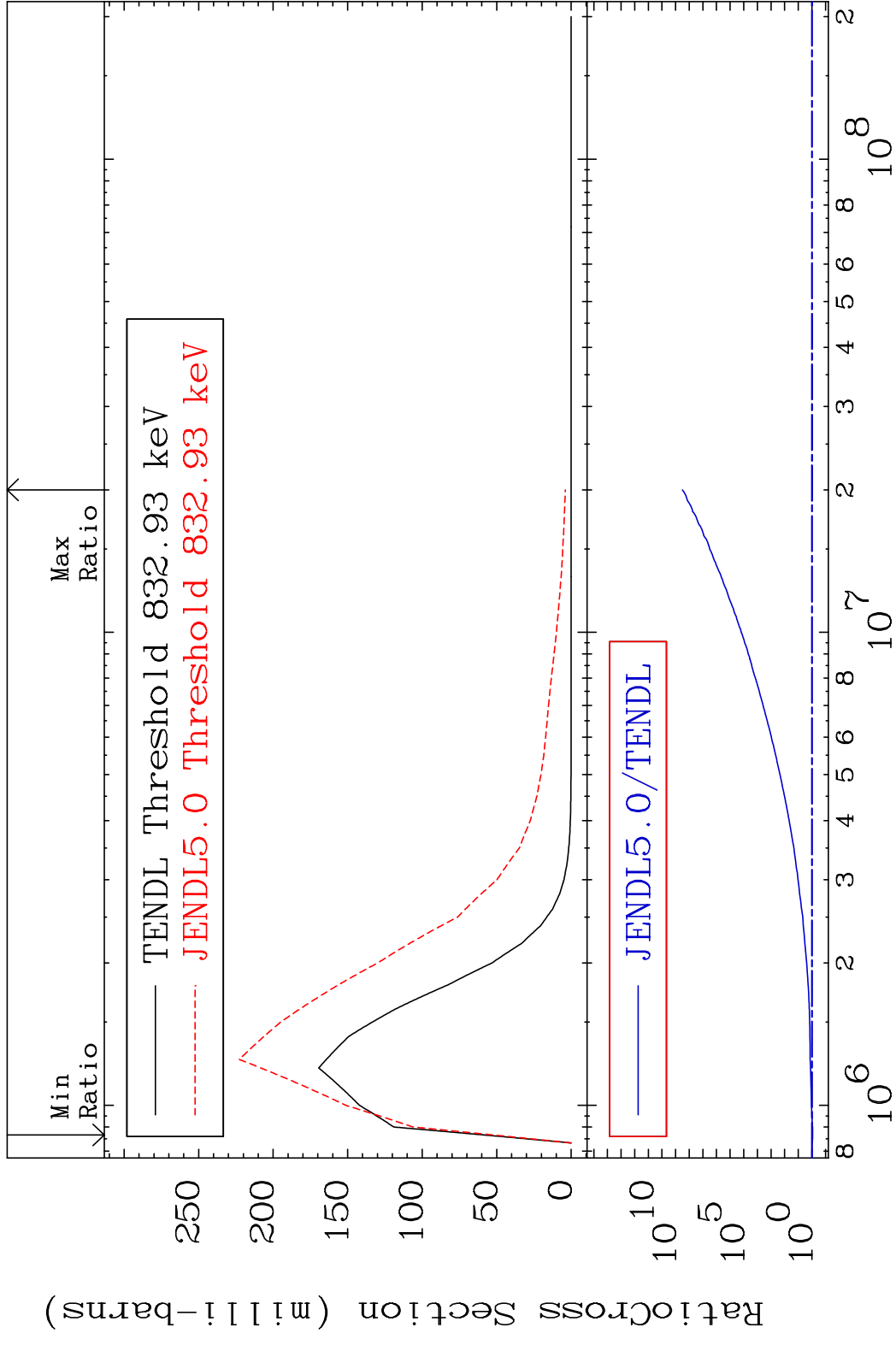


10 Incident Energy (eV) 72-Hf-174

MAT 7225 MT= 53 (n, n') Level 72-Hf-174
 Cross Section -40.32 To 909.1 %

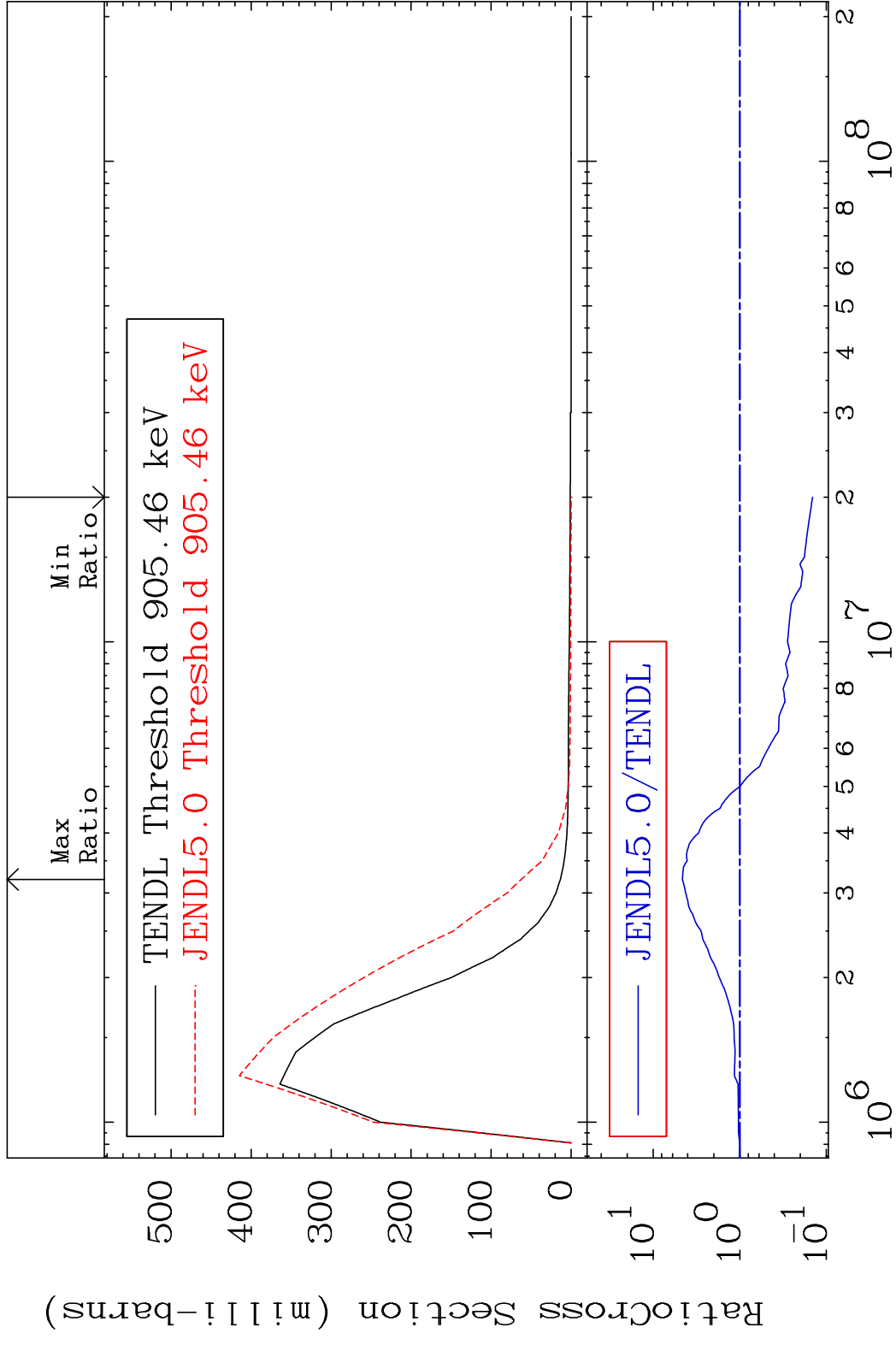


MAT 7225 MT= 54 (n, n') Level 72-Hf-174
 Cross Section -10.84 To 9999. %

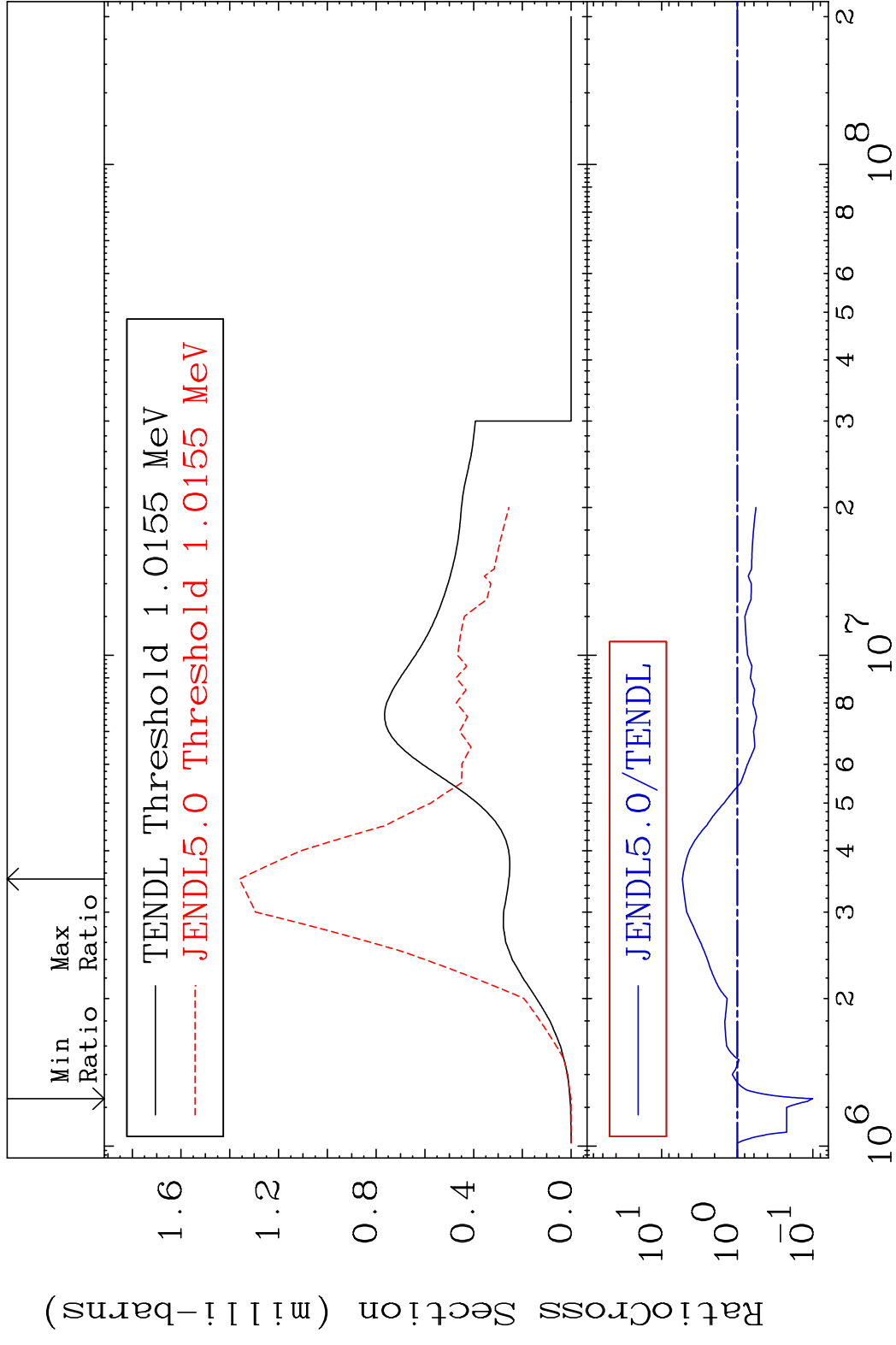


12 Incident Energy (eV) 72-Hf-174

MAT 7225 MT= 55 (n, n') Level 72-Hf-174
 Cross Section -85.57 To 361.3 %

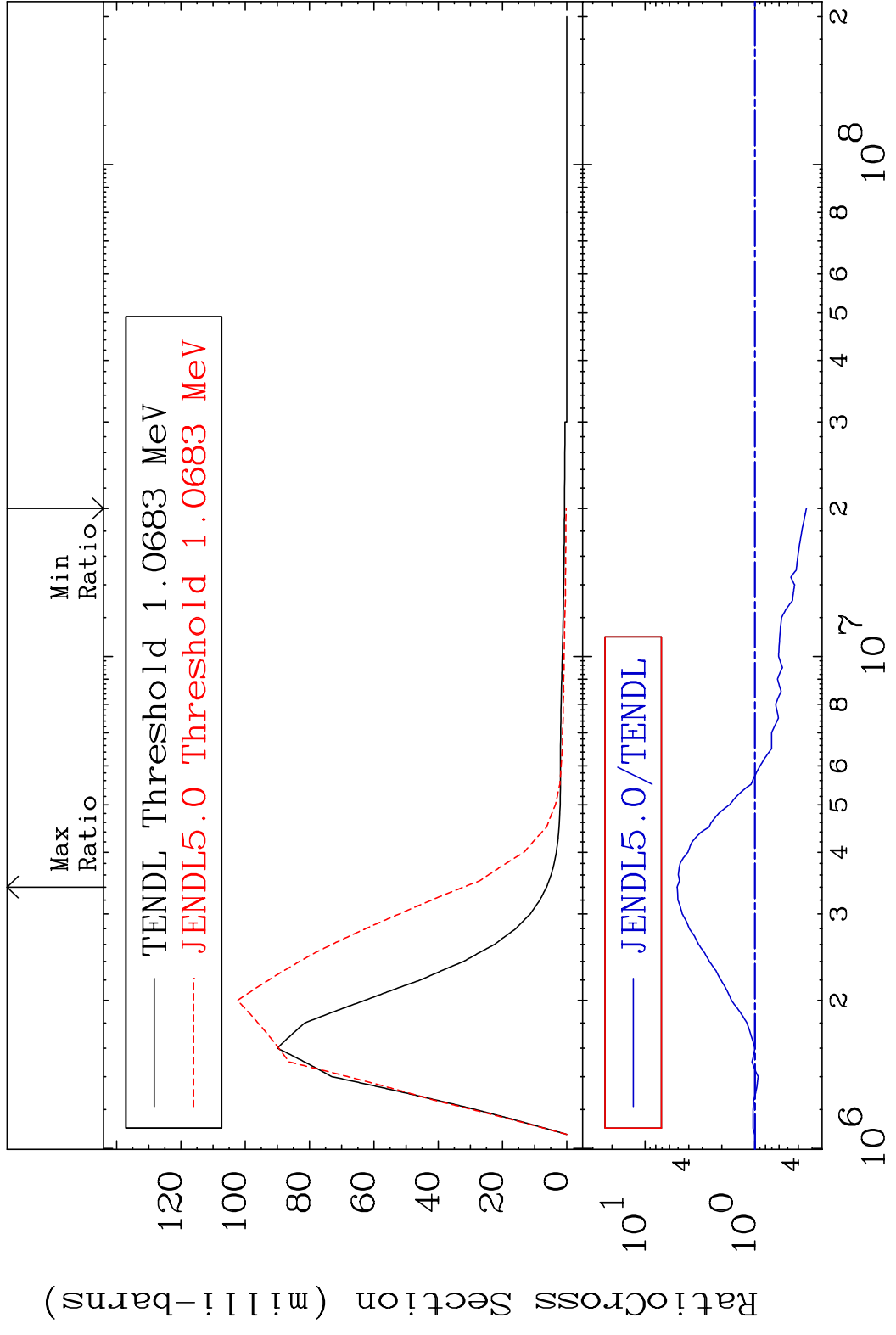


MAT 7225 MT= 56 (n,n') Level 72-Hf-174
 Cross Section -89.89 To 432.5 %



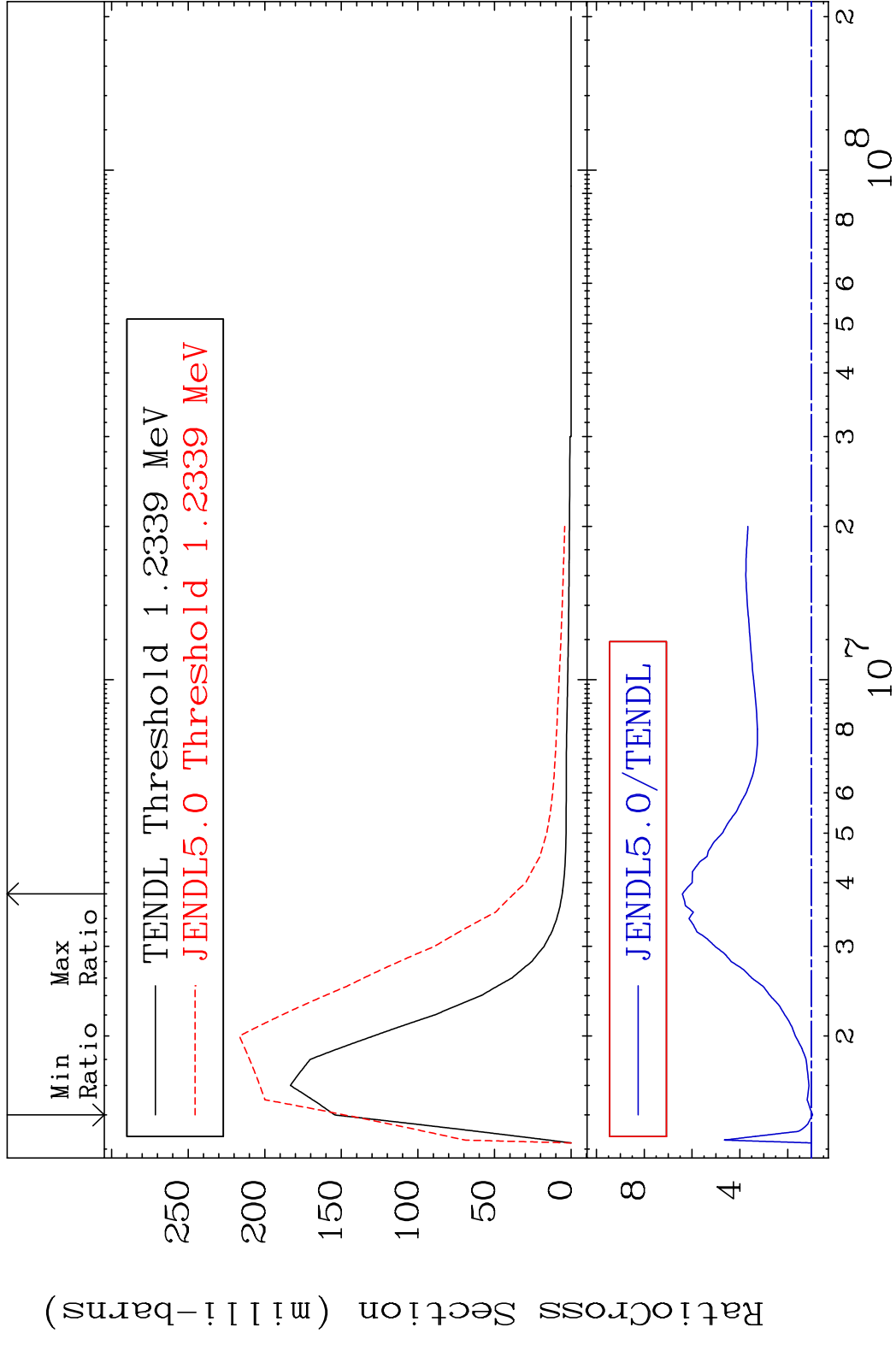
14 Incident Energy (eV) 72-Hf-174

MAT 7225 MT= 57 (n, n') Level 72-Hf-174
 Cross Section -66.19 To 409.7 %

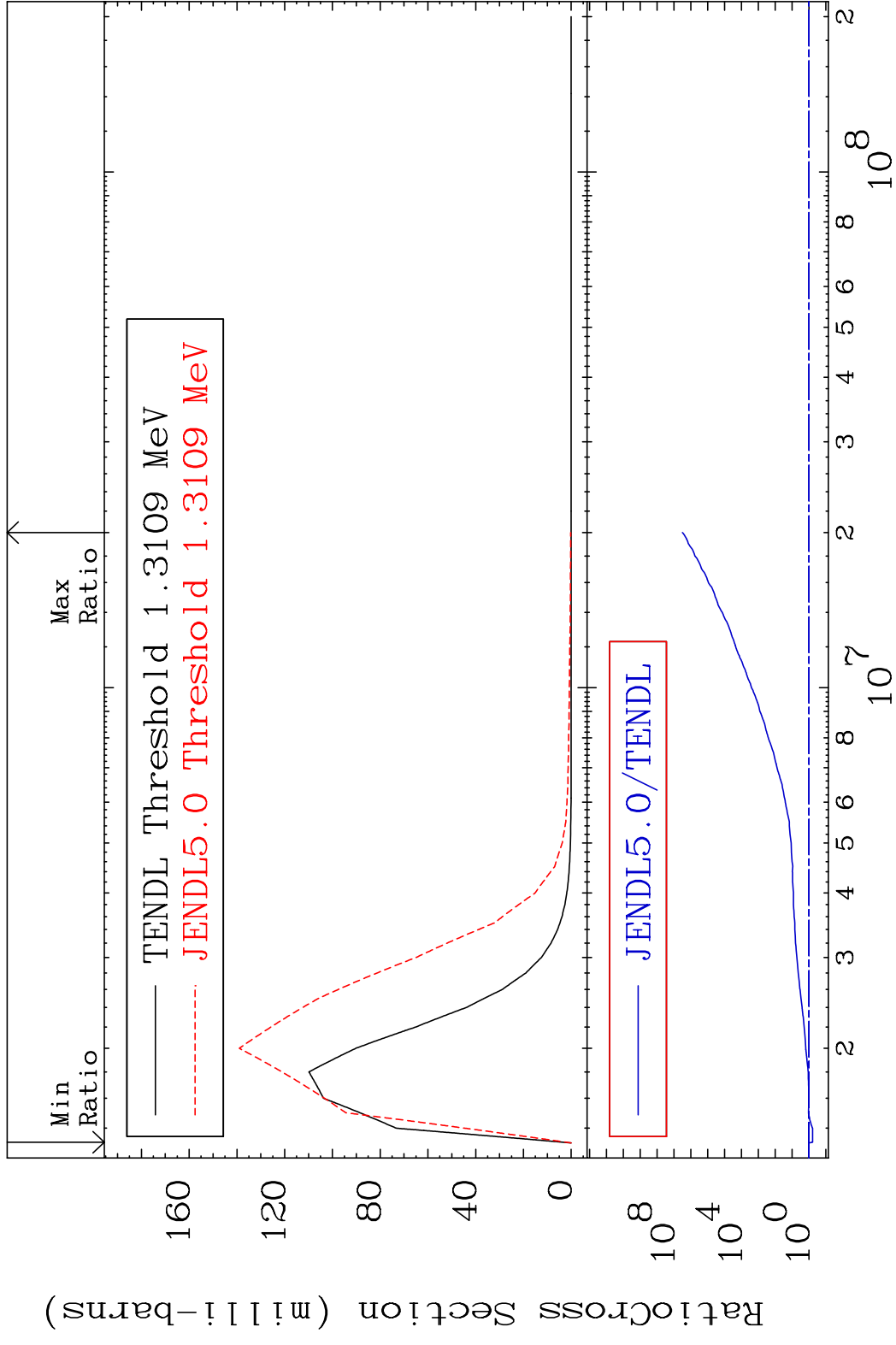


15 Incident Energy (eV) 72-Hf-174

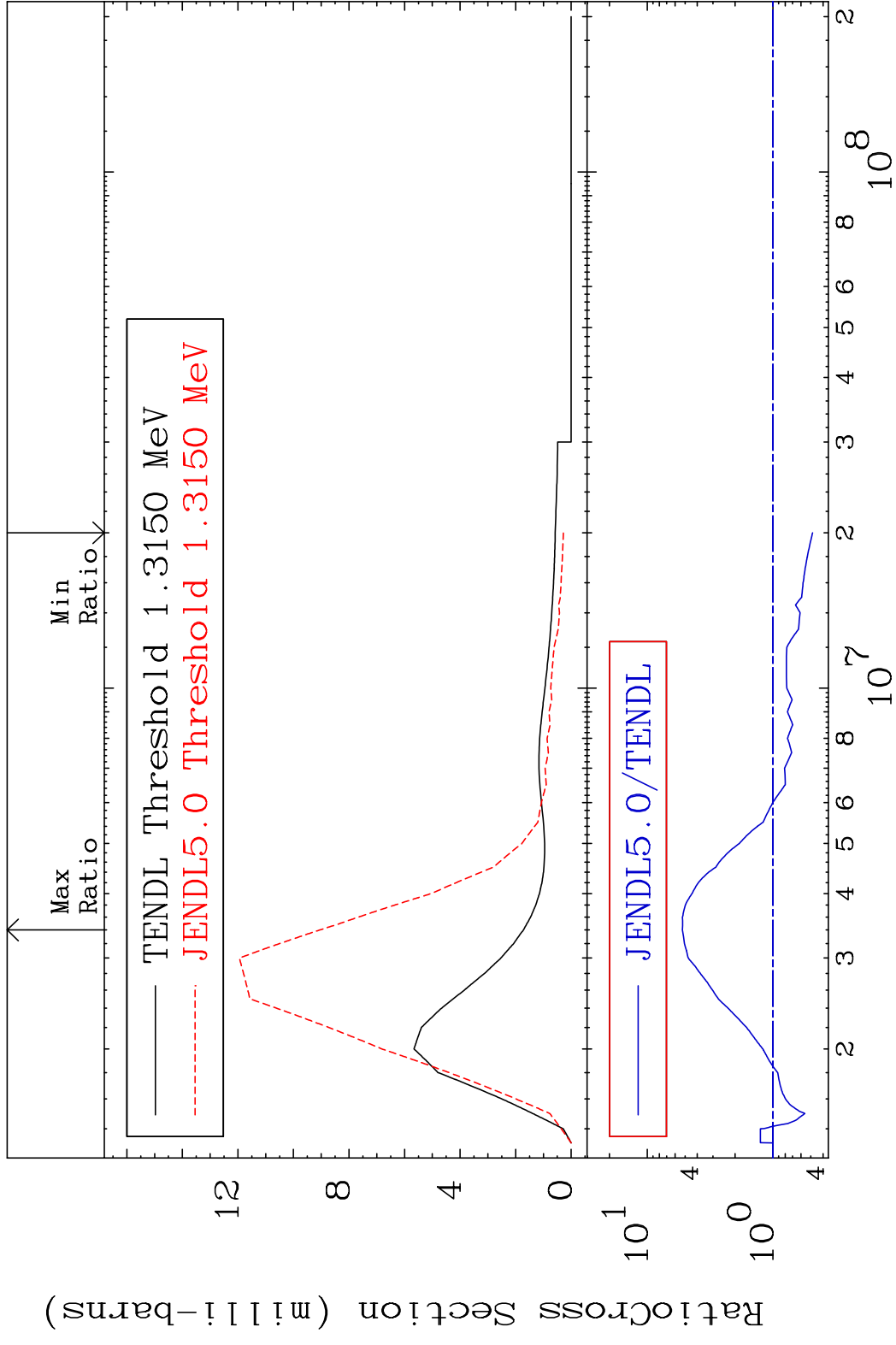
MAT 7225 MT= 58 (n,n') Level 72-Hf-174
 Cross Section -4.169 To 540.6 %



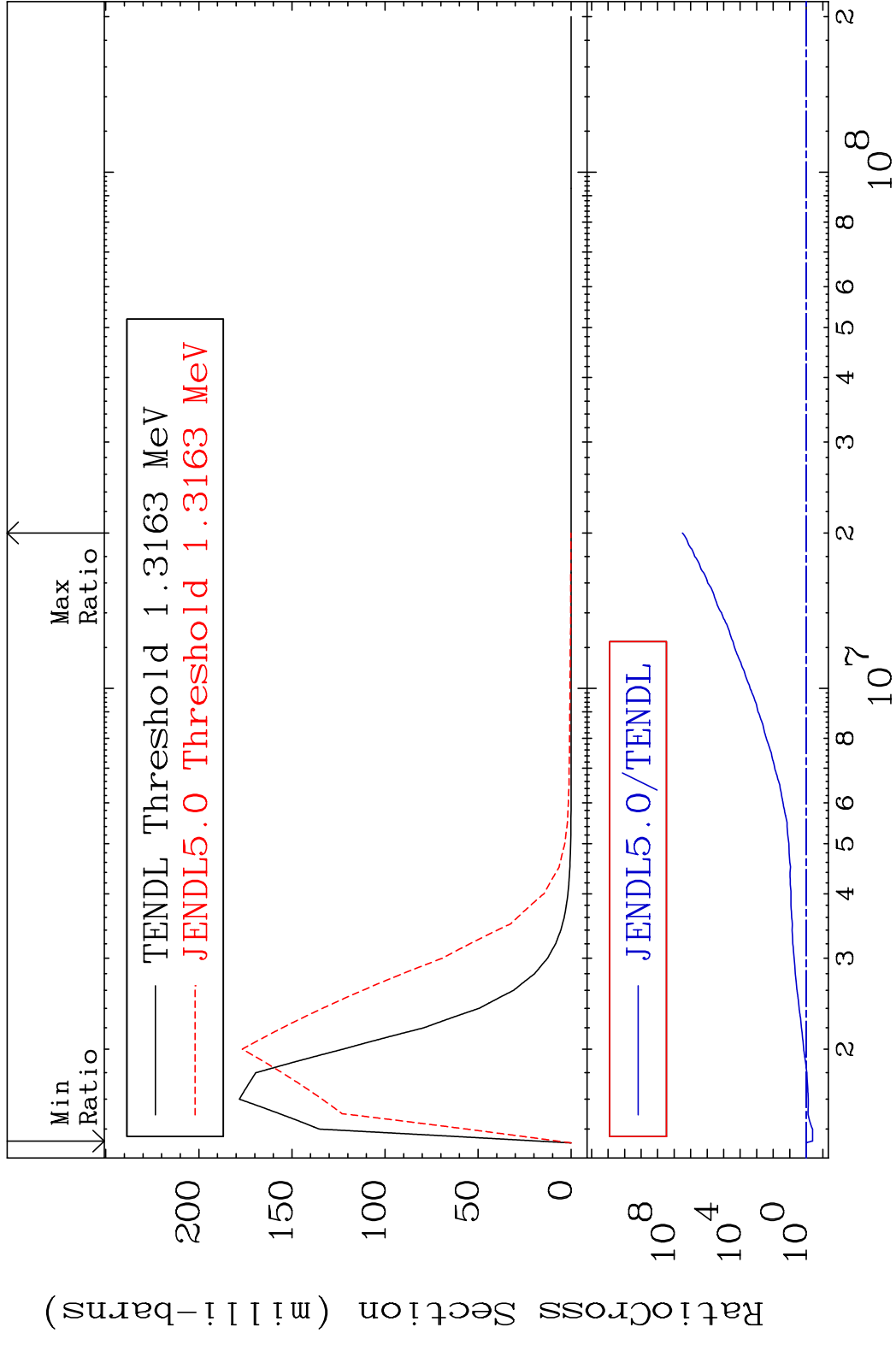
MAT 7225 MT= 59 (n, n') Level 72-Hf-174
 Cross Section -39.34 To 9999. %



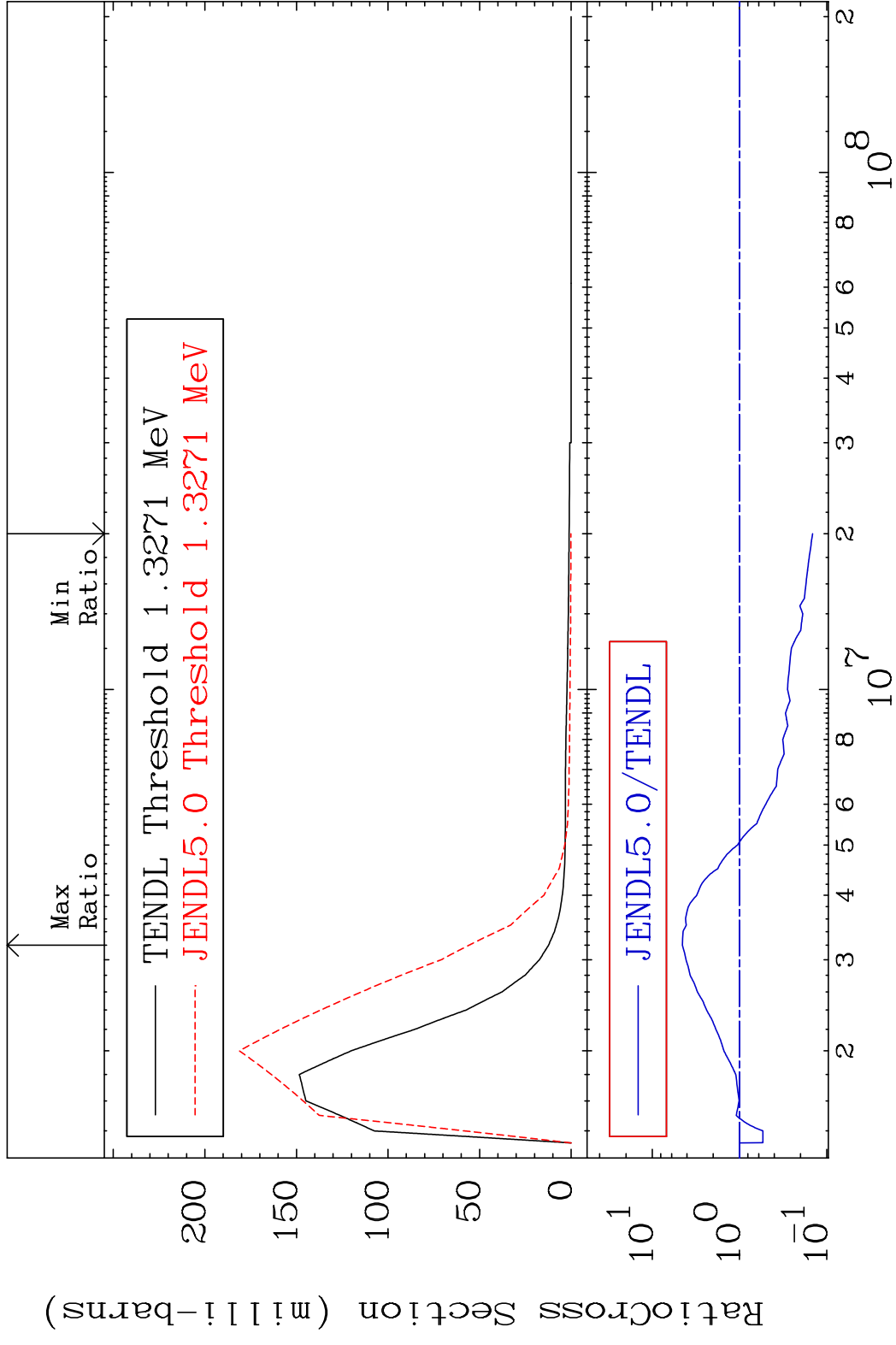
MAT 7225 MT= 60 (n, n') Level 72-Hf-174
 Cross Section -51.57 To 426.0 %



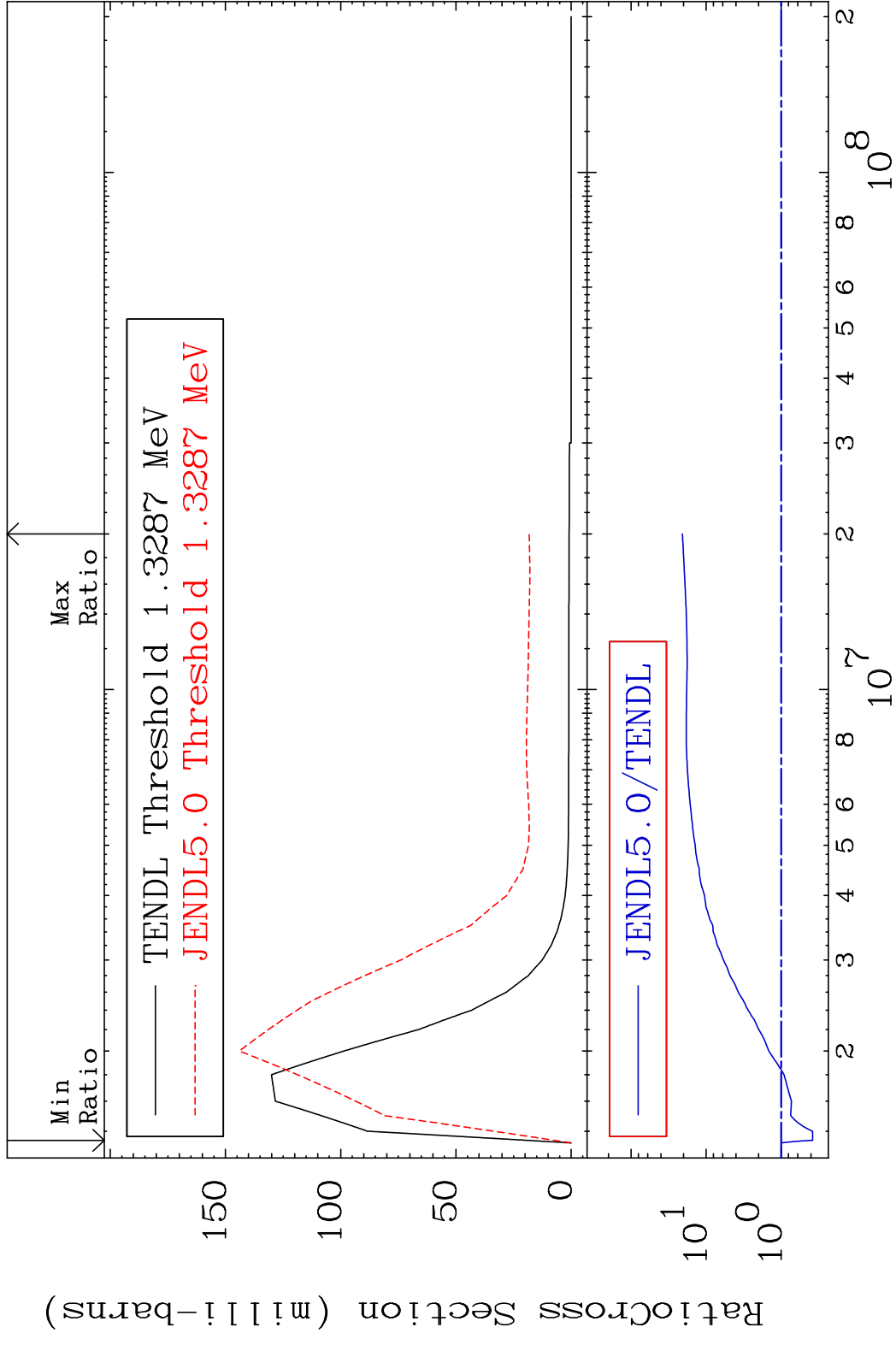
MAT 7225 MT= 61 (n, n') Level 72-Hf-174
 Cross Section -58.52 To 9999. %



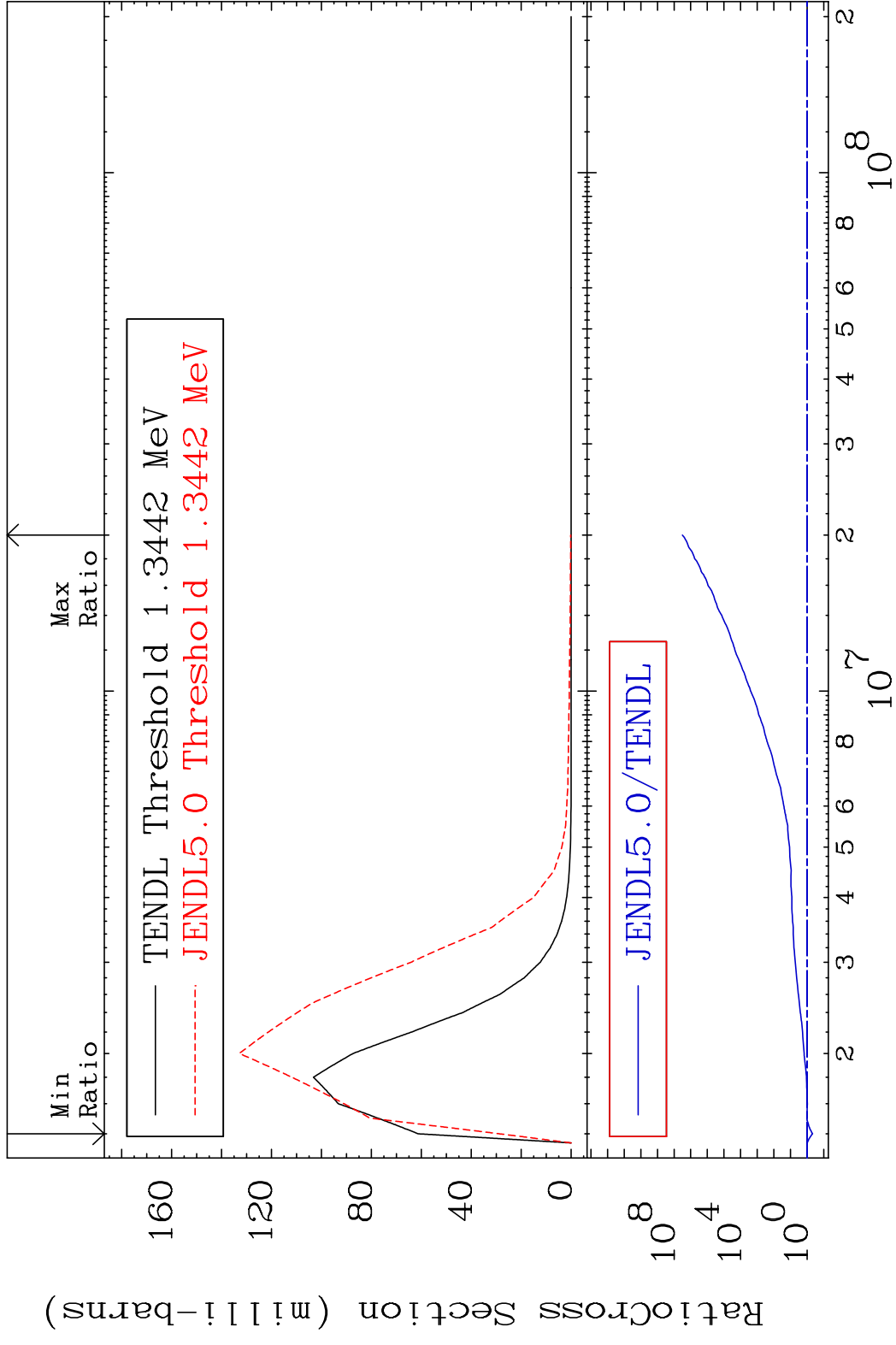
MAT 7225 MT= 62 (n, n') Level 72-Hf-174
 Cross Section -85.47 To 351.5 %



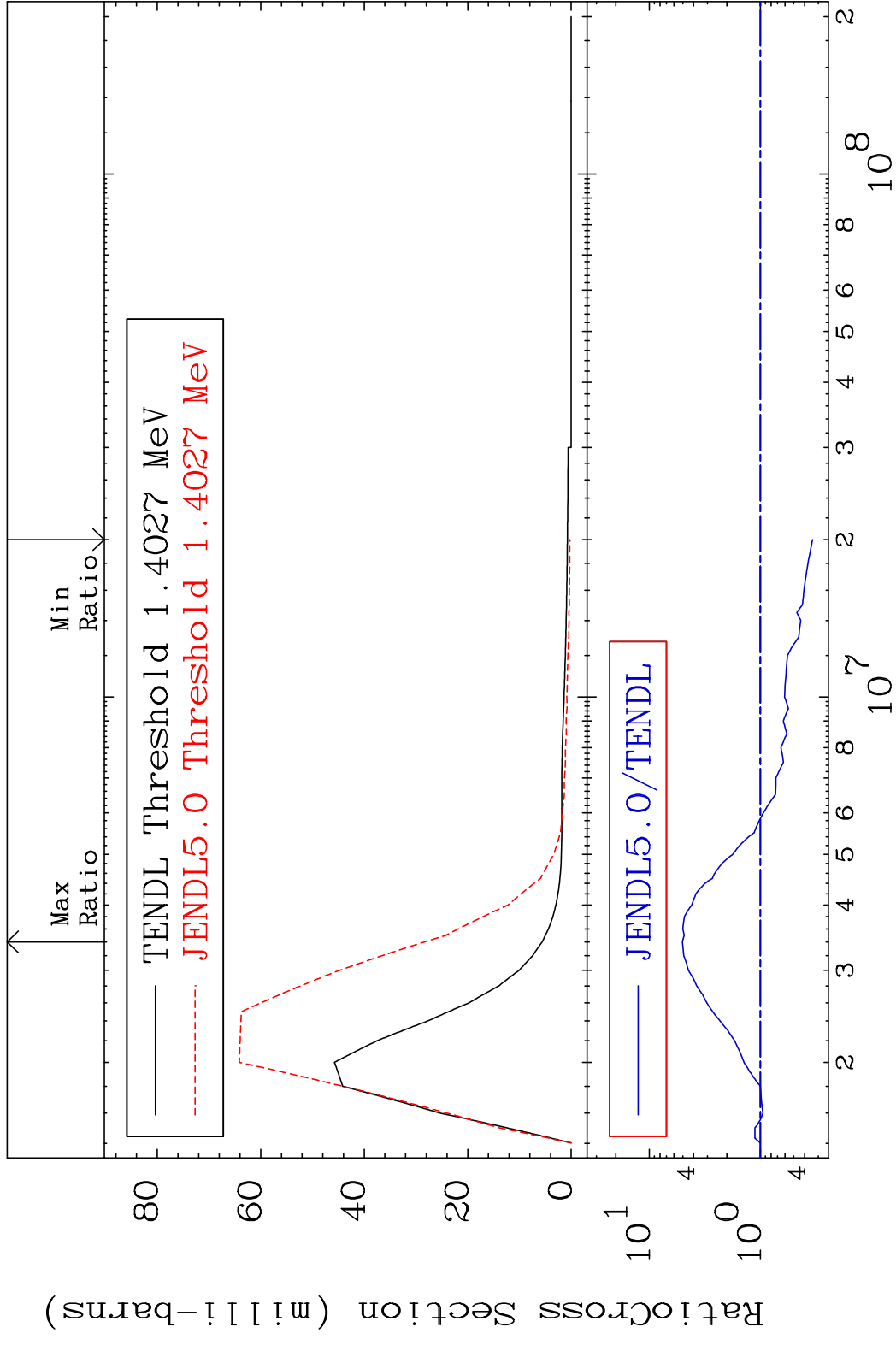
MAT 7225 MT= 63 (n, n') Level 72-Hf-174
 Cross Section -61.91 To 1974. %



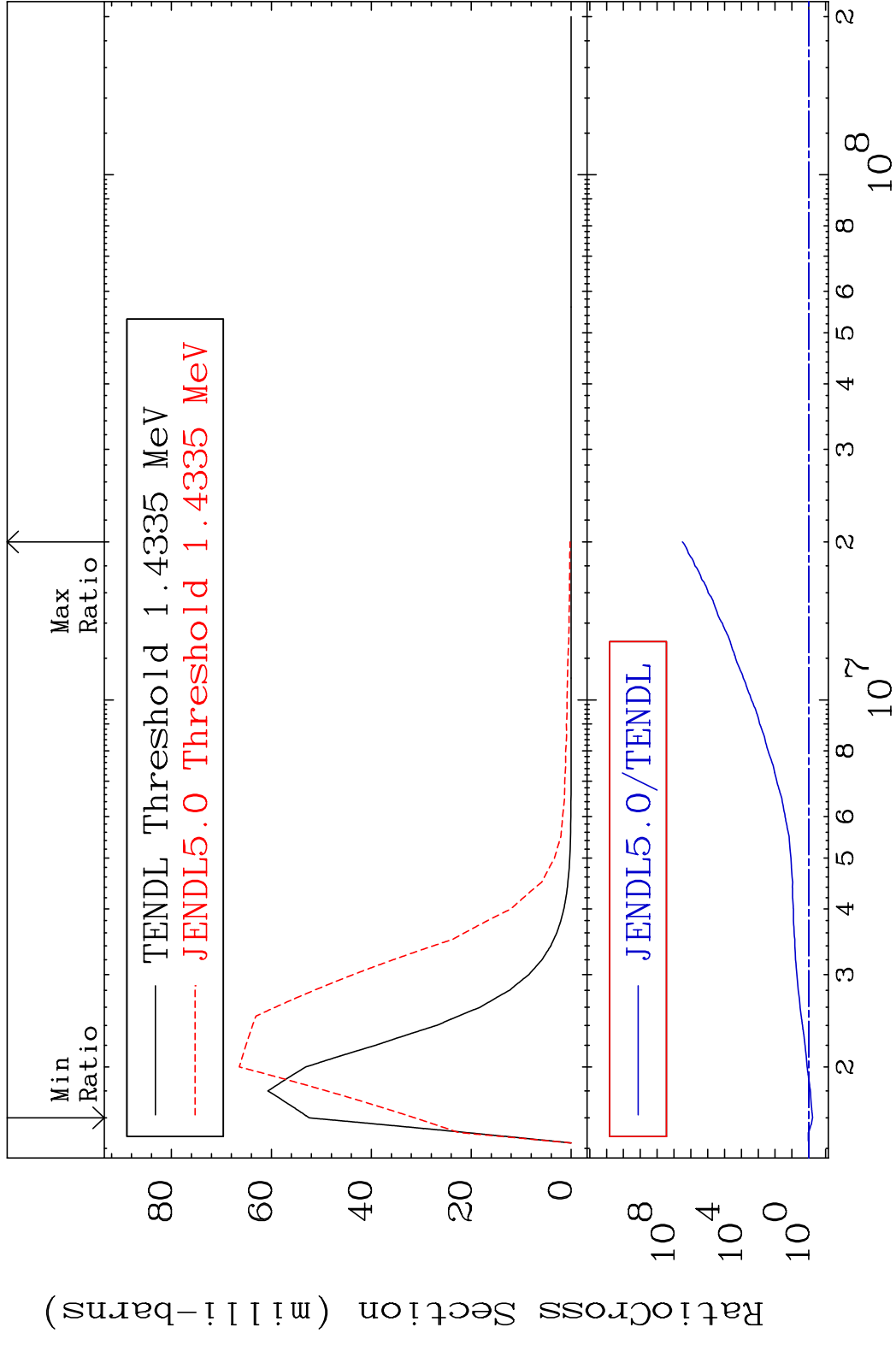
MAT 7225 MT= 64 (n, n') Level 72-Hf-174
 Cross Section -53.01 To 9999. %



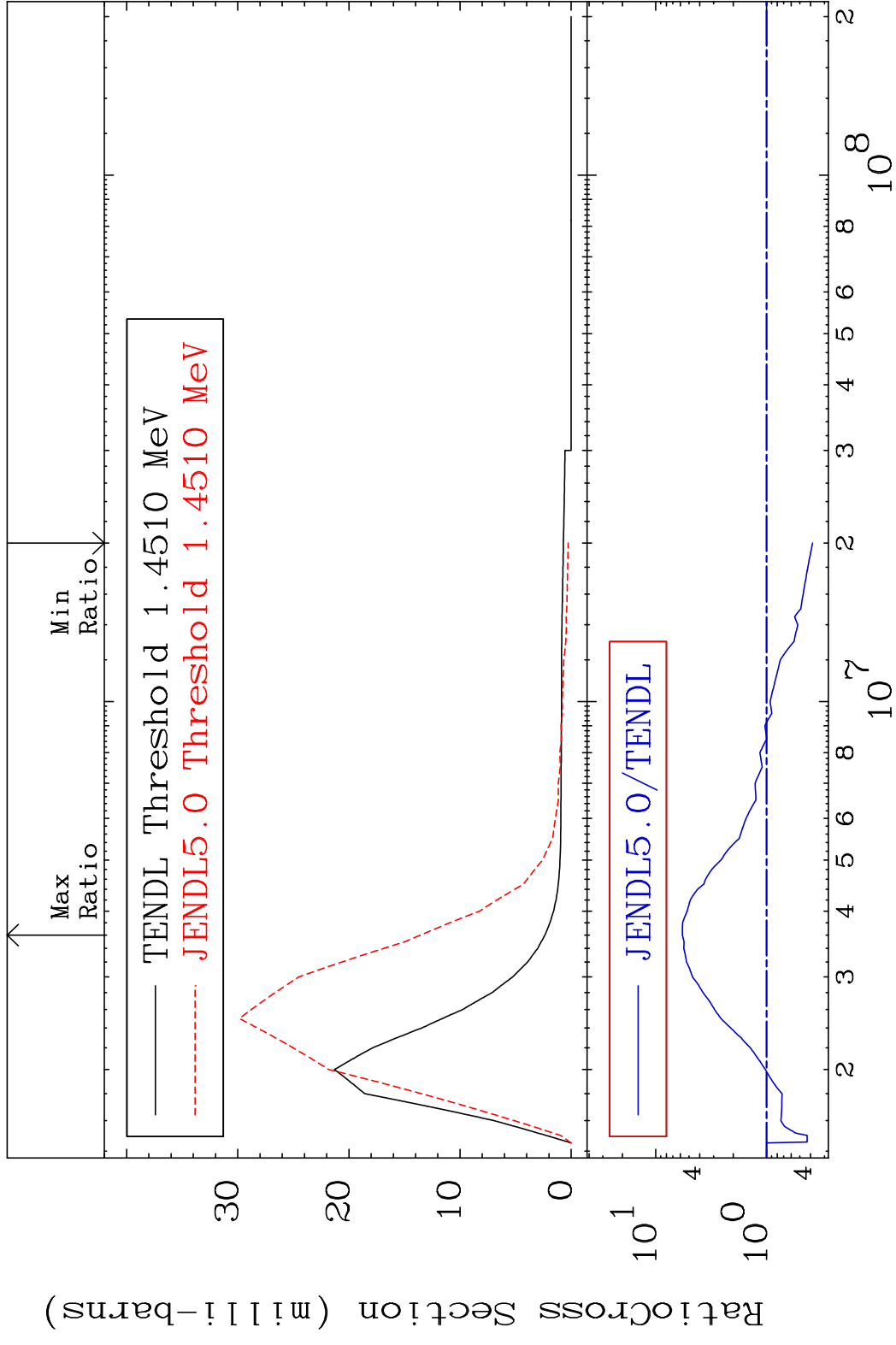
MAT 7225 MT= 65 (n,n') Level 72-Hf-174
 Cross Section -66.15 To 404.0 %



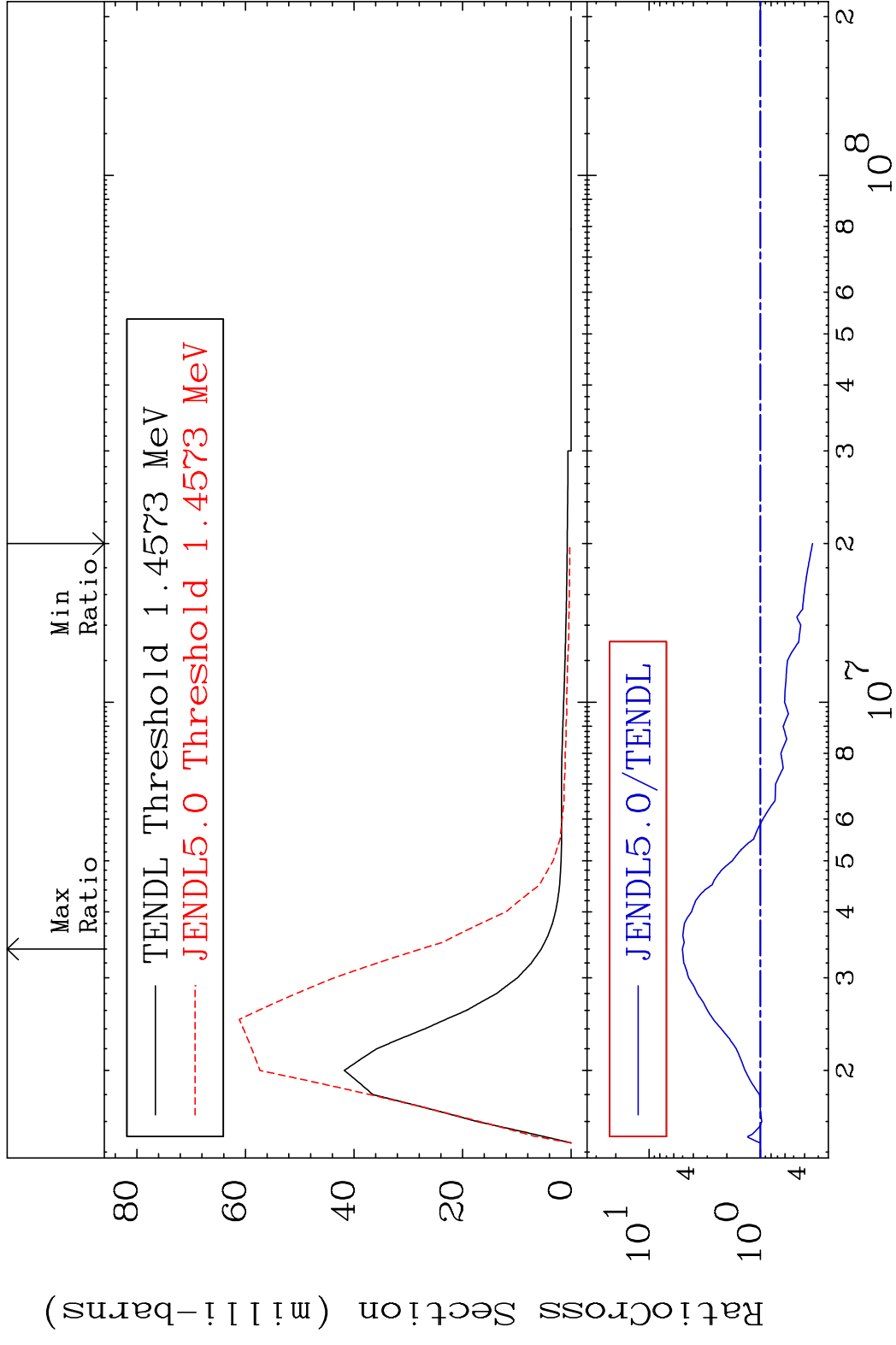
MAT 7225 MT= 66 (n, n') Level 72-Hf-174
 Cross Section -40.30 To 9999. %



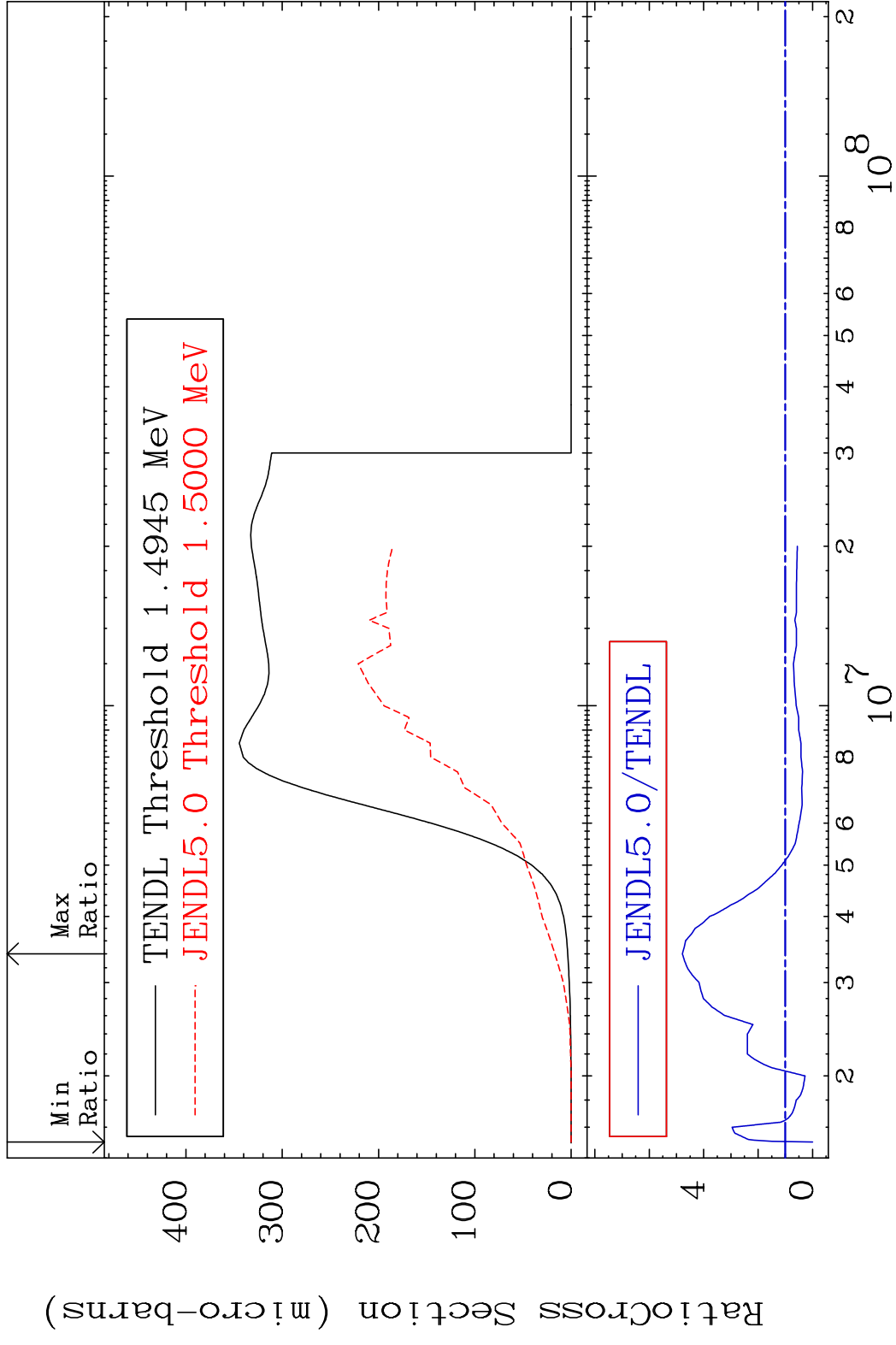
MAT 7225 MT= 67 (n, n') Level 72-Hf-174
 Cross Section -61.57 To 475.2 %



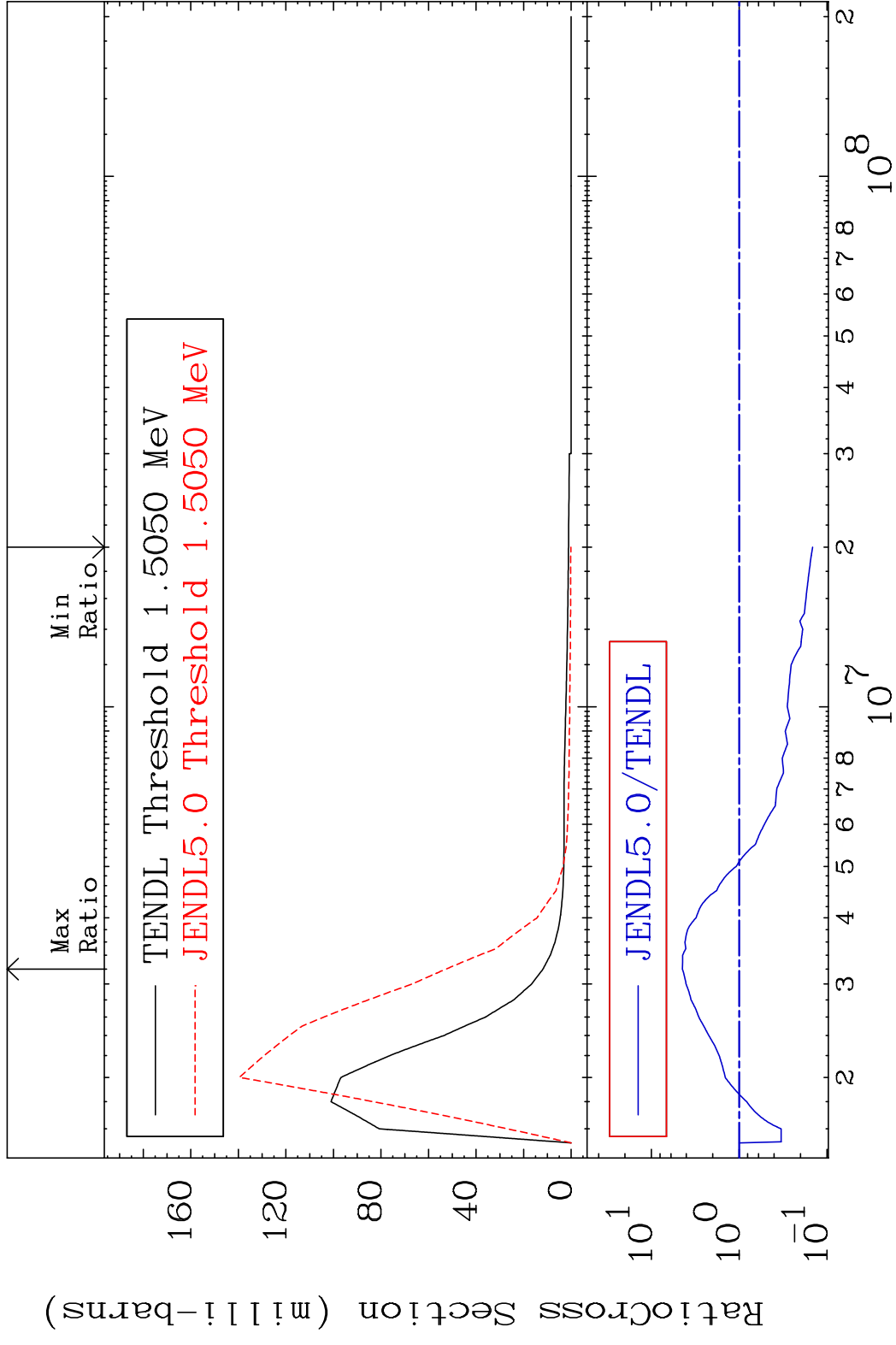
MAT 7225 MT= 68 (n,n') Level 72-Hf-174
 Cross Section -66.13 To 402.6 %



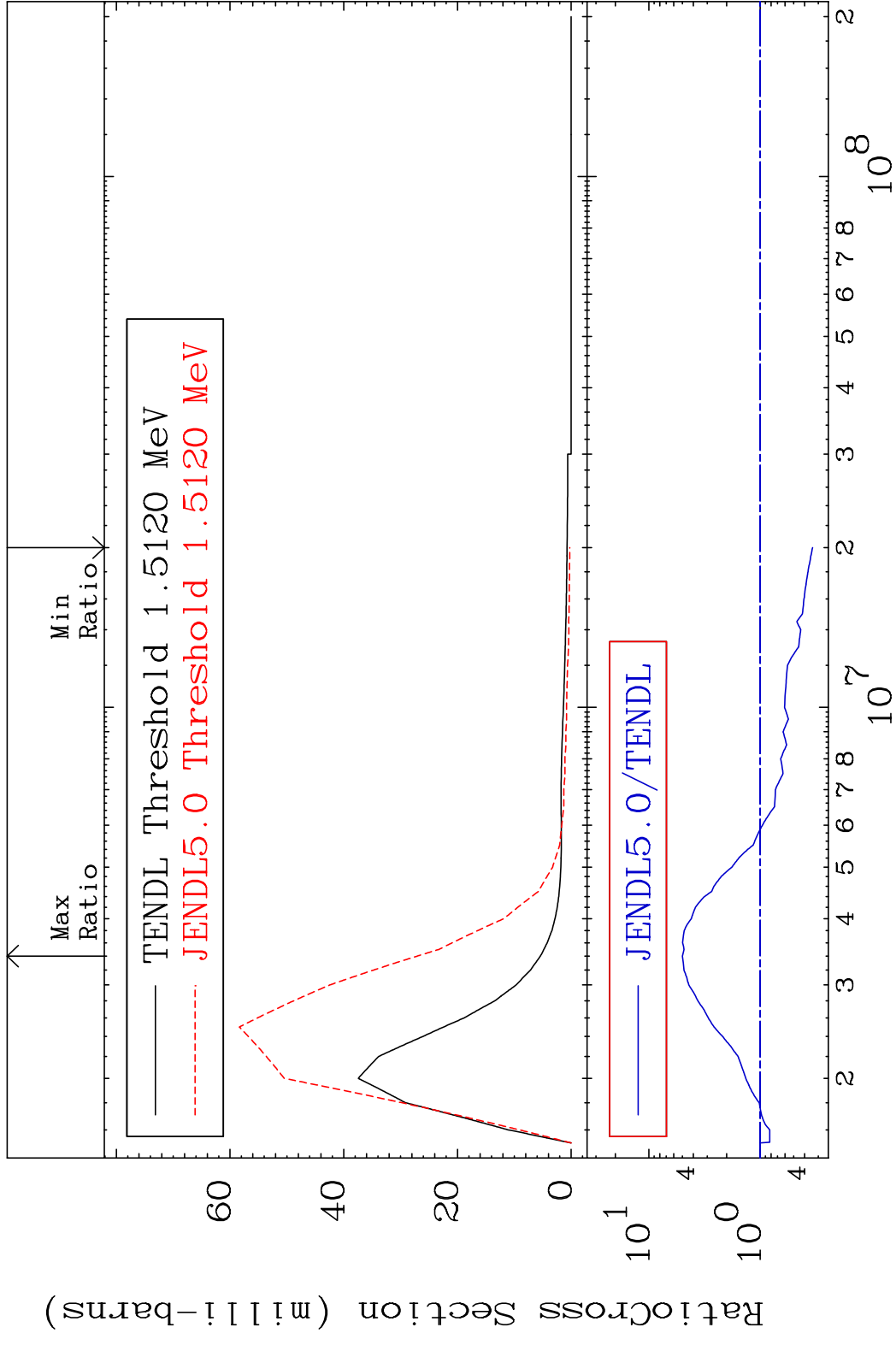
MAT 7225 MT= 69 (n, n') Level 72-Hf-174
 Cross Section -100.0 To 378.5 %



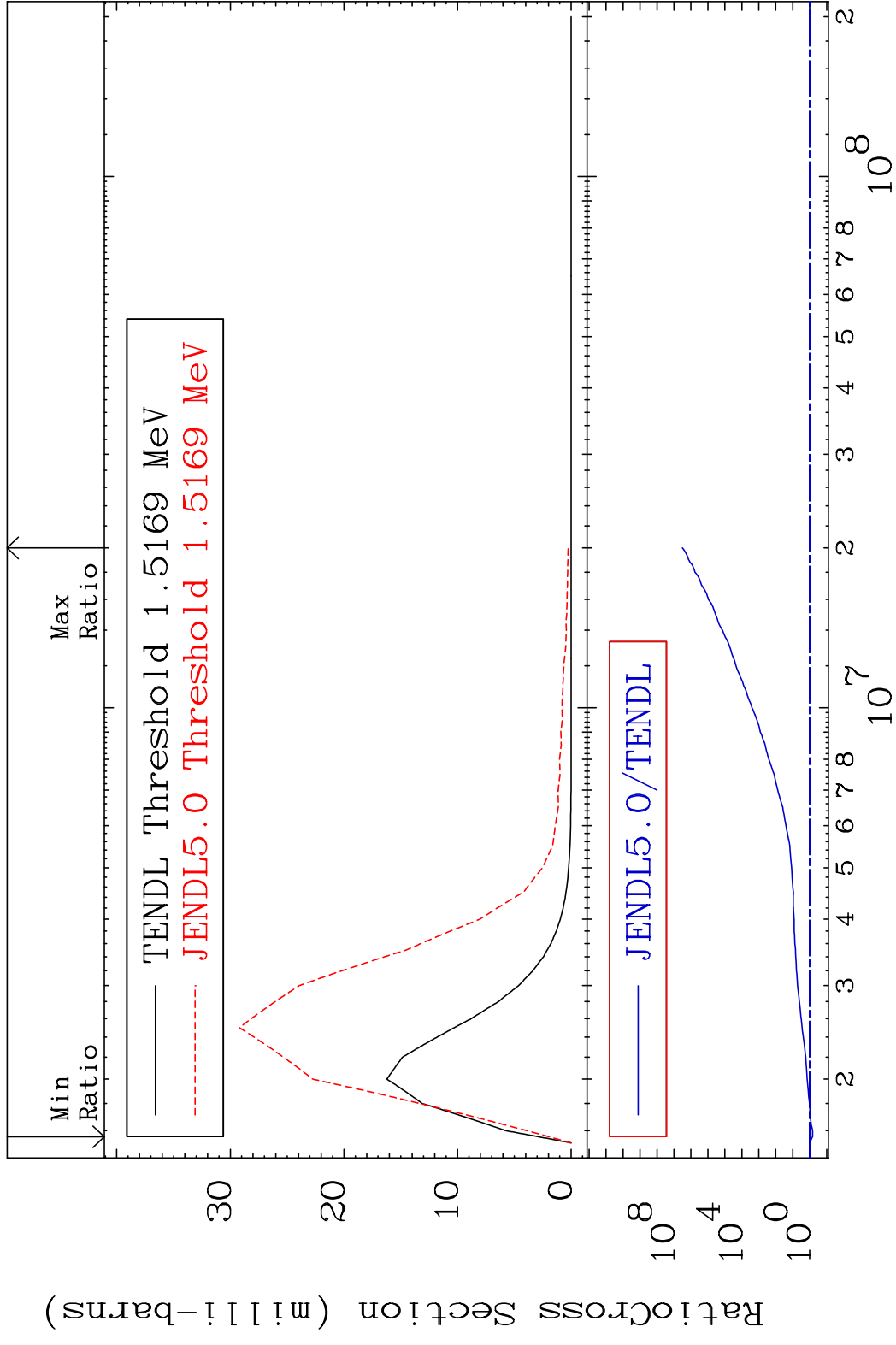
MAT 7225 MT= 70 (n,n') Level 72-Hf-174
 Cross Section -85.42 To 344.2 %



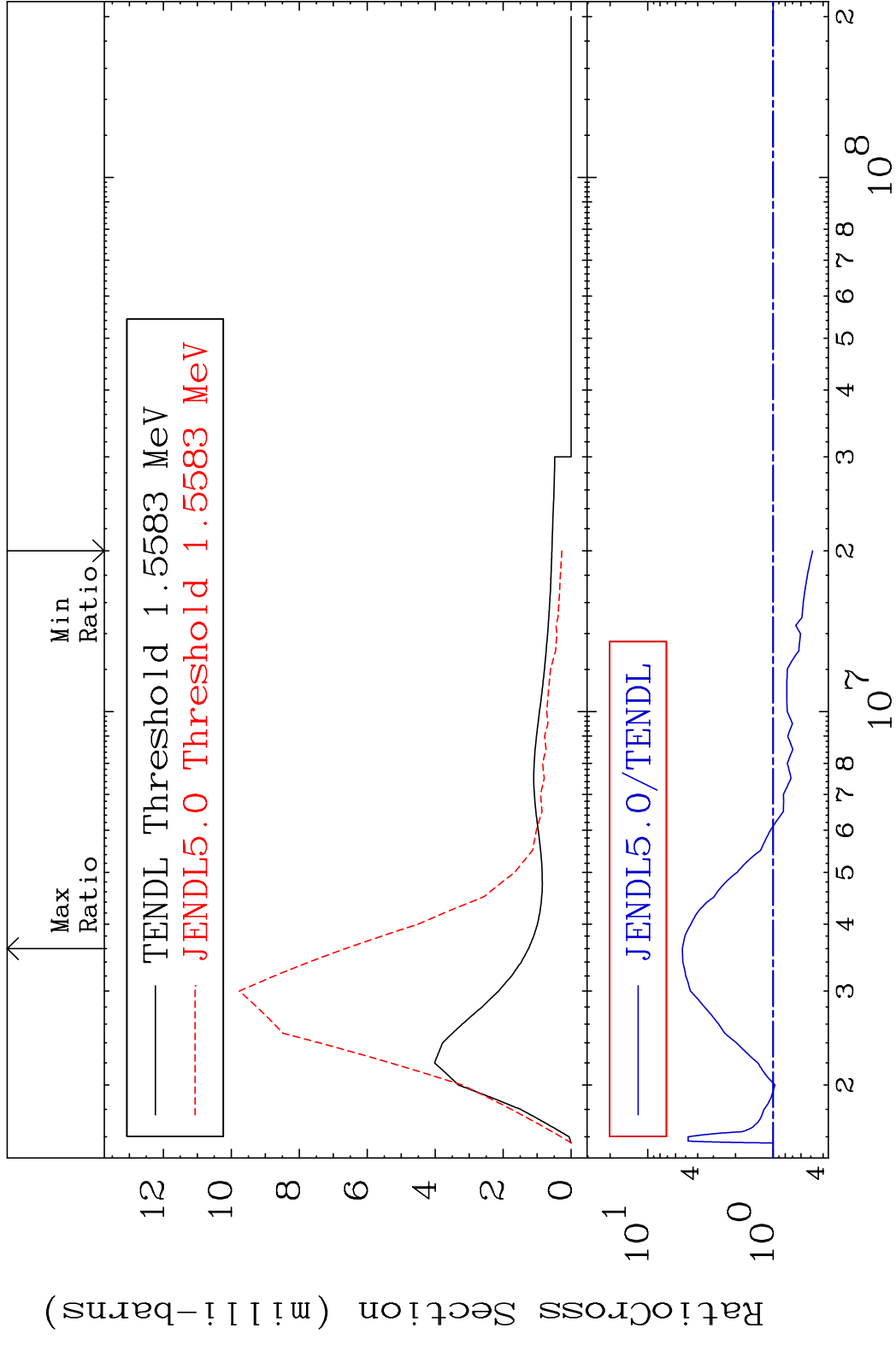
MAT 7225 MT= 71 (n,n') Level 72-Hf-174
 Cross Section -66.13 To 401.0 %



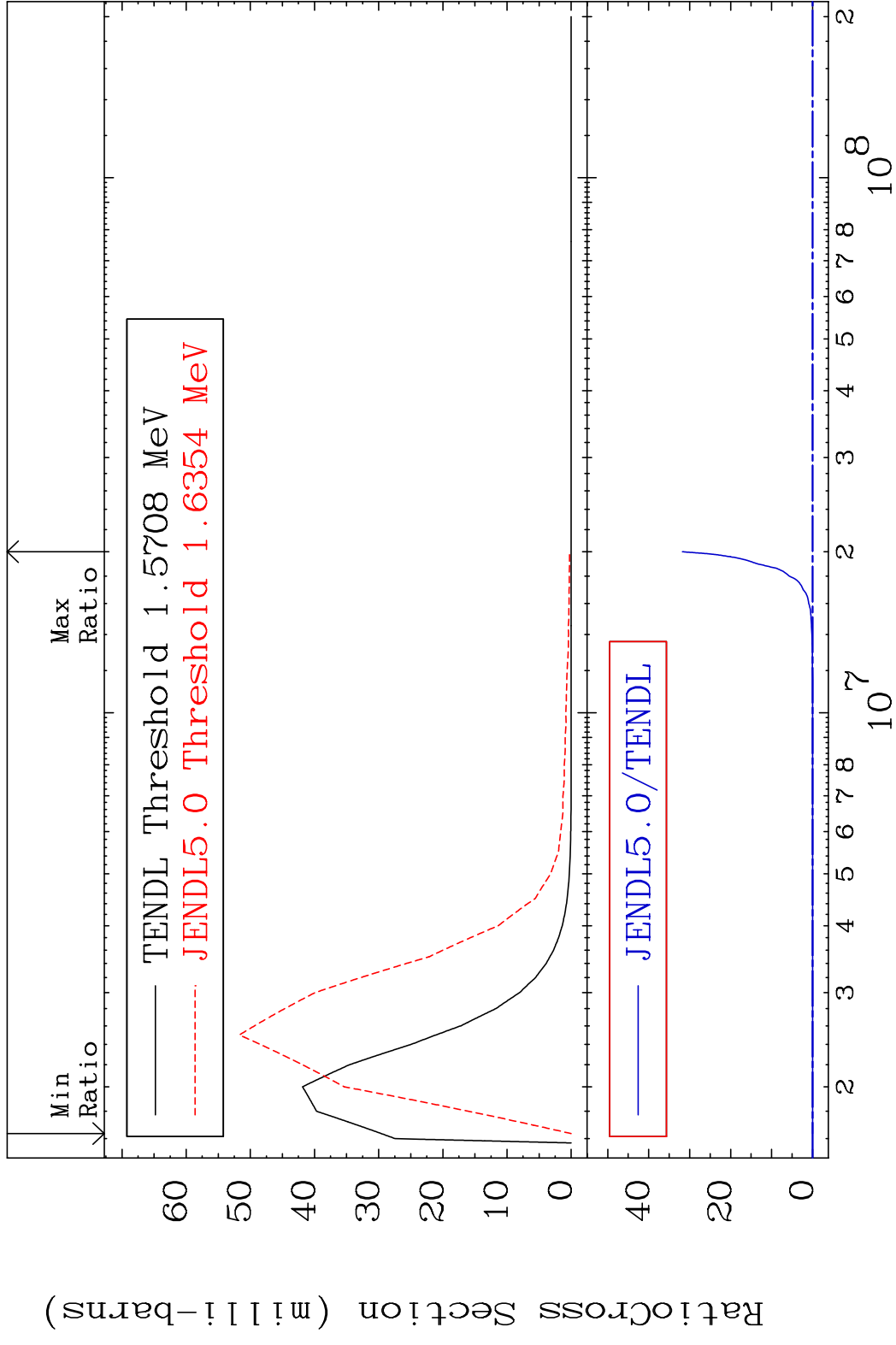
MAT 7225 MT= 72 (n,n') Level 72-Hf-174
 Cross Section -32.14 To 9999. %



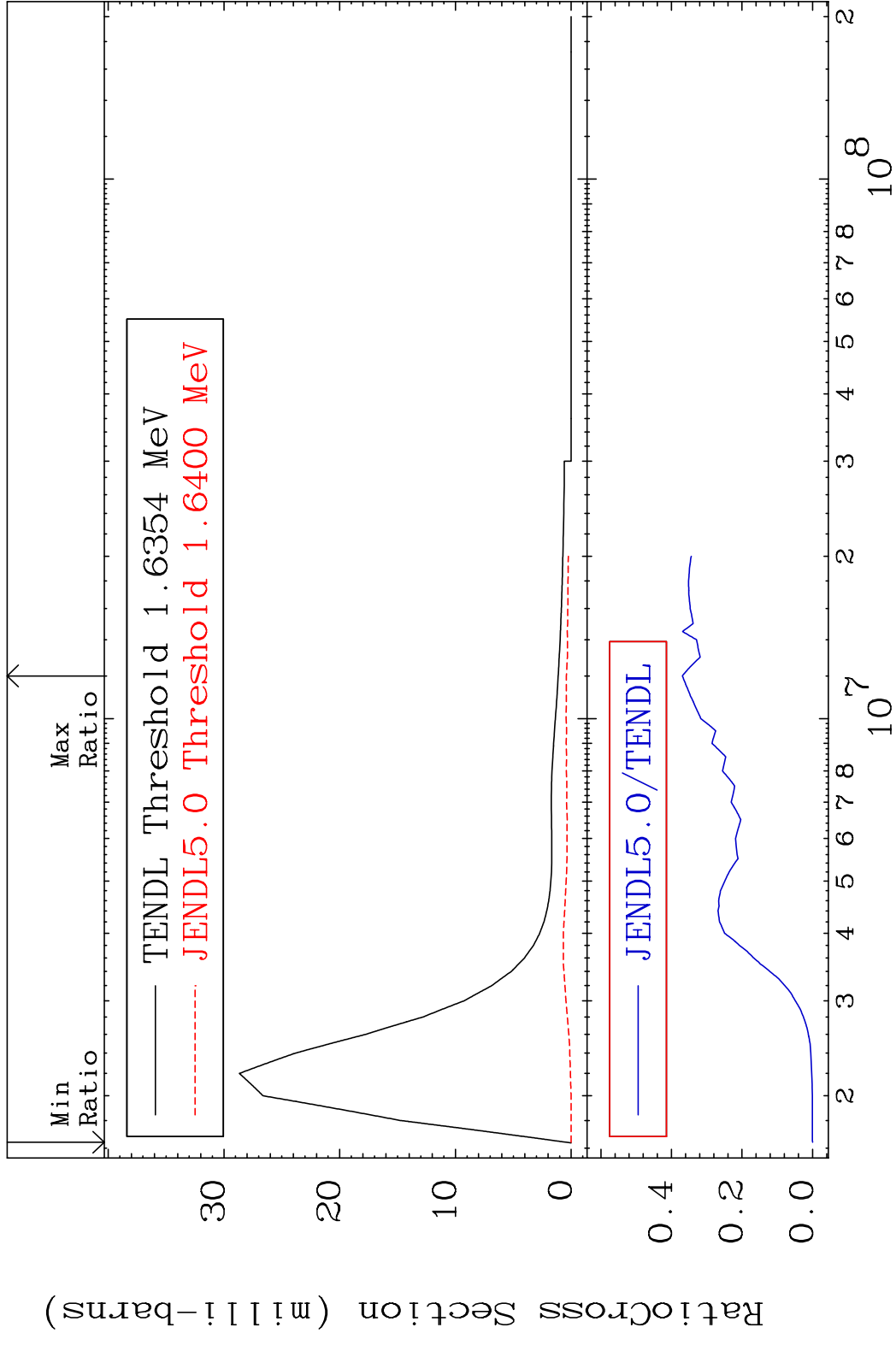
MAT 7225 MT= 73 (n, n') Level 72-Hf-174
 Cross Section -51.53 To 430.3 %



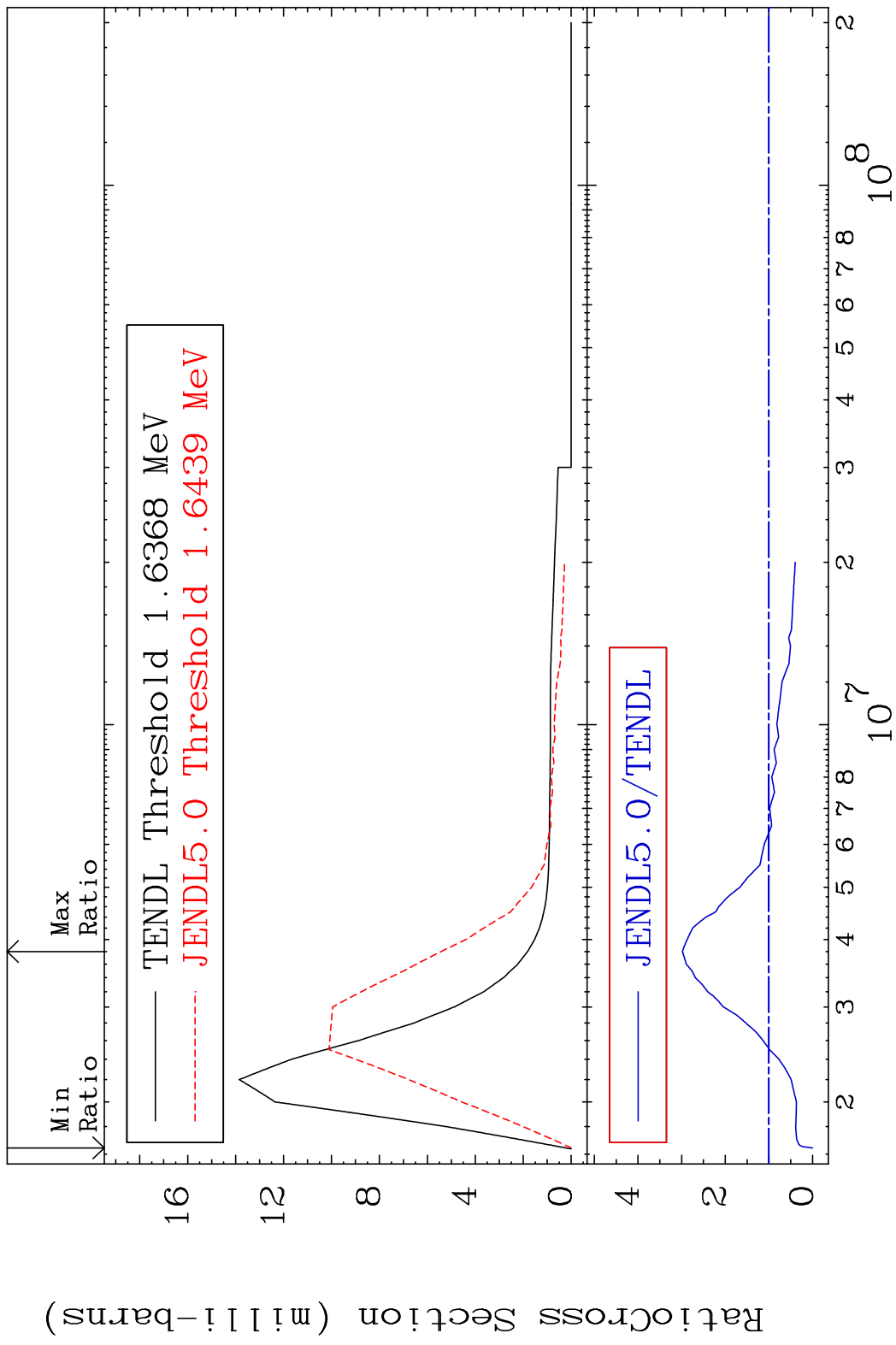
MAT 7225 MT= 74 (n, n') Level 72-Hf-174
 Cross Section -100.0 To 9999. %



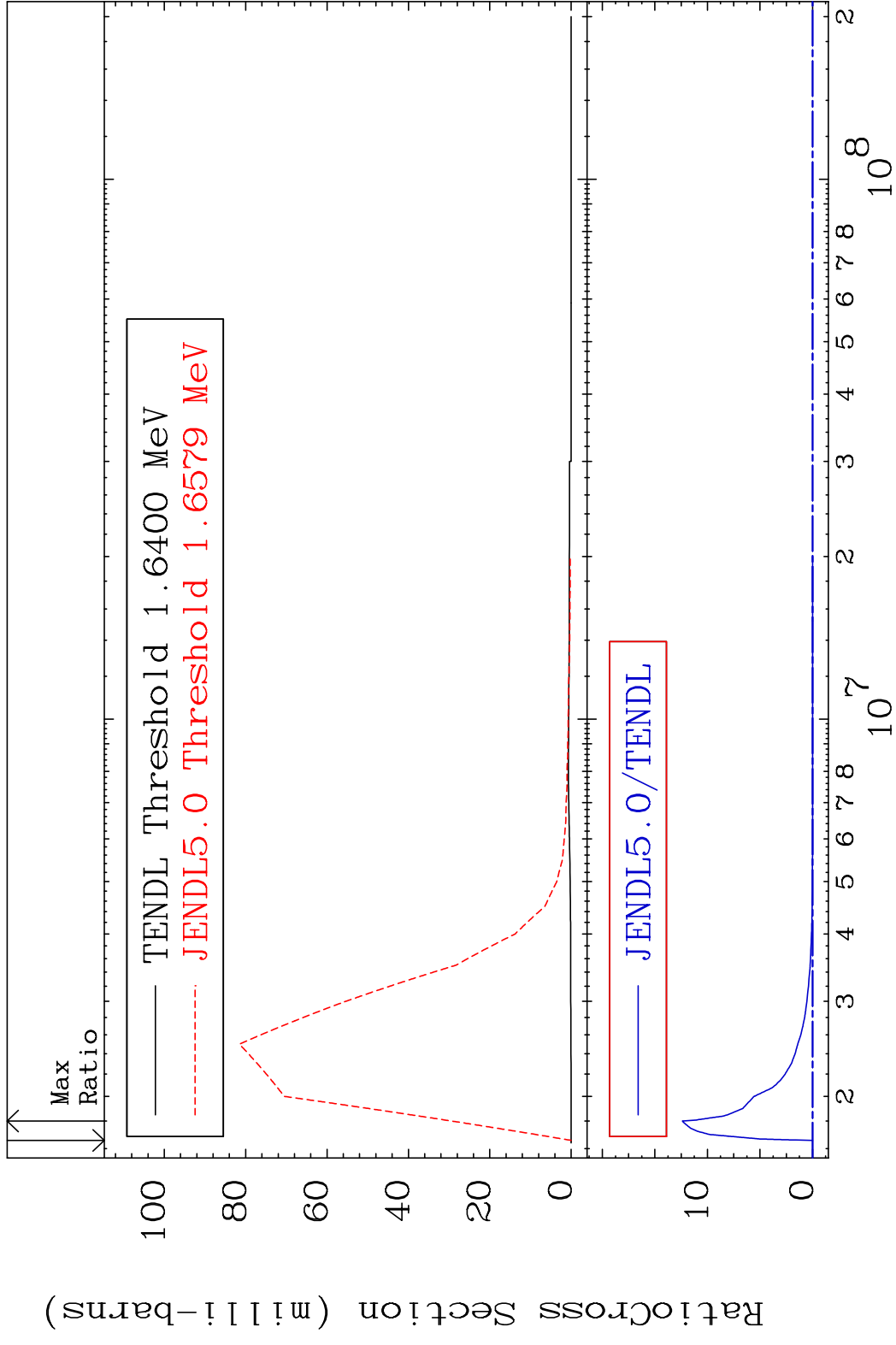
MAT 7225 MT= 75 (n,n') Level 72-Hf-174
 Cross Section -100.0 To -63.09%



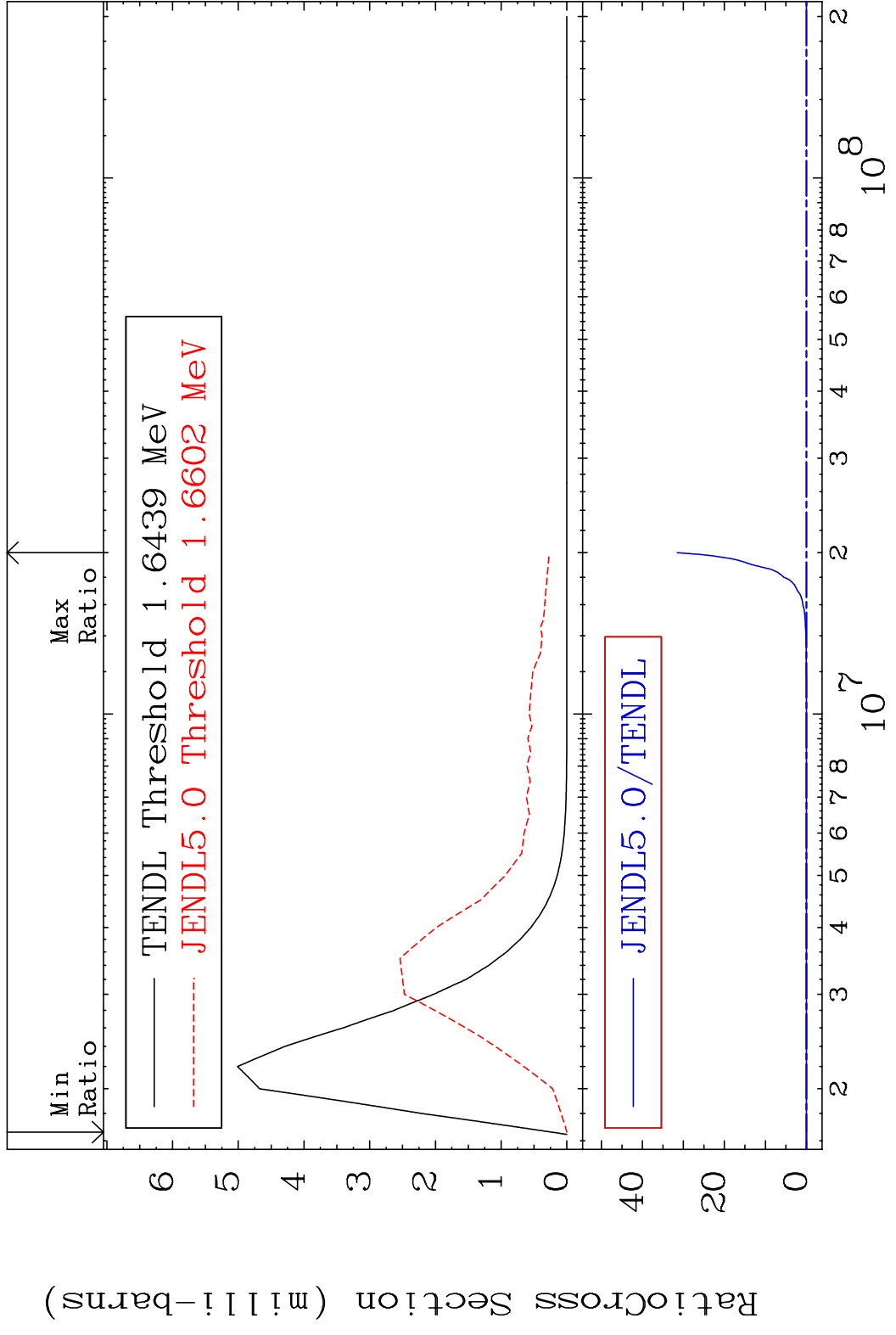
MAT 7225 MT= 76 (n,n') Level 72-Hf-174
 Cross Section -100.0 To 198.4 %



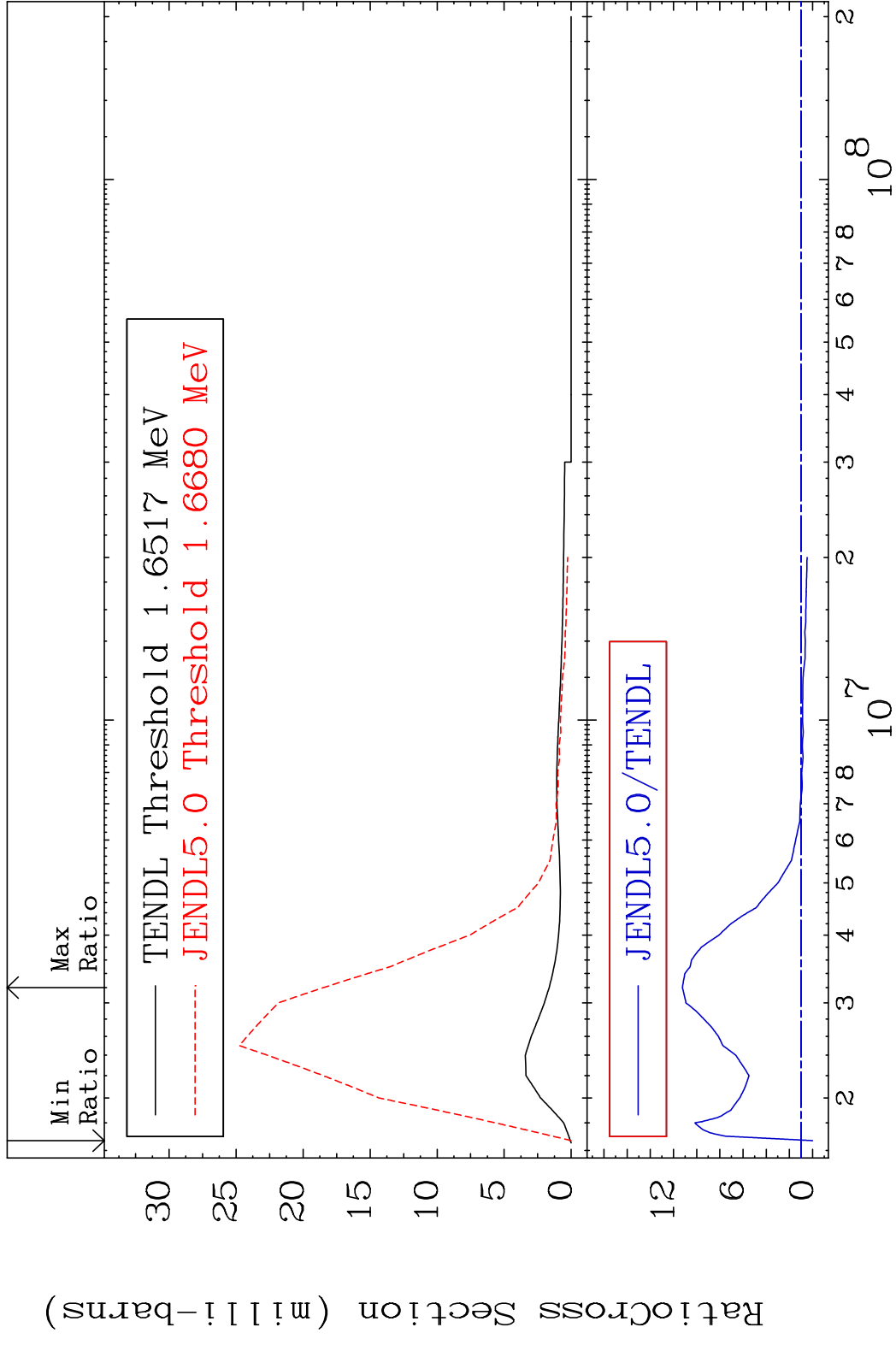
MAT 7225 MT= 77 (n,n') Level 72-Hf-174
 Cross Section -100.0 To 9999. %



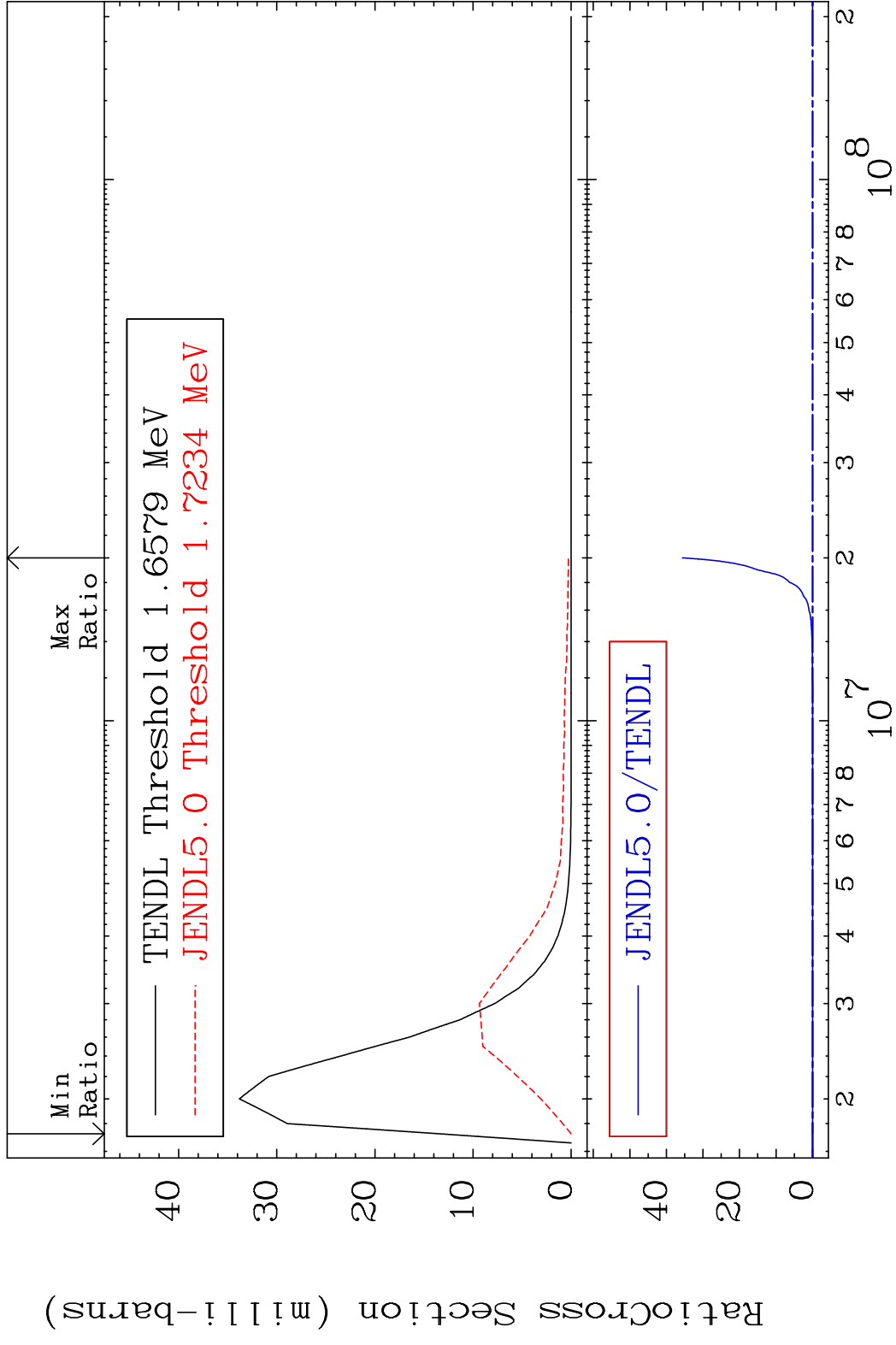
MAT 7225 MT= 78 (n, n') Level 72-Hf-174
 Cross Section -100.0 To 9999. %



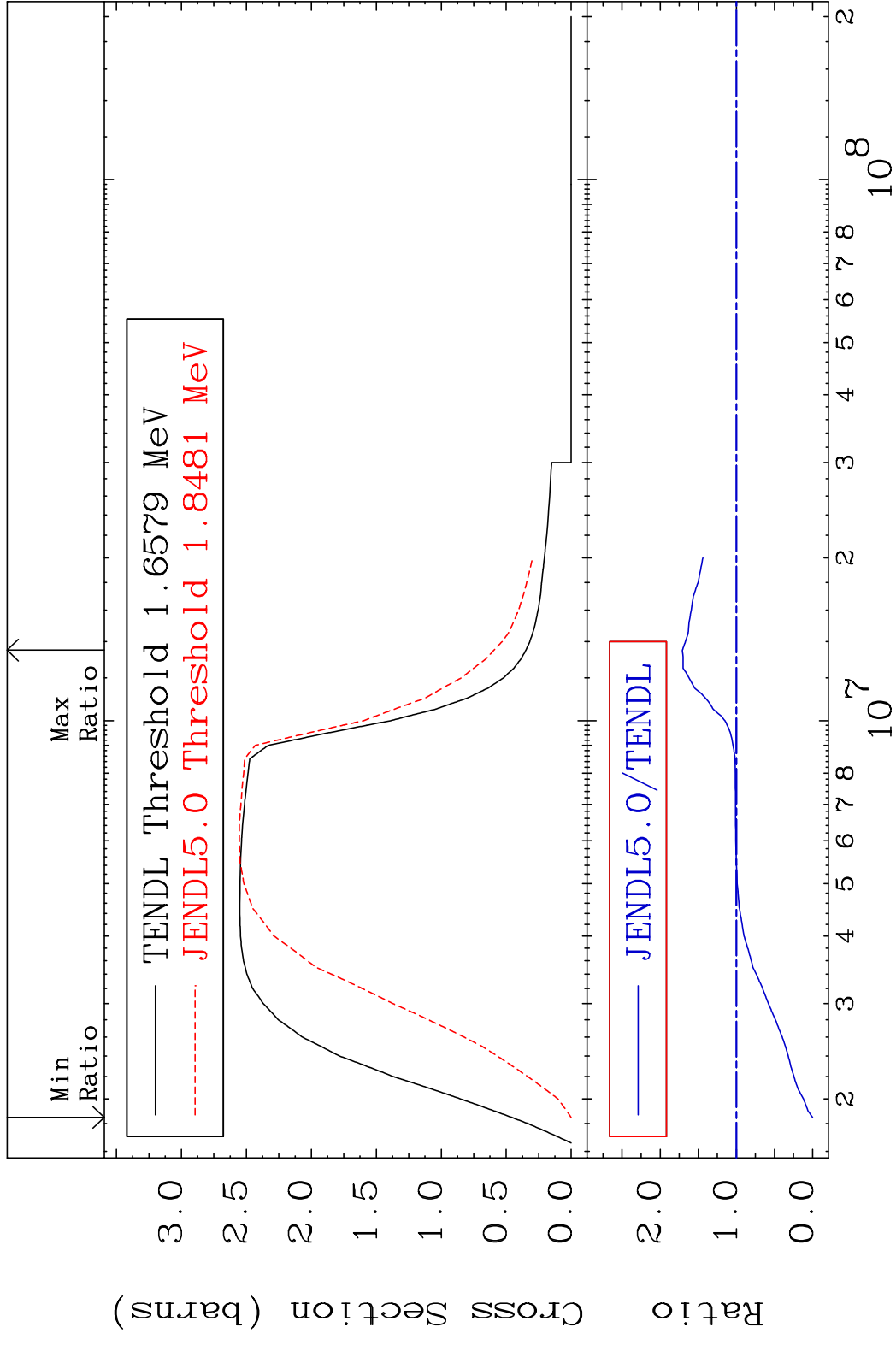
MAT 7225 MT= 79 (n, n') Level 72-Hf-174
 Cross Section -100.0 To 1023. %



MAT 7225 MT= 80 (n, n') Level 72-Hf-174
 Cross Section -100.0 To 9999. %



MAT 7225 (n, n') Continuum 72-Hf-174
 Cross Section -100.0 To 70.87 %

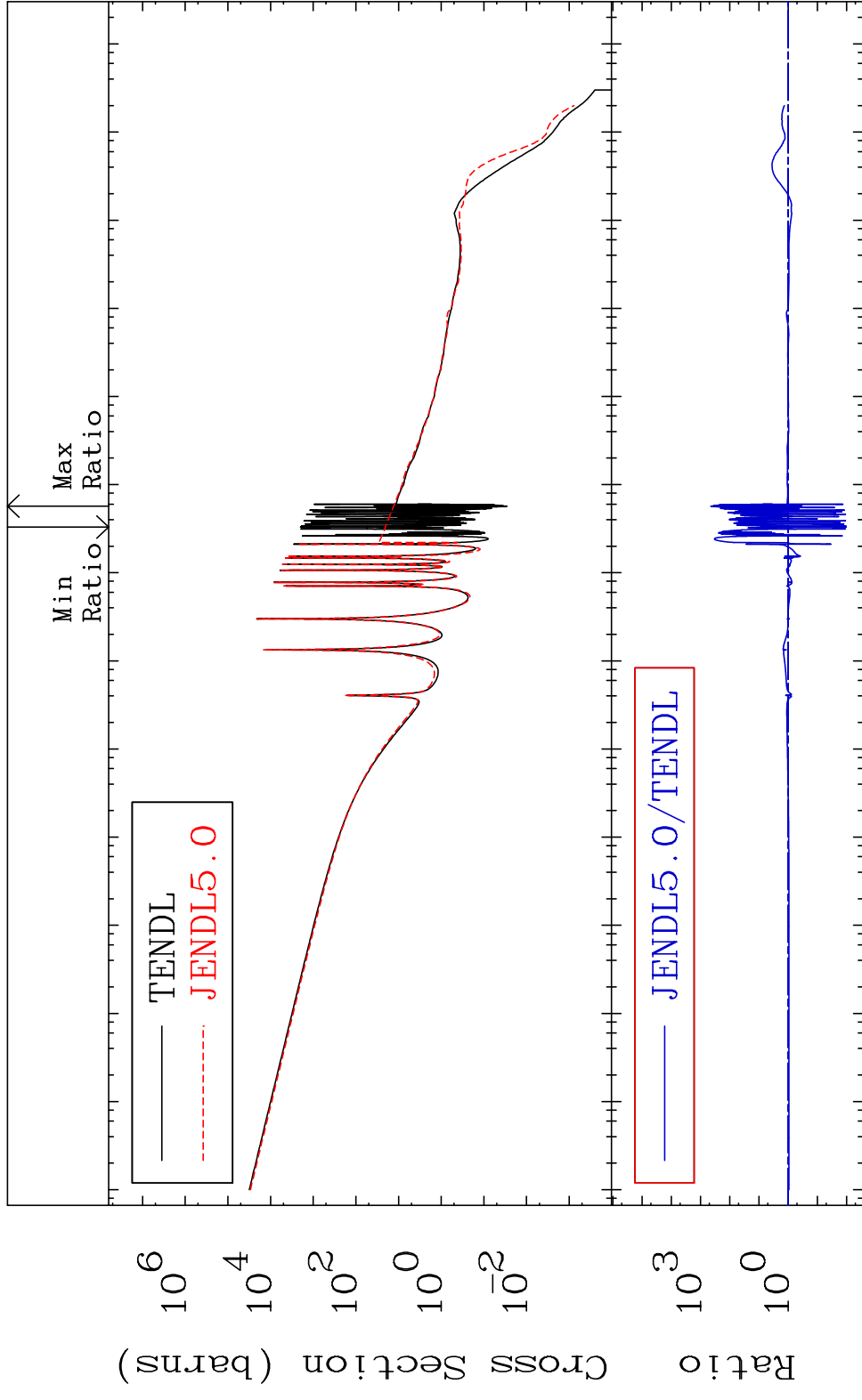


MAT 7225

72-Hf-174

(n, γ)

Cross Section -98.97 To 9999. %



Ratio
10³
10⁰
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

40

Incident Energy (eV)

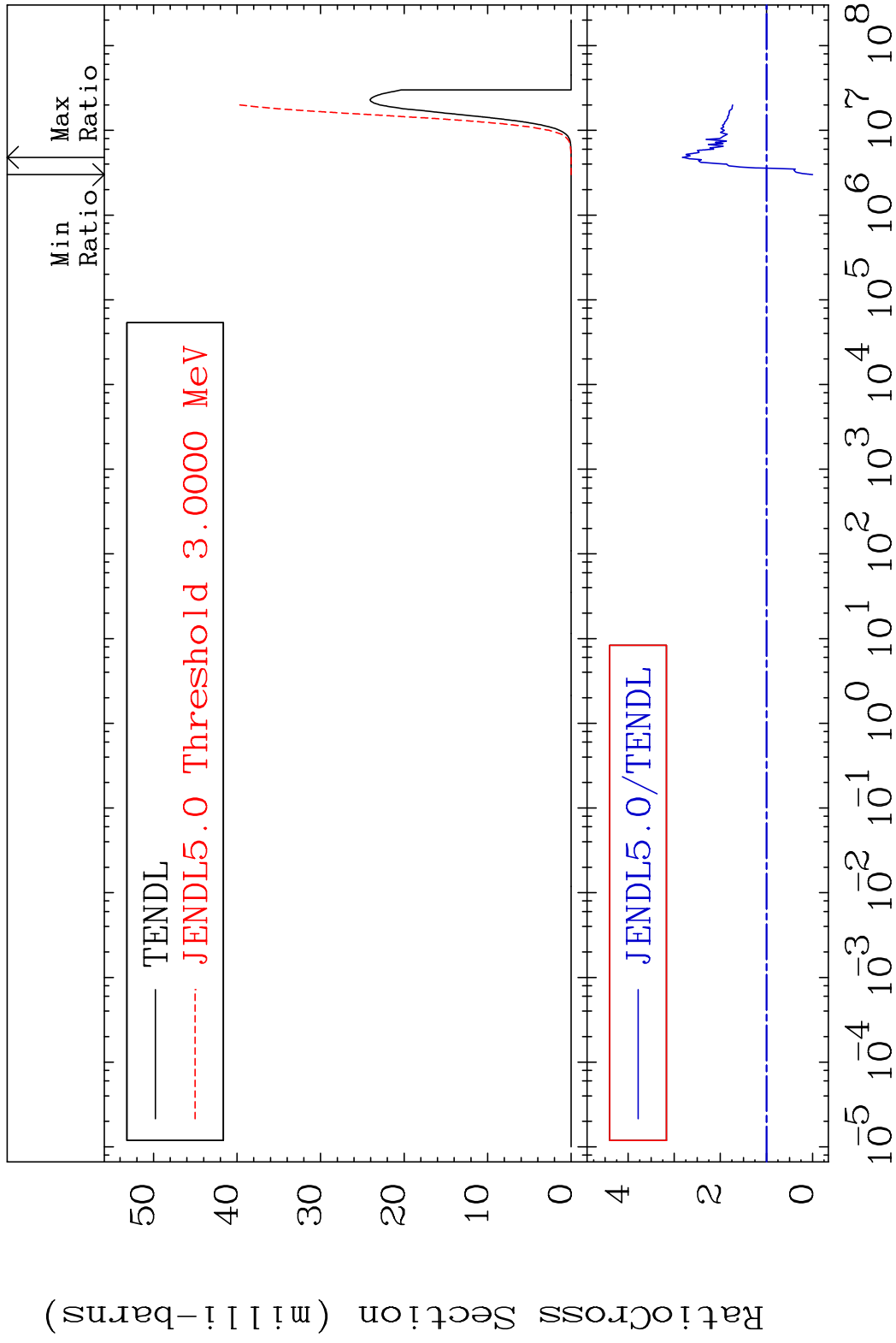
72-Hf-174

MAT 7225

(n, p)

72-Hf-174

Cross Section -100.0 To 182.4 %

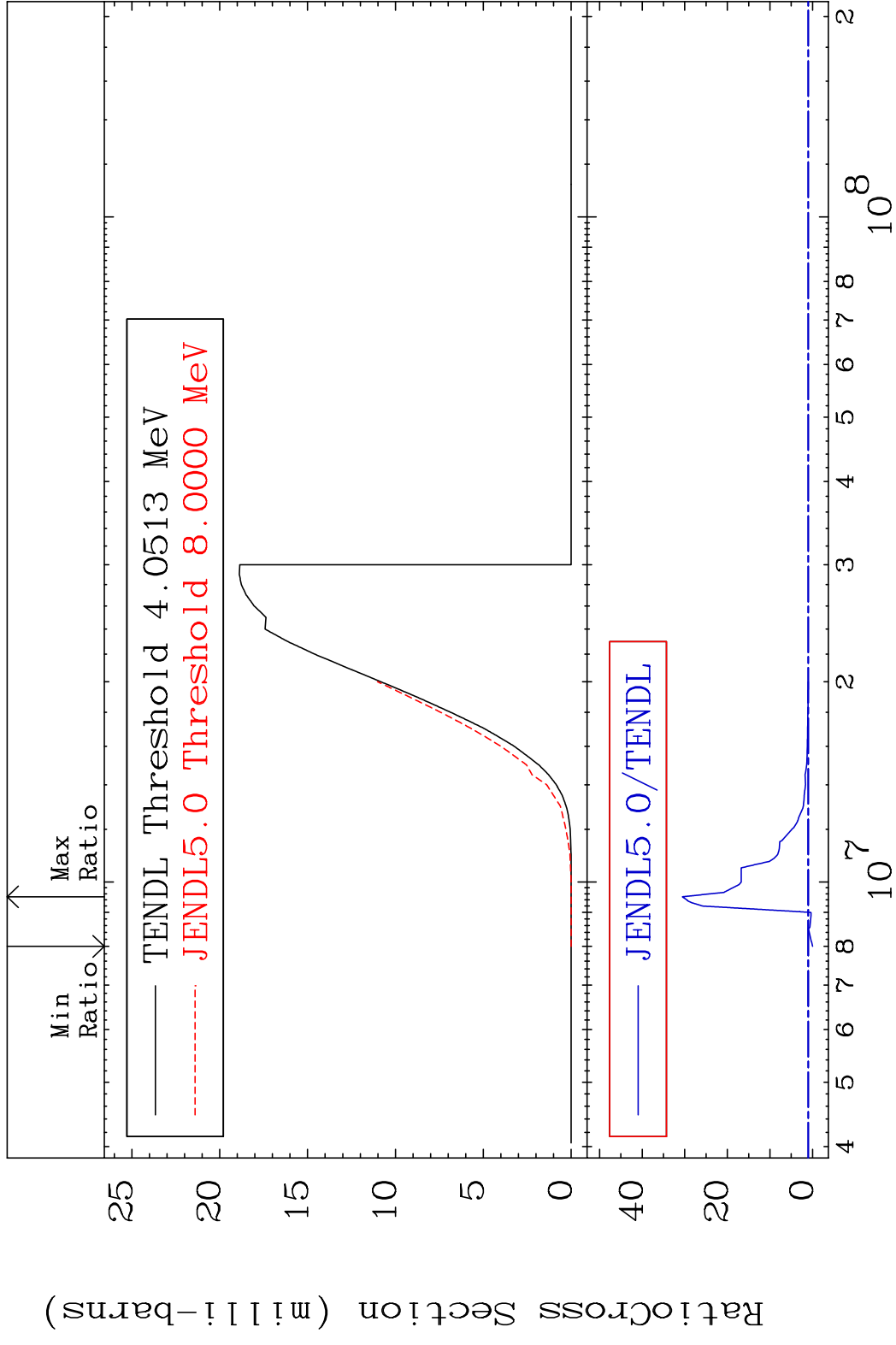


41

Incident Energy (eV)

72-Hf-174

MAT 7225 (n,d) 72-Hf-174
 Cross Section -100.0 To 2956. %

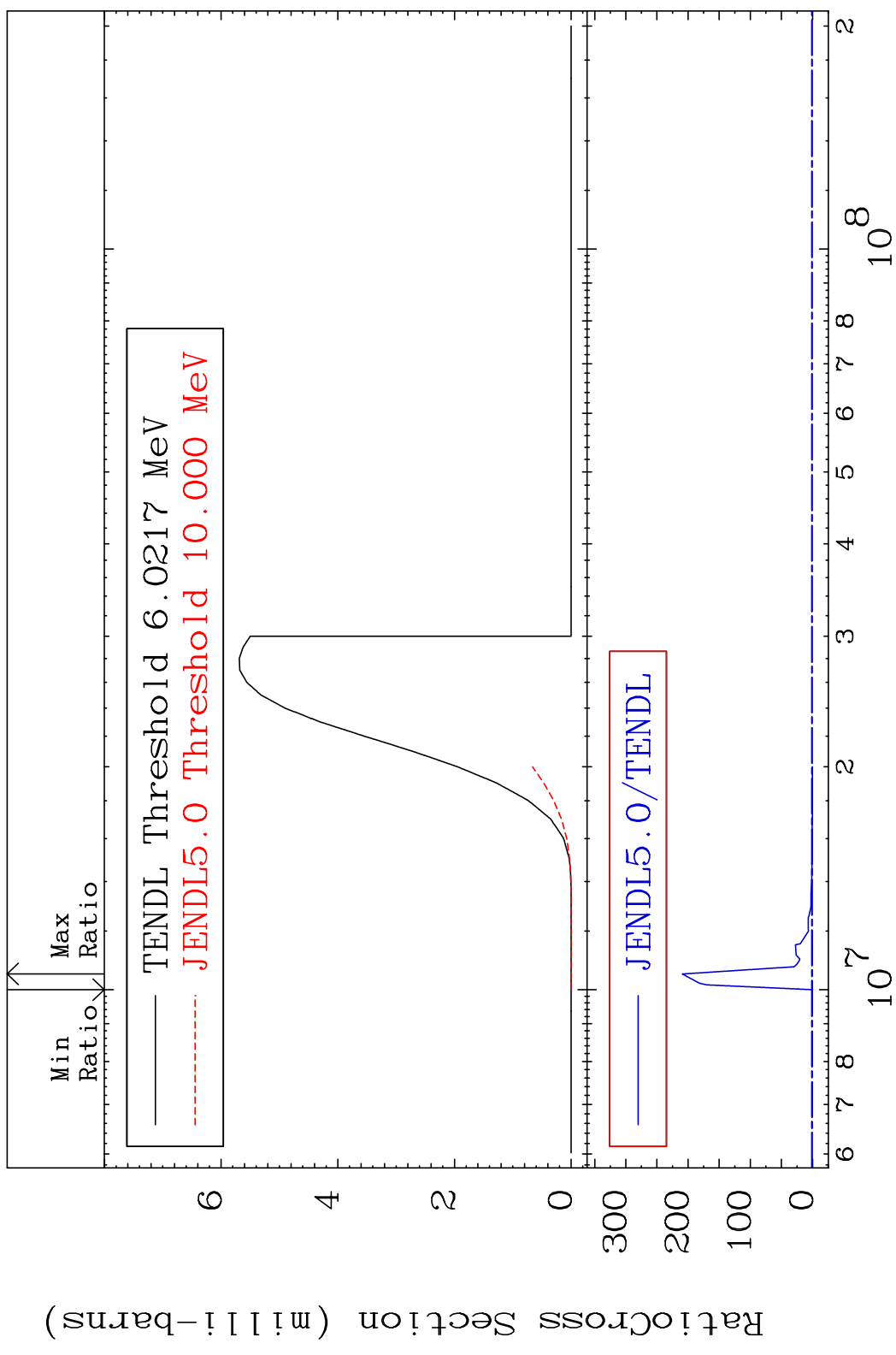


MAT 7225

(n, t)

72-Hf-174

Cross Section -100.0 To 9999. %

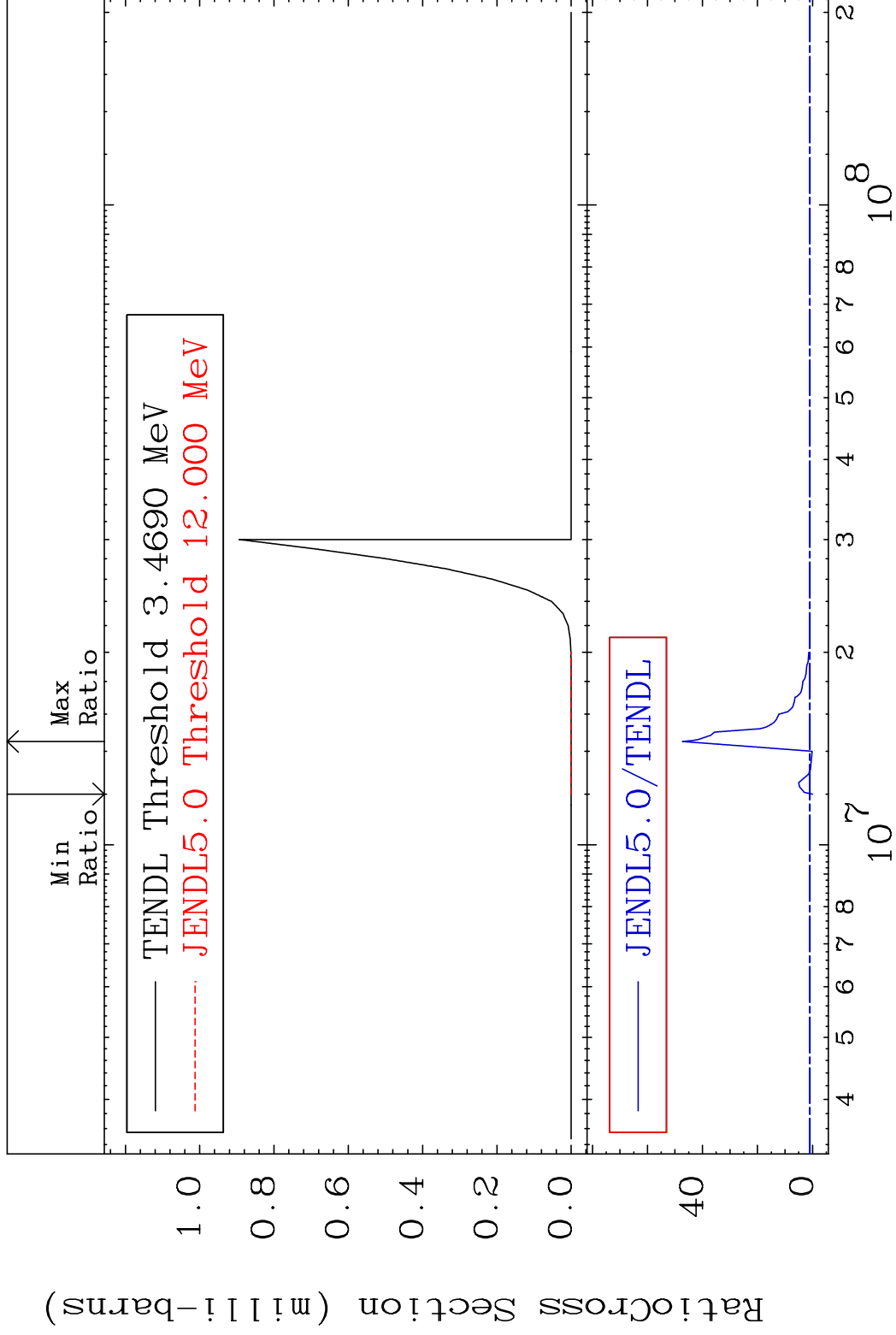


MAT 7225

(n, He-3)

72-Hf-174

Cross Section -100.0 To 4632. %



44

Incident Energy (eV)

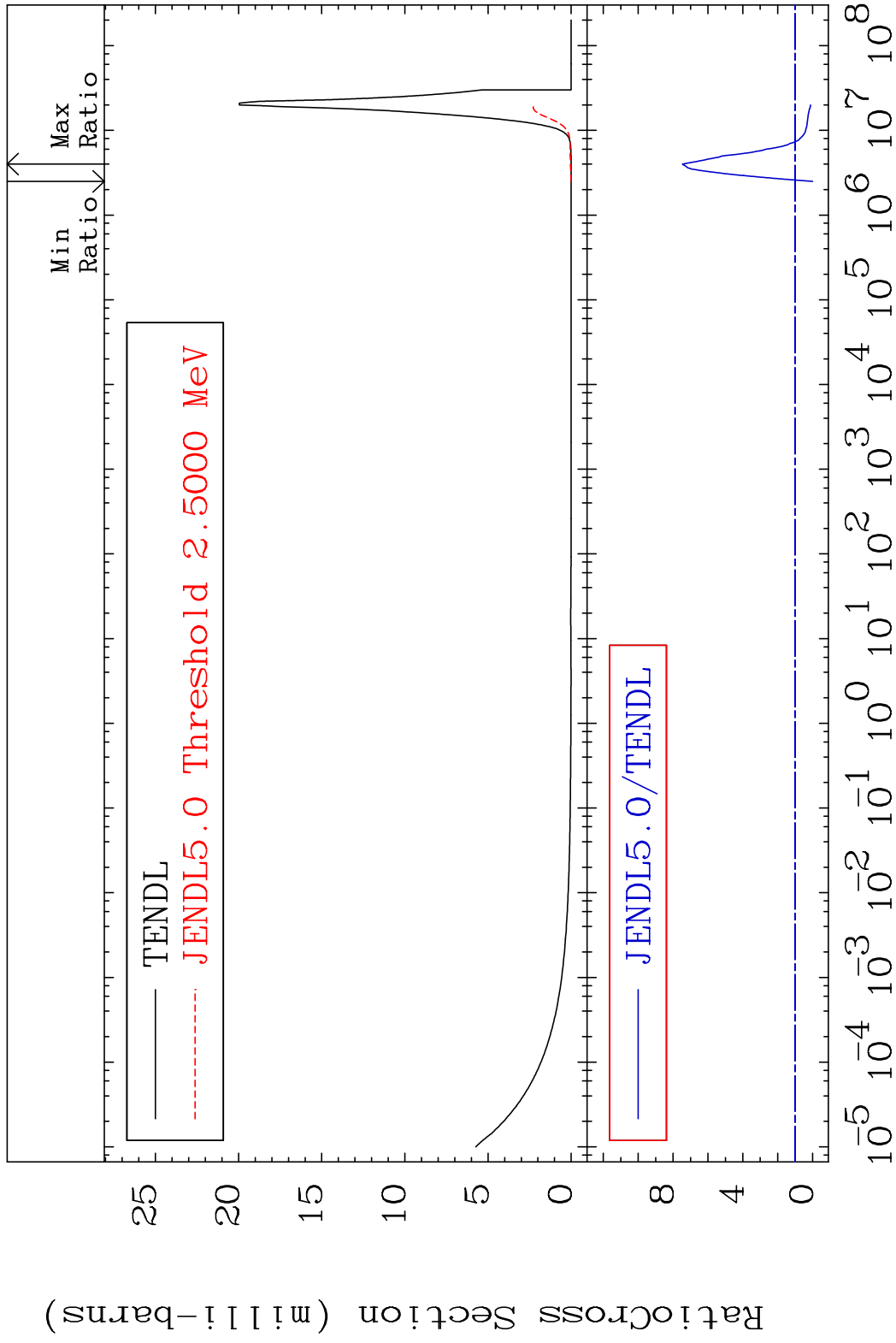
72-Hf-174

MAT 7225

(n, α)

72-Hf-174

Cross Section -100.0 To 646.8 %

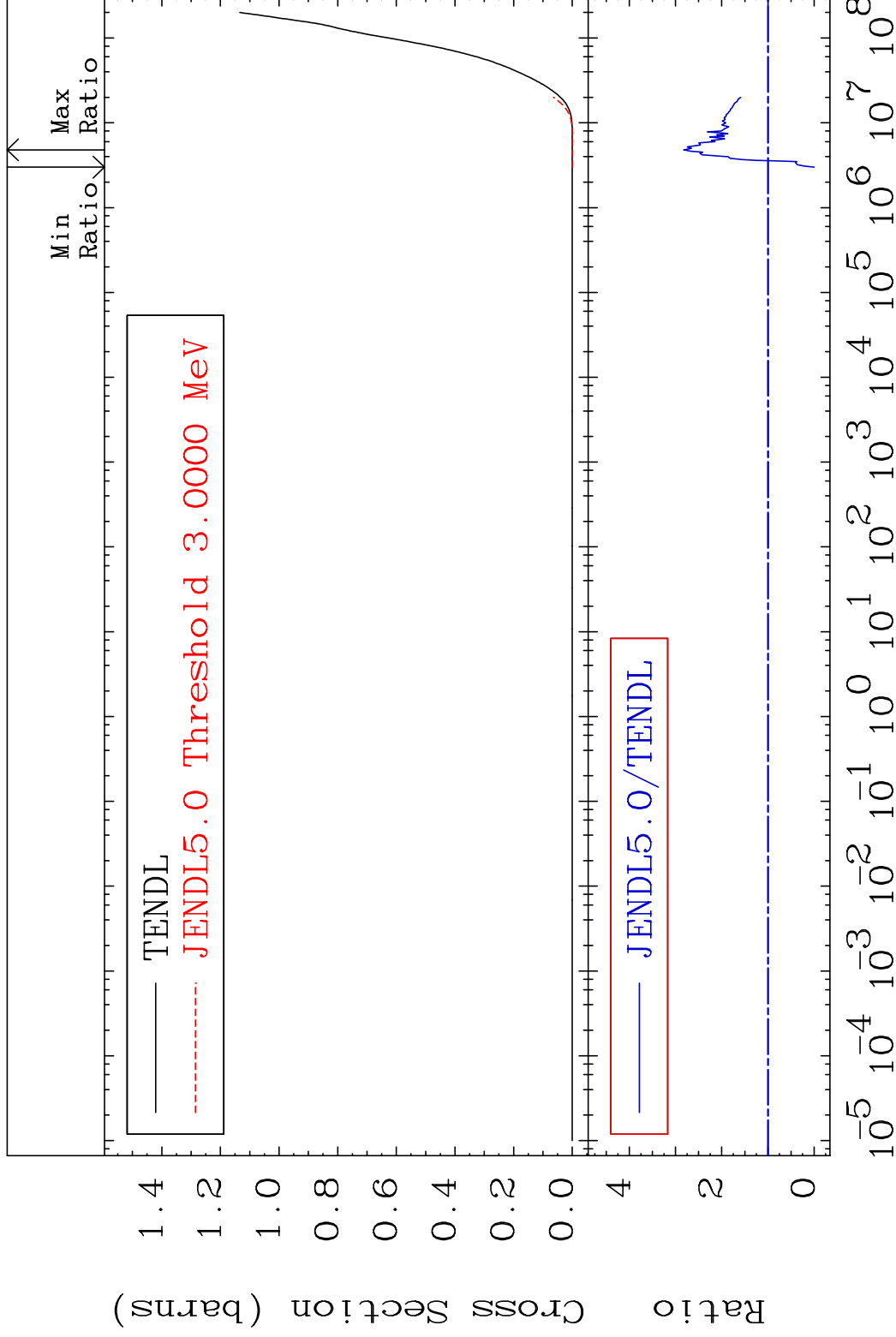


MAT 7225

Hydrogen Production

72-Hf-174

Cross Section -100.0 To 182.4 %



46

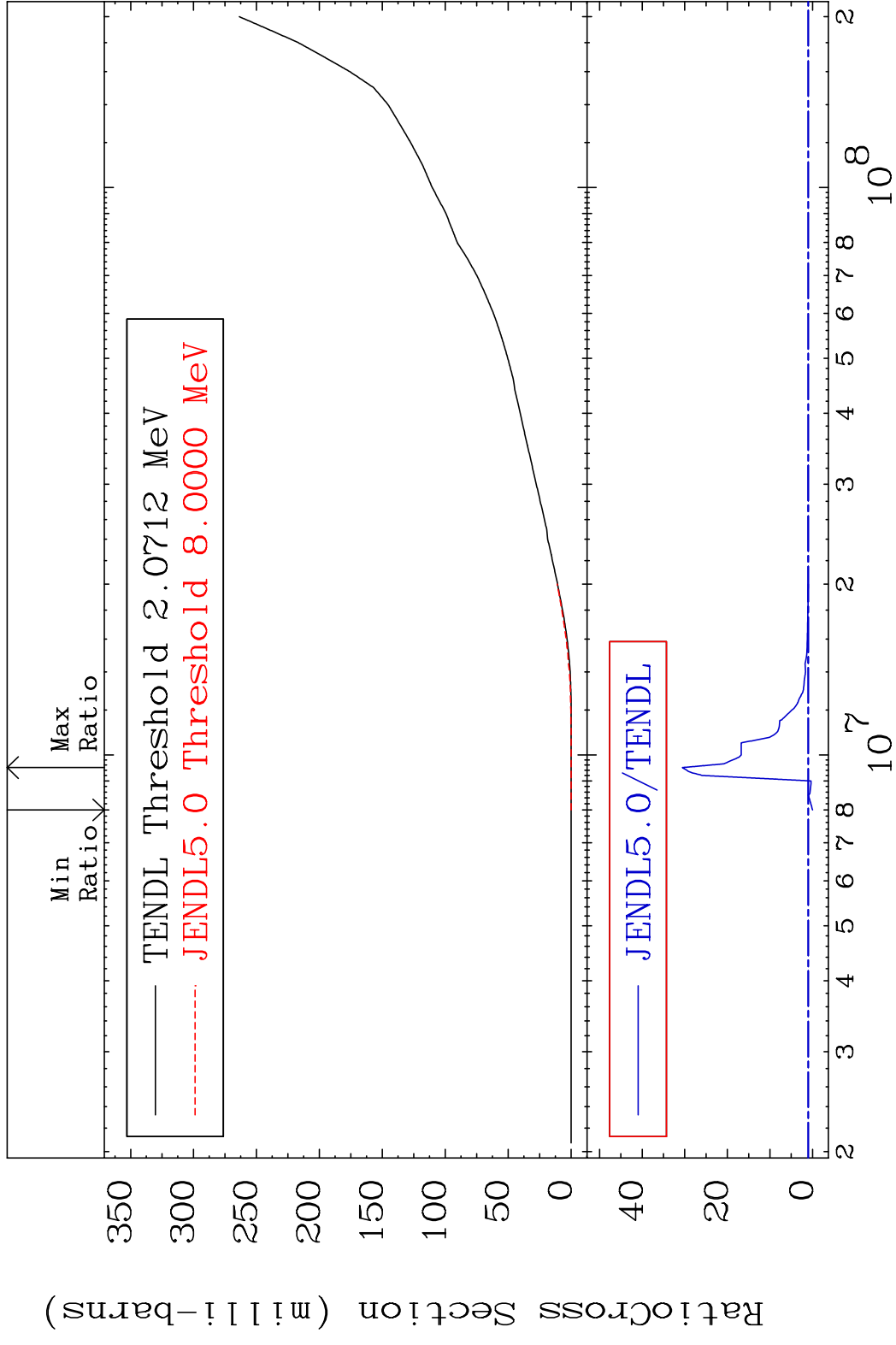
Incident Energy (eV)

72-Hf-174

MAT 7225

Deuterium Production 72-Hf-174

Cross Section -100.0 To 2956. %

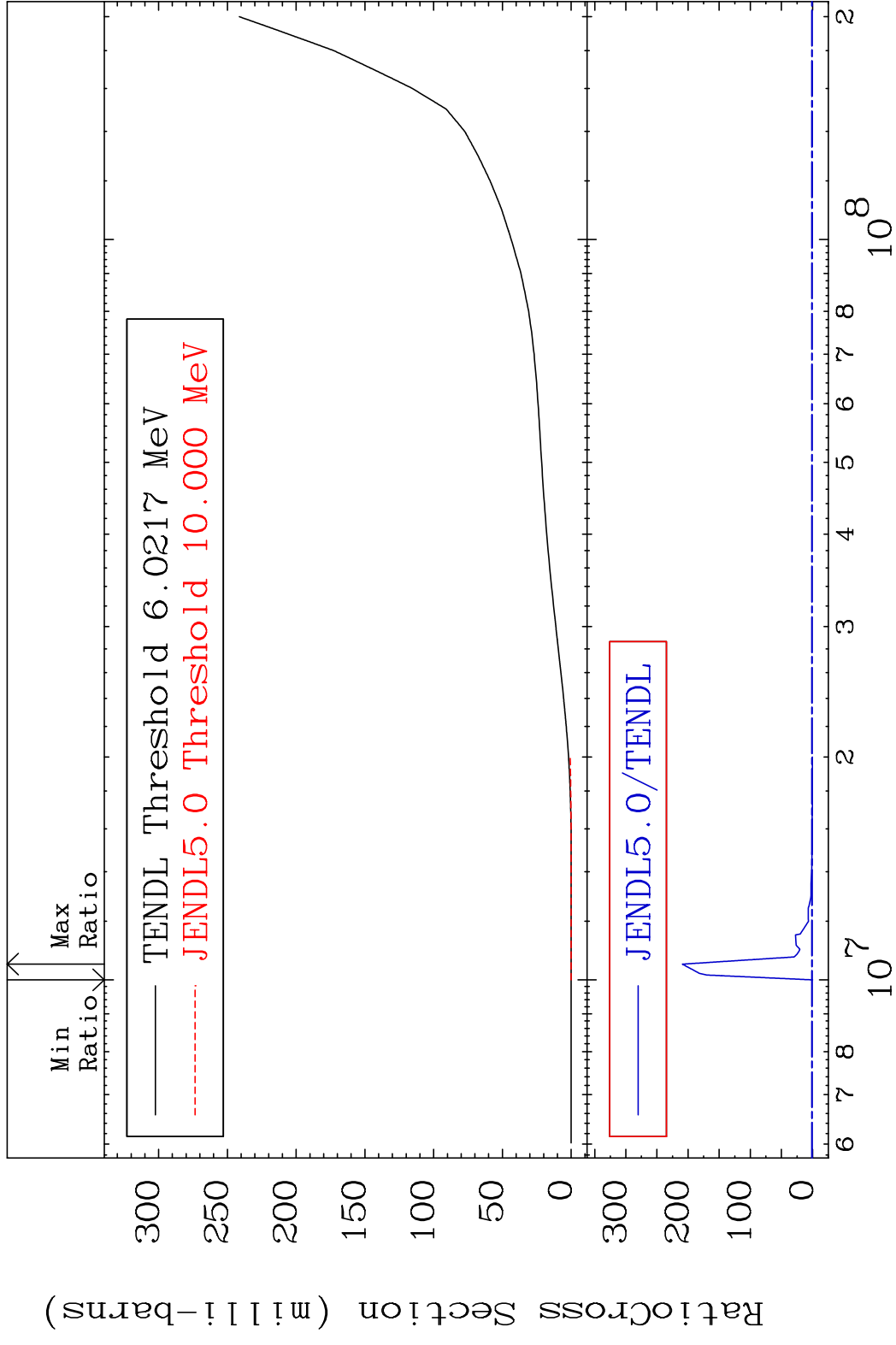


47

Incident Energy (eV)

72-Hf-174

MAT 7225 Tritium Production 72-Hf-174
 Cross Section -100.0 To 9999. %

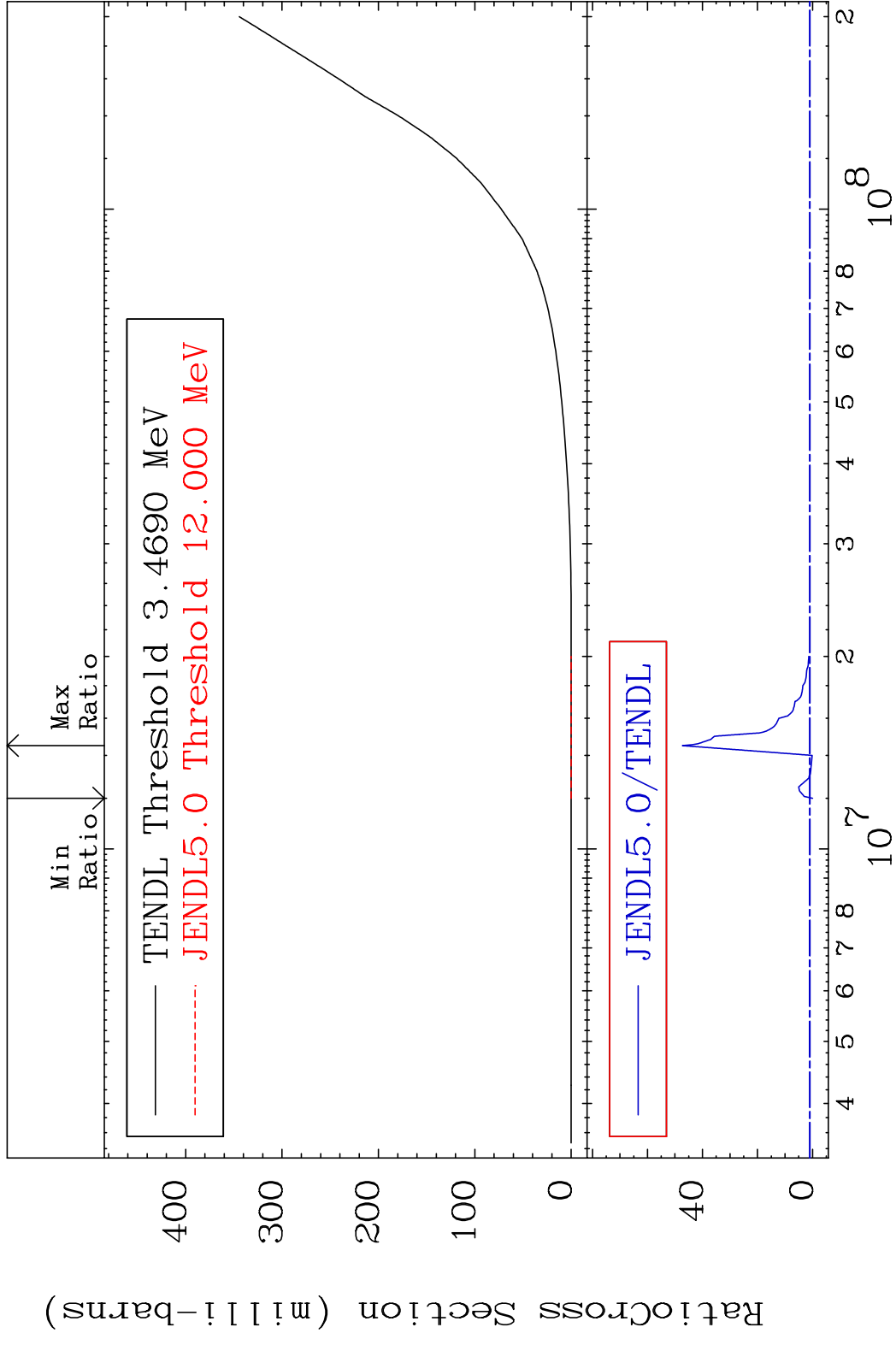


MAT 7225

He-3 Production

72-Hf-174

Cross Section -100.0 To 4632. %

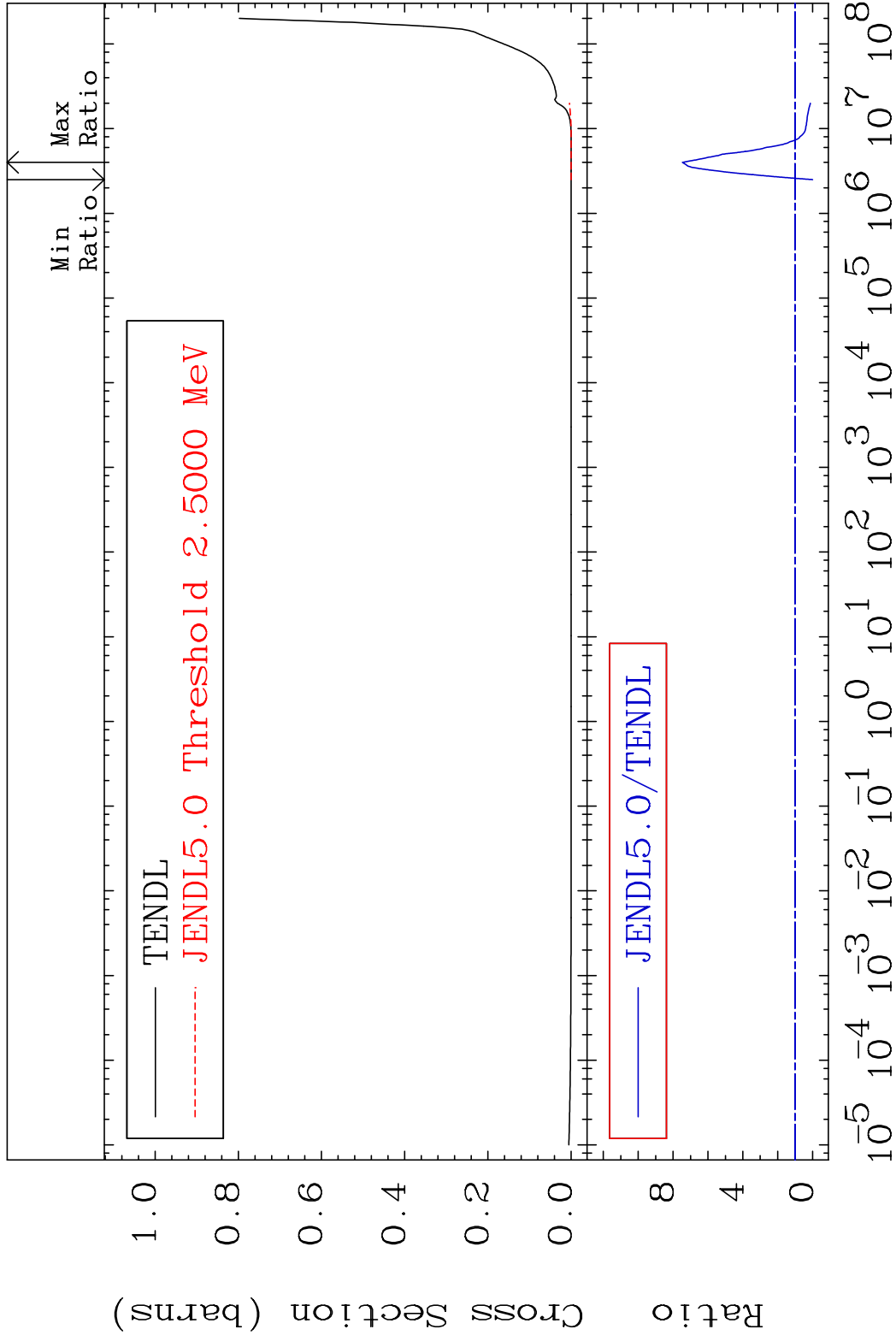


MAT 7225

He-4 Production

72-Hf-174

Cross Section -100.0 To 646.8 %

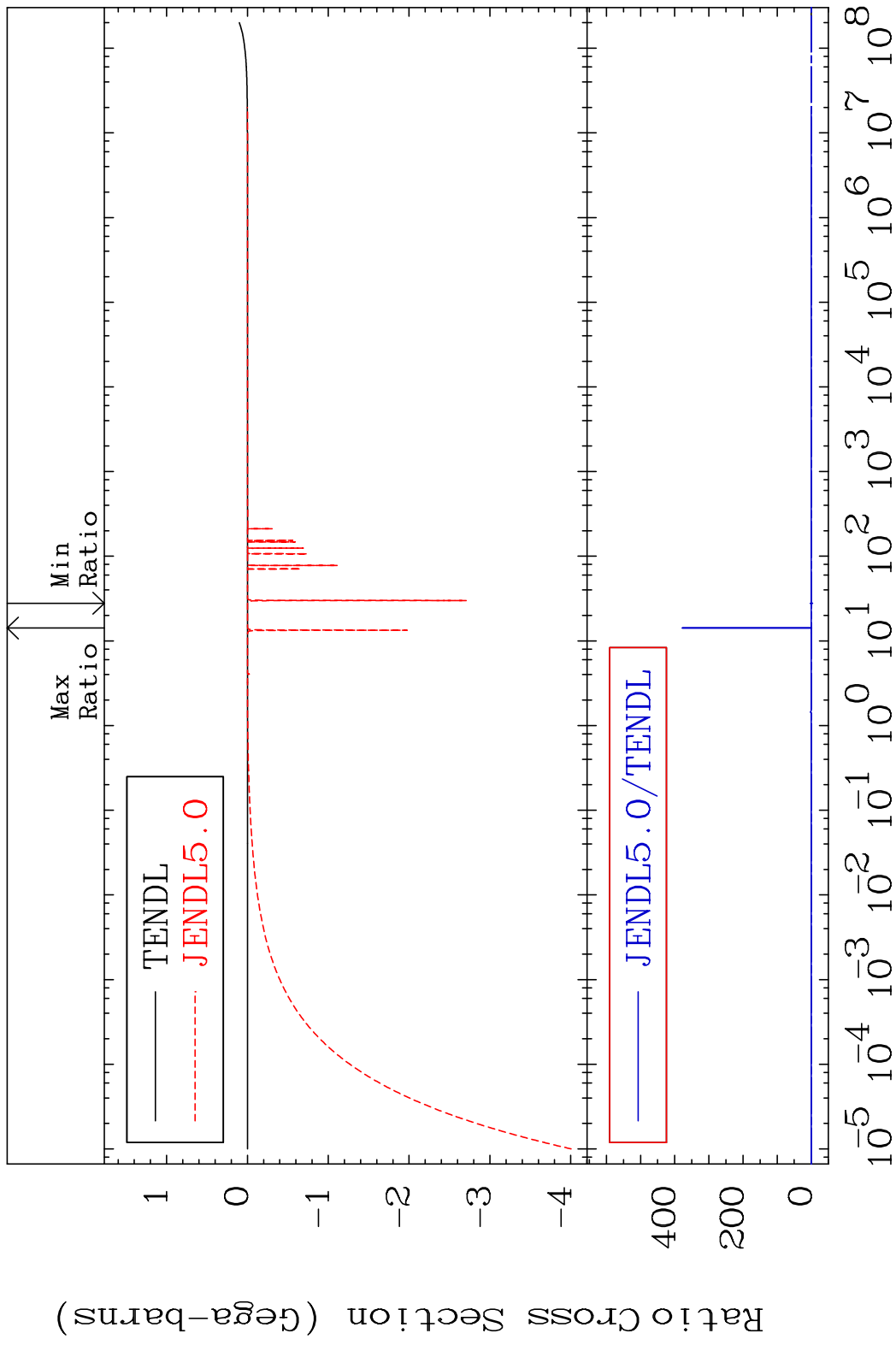


50

Incident Energy (eV)

72-Hf-174

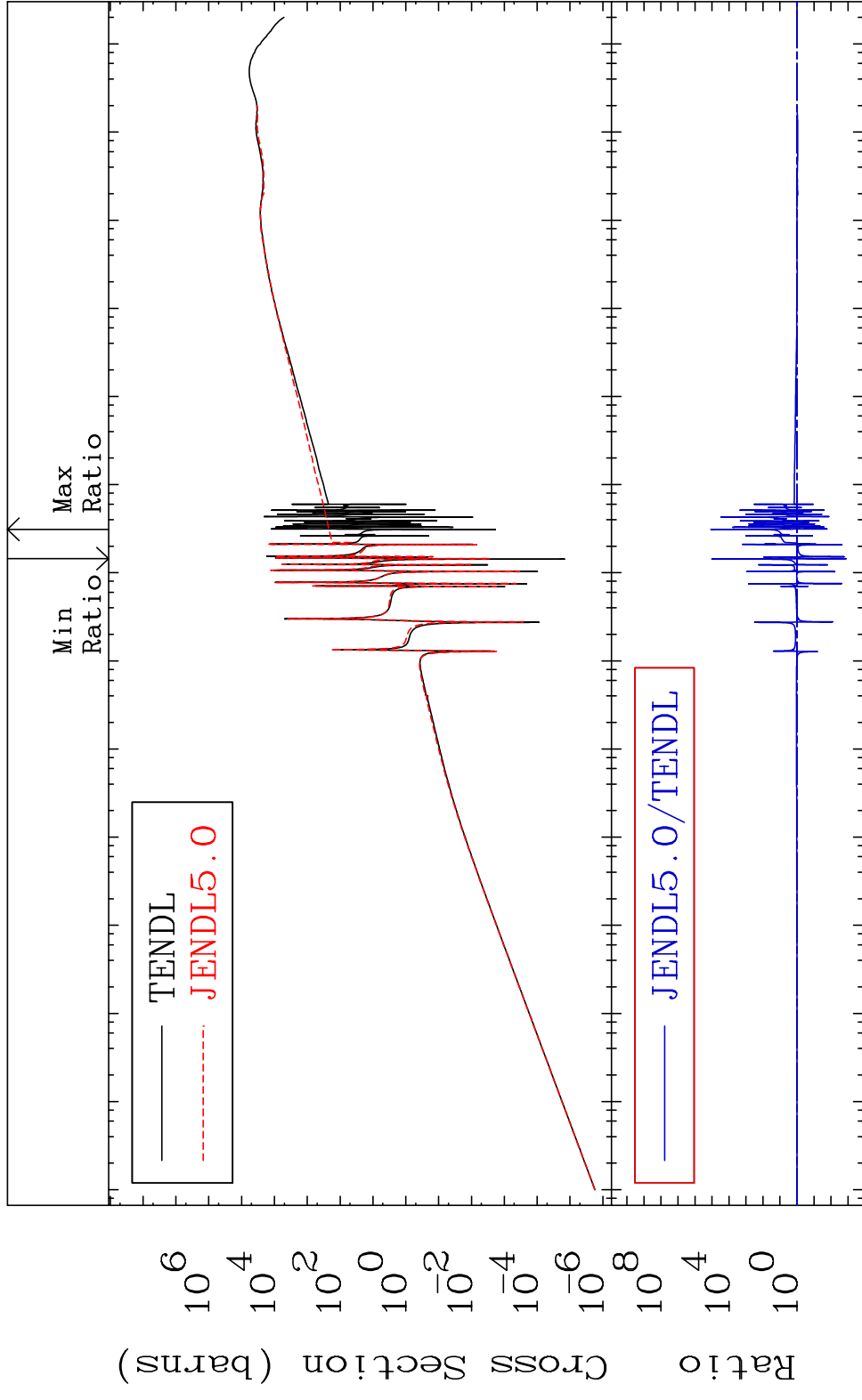
MAT 7225 Kerma total (eV-barns) 72-Hf-174
 Cross Section -9999. To 9999. %



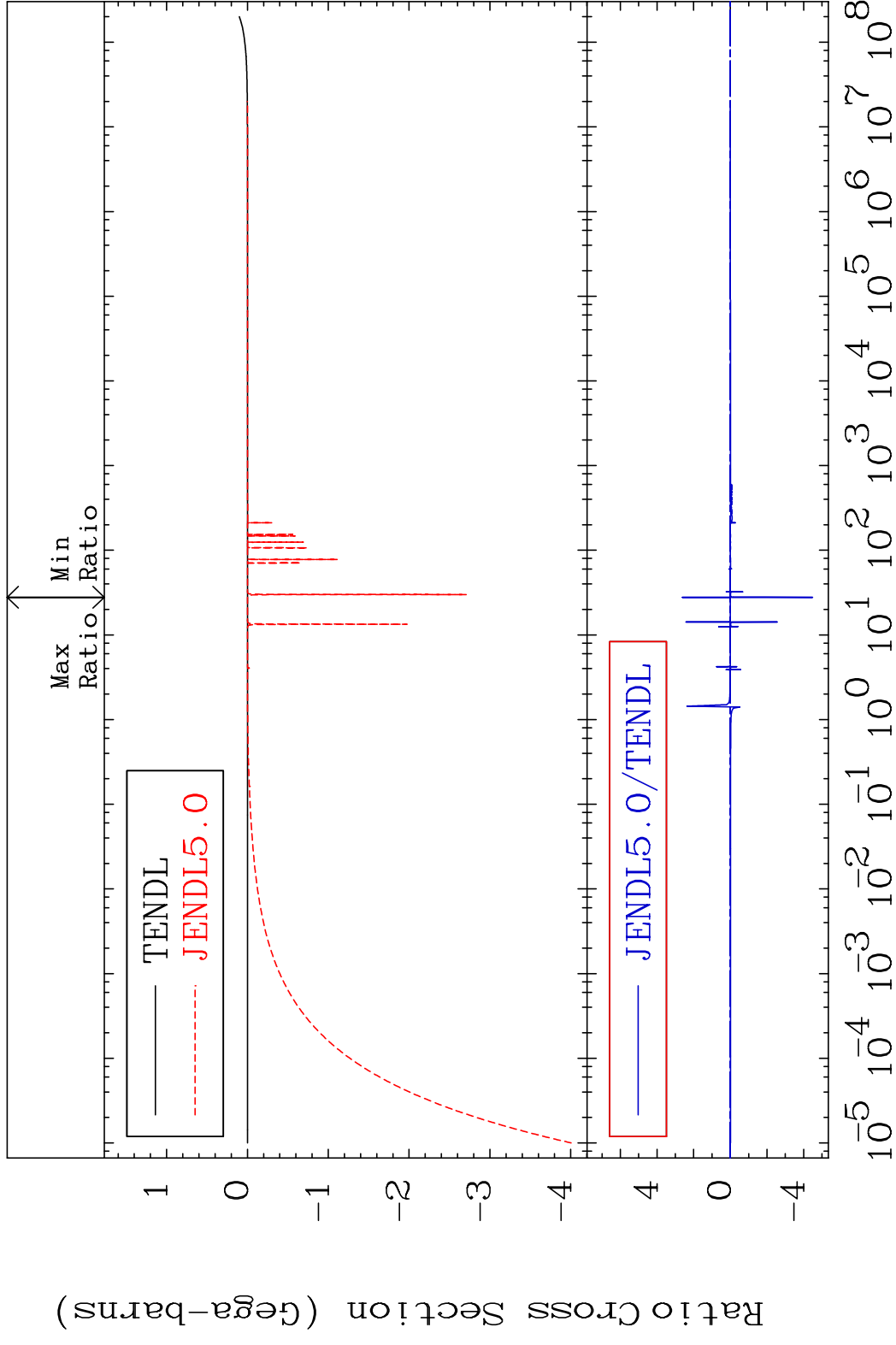
MAT 7225

Kerma elastic
Cross Section

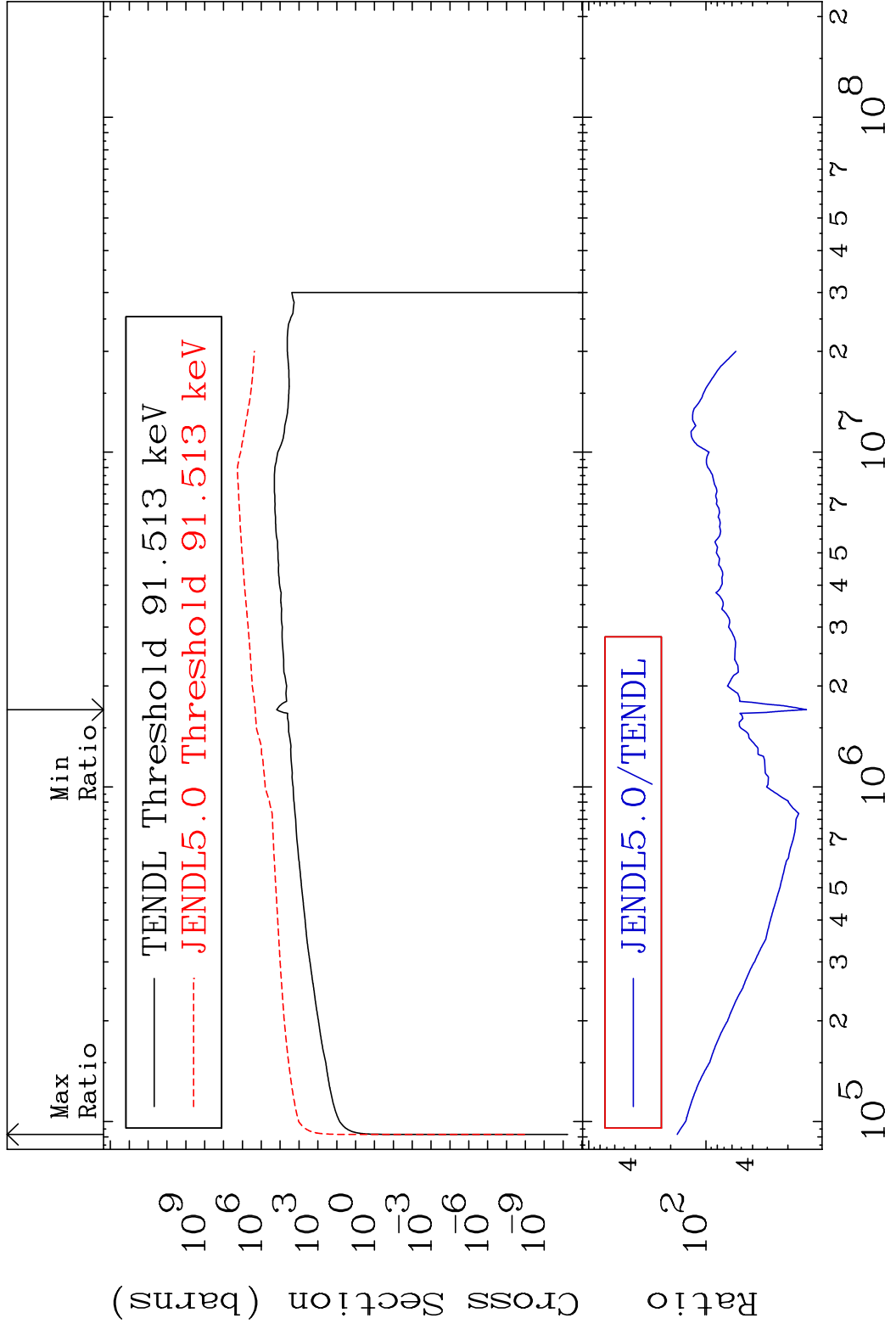
72-Hf-174
-99.88 To 9999. %



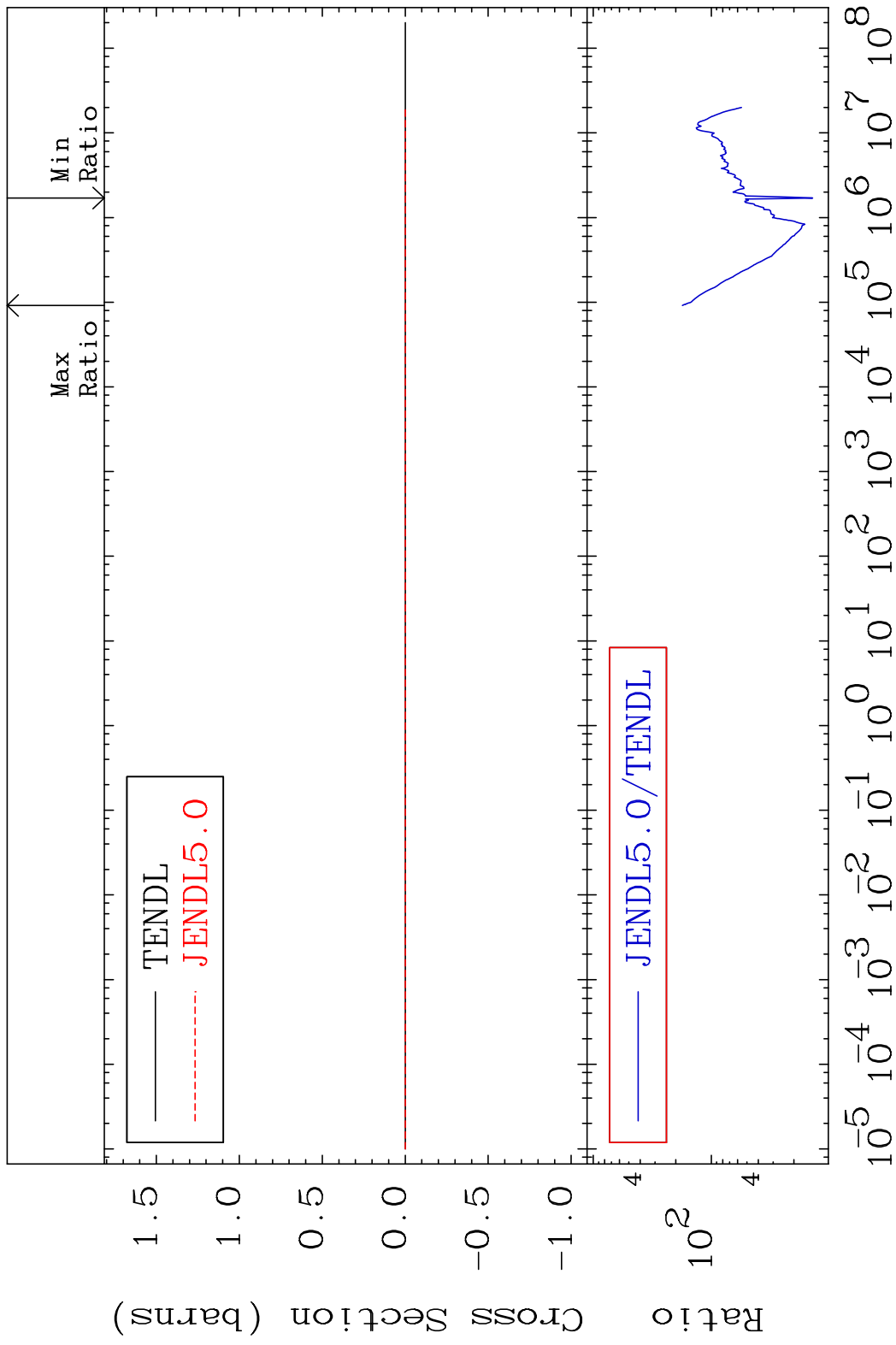
MAT 7225 Kerma non-elastic (all but mt2) 72-Hf-174
 Cross Section -9999. To 9999. %

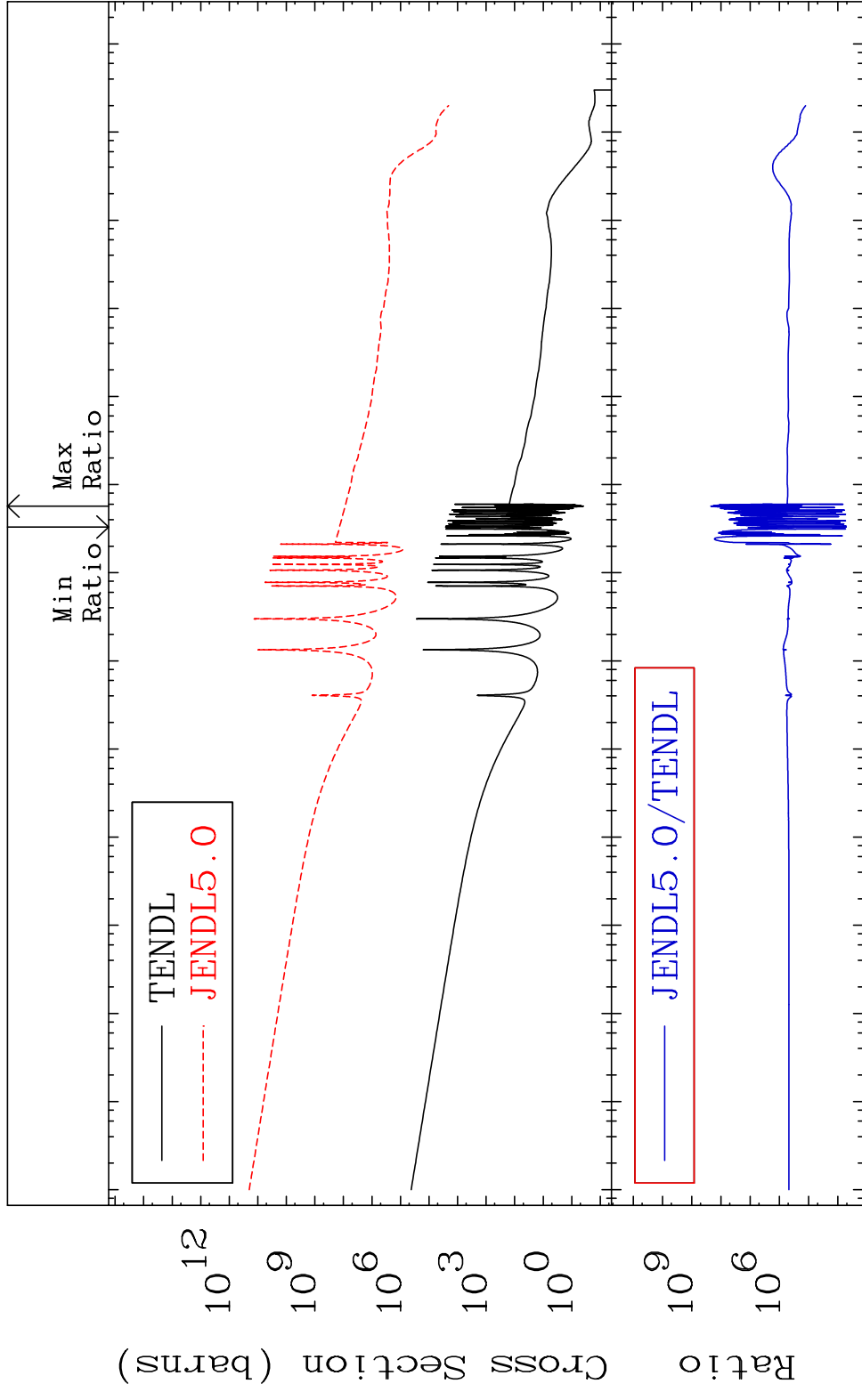


MAT 7225 Kerma inelastic (mt51-91) 72-Hf-174
 Cross Section 1289. To 9999. %

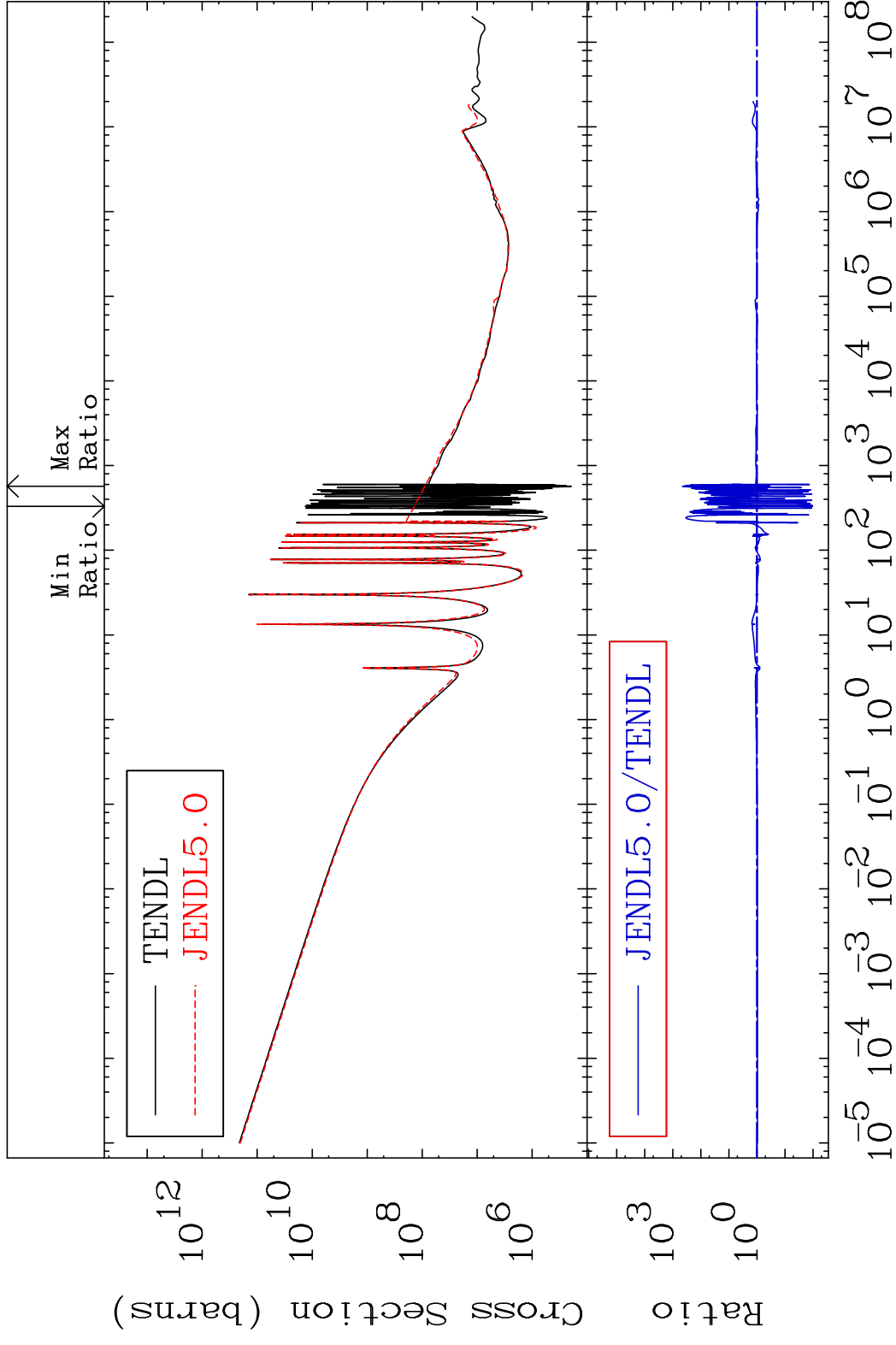


MAT 7225 Kerma fission (mt18 or mt19-20-21-38)72-Hf-174
 Cross Section 1289. To 9999. %

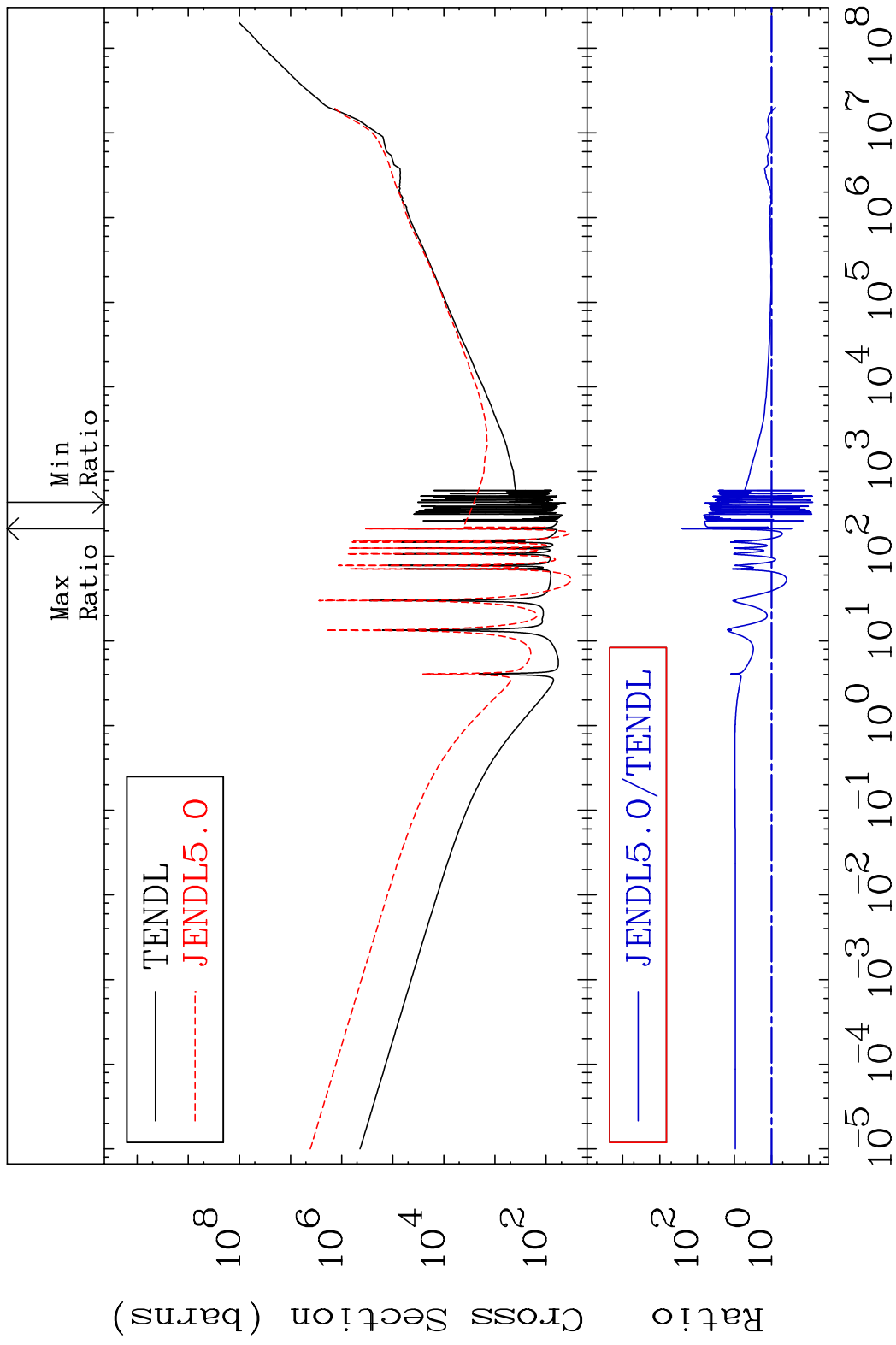




MAT 7225 Total photon (eV-barns) 72-Hf-174
 Cross Section -98.95 To 9999. %



MAT 7225 Total kinematic kerma (high limit) 72-Hf-174
 Cross Section -92.06 To 9999. %

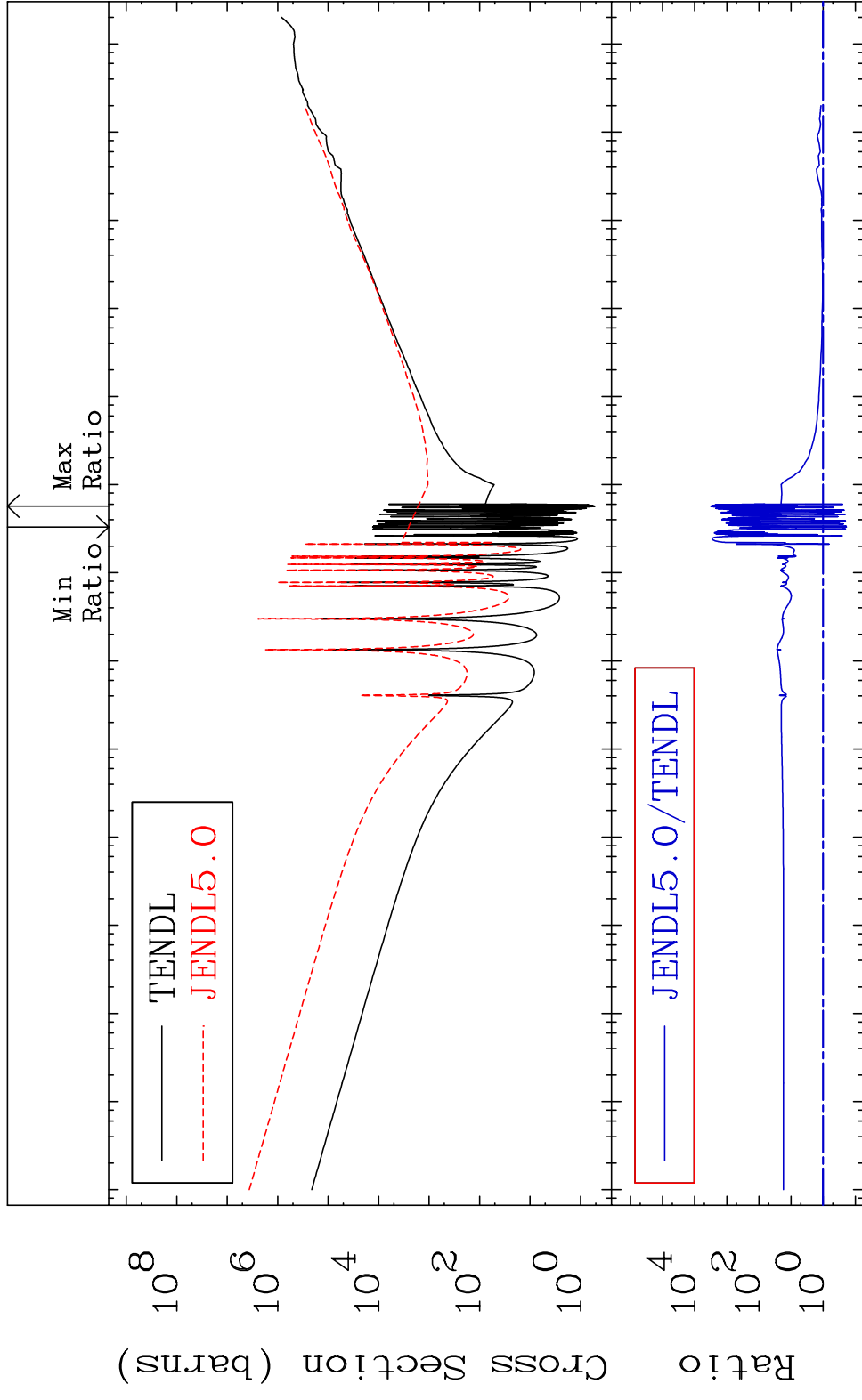


MAT 7225

Dpa total (eV-barns)

72-Hf-174

Cross Section -80.92 To 9999. %



59

Incident Energy (eV)

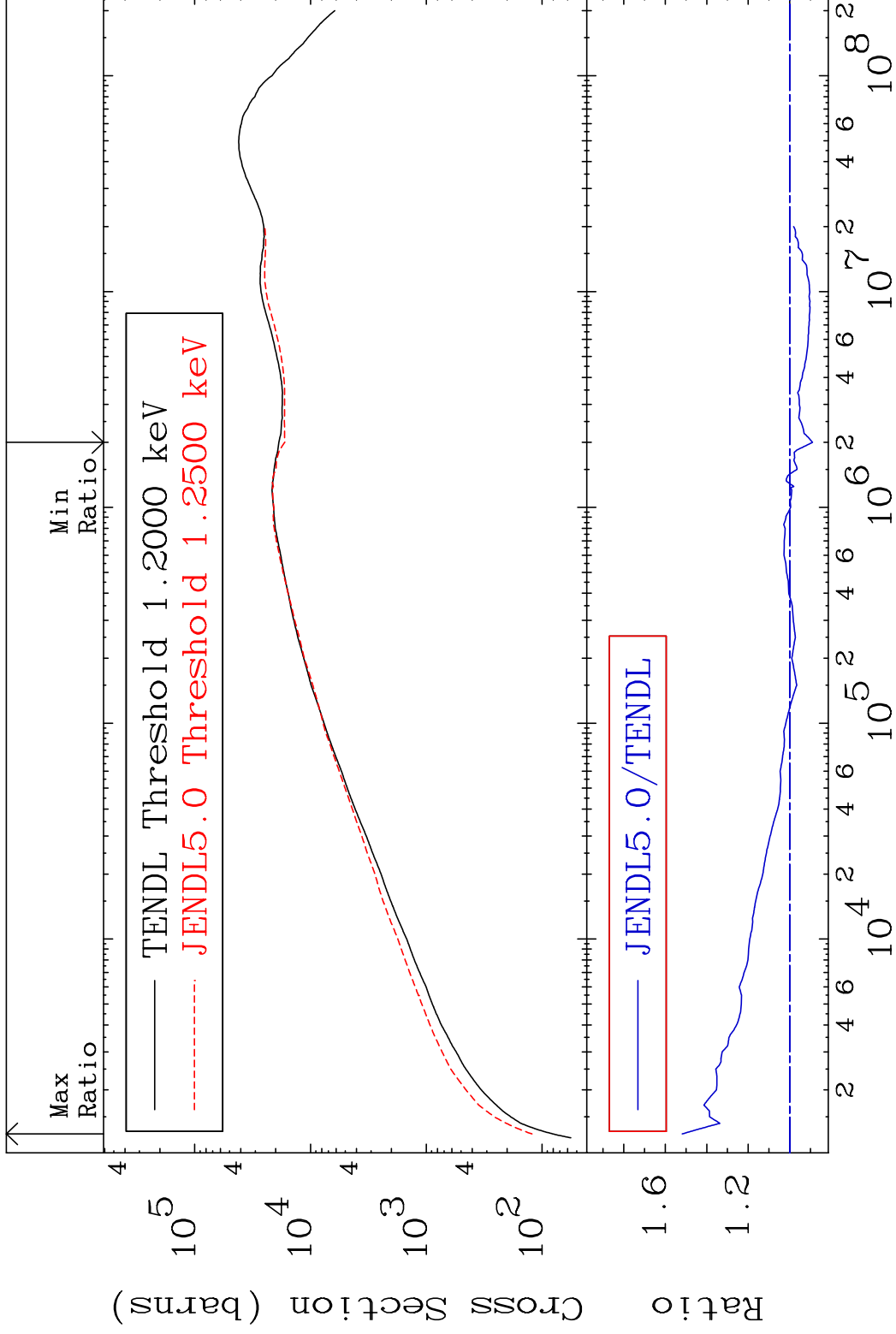
72-Hf-174

MAT 7225

Dpa elastic (mt2)

72-Hf-174

Cross Section -11.02 To 51.86 %

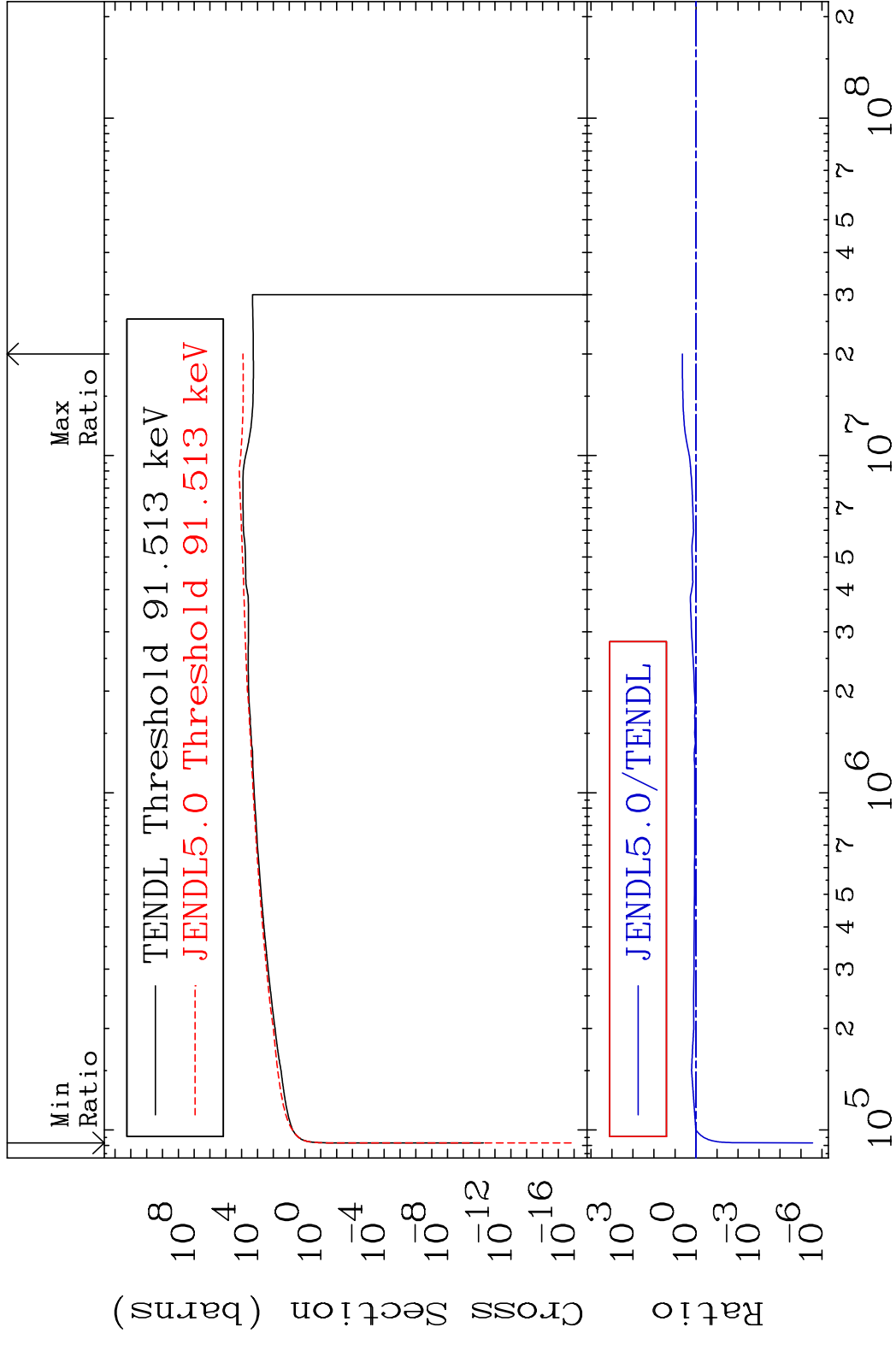


60

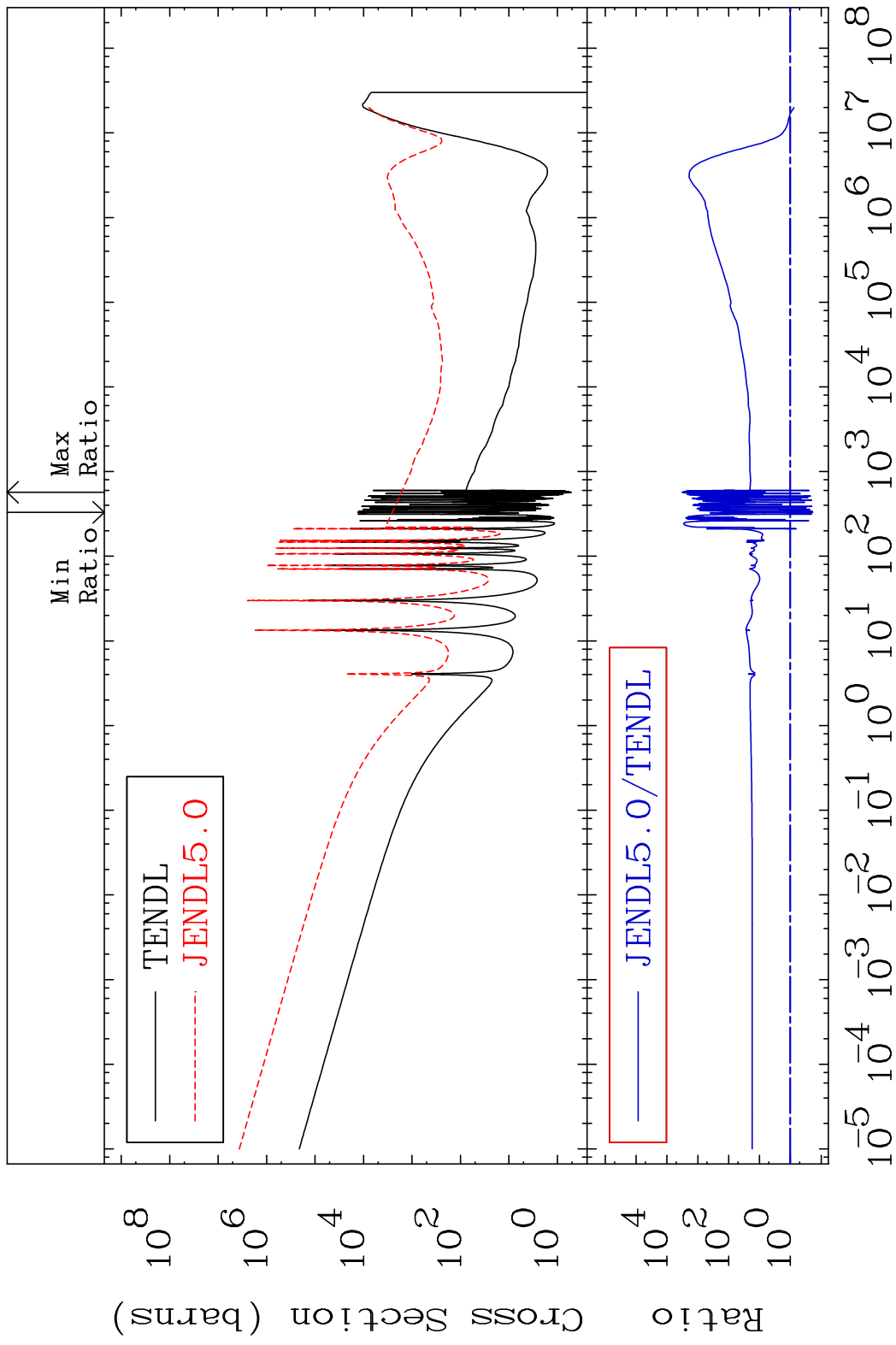
Incident Energy (eV)

72-Hf-174

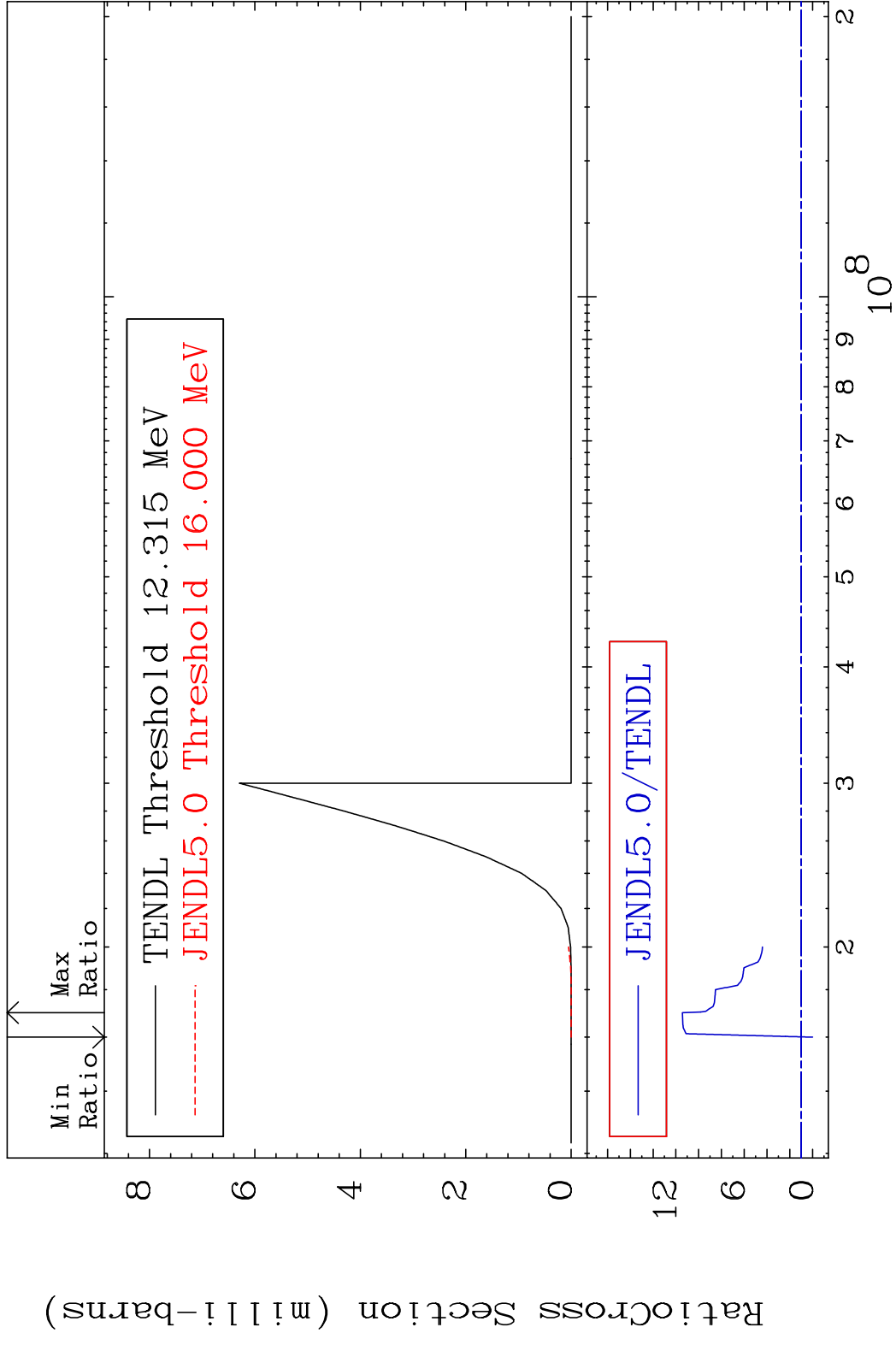
MAT 7225 Dpa inelastic (mt51-91) 72-Hf-174
 Cross Section -100.0 To 345.9 %

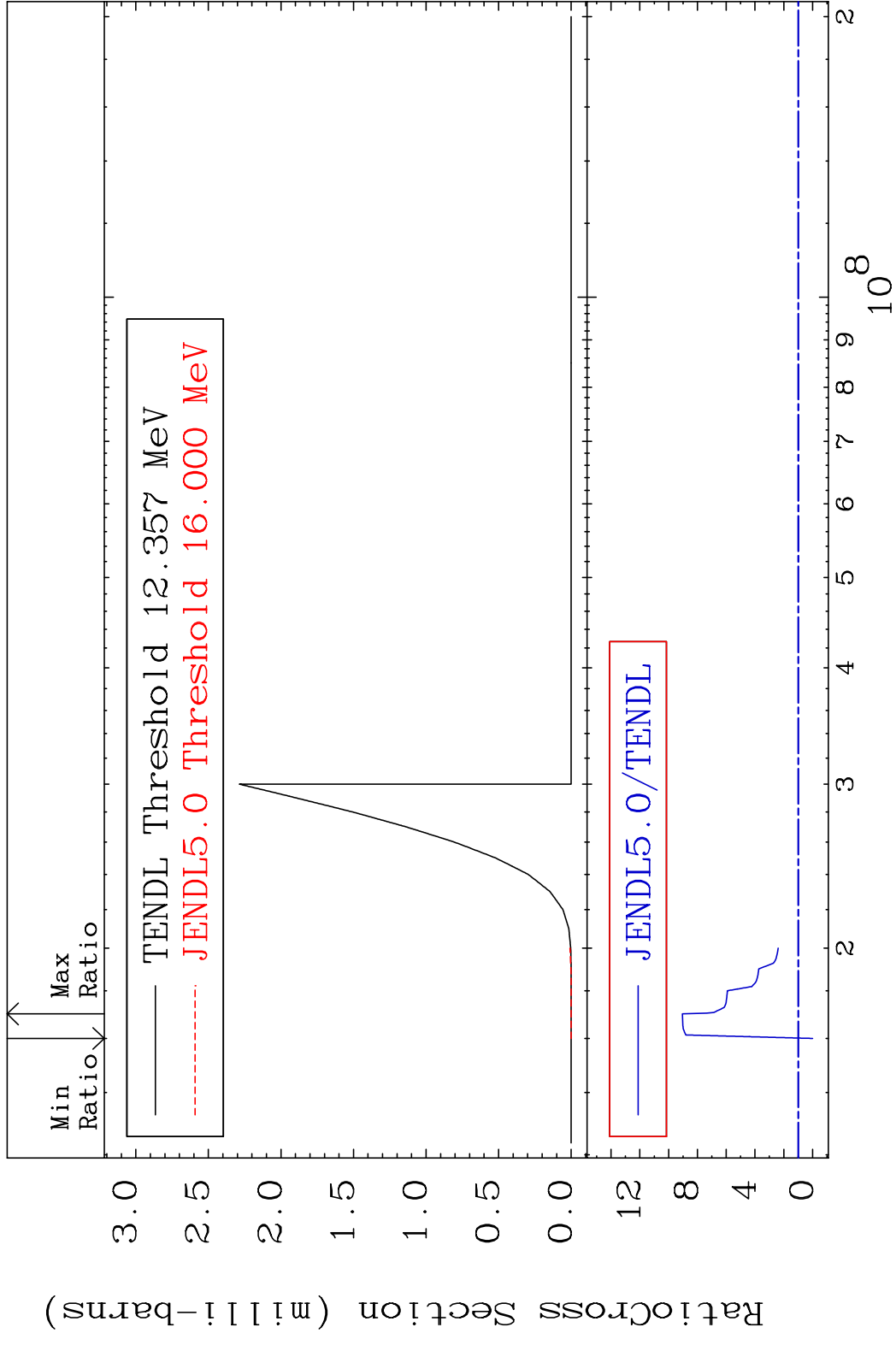


MAT 7225 Dpa disappearance (mt102 -120) 72-Hf-174
 Cross Section -80.92 To 9999. %

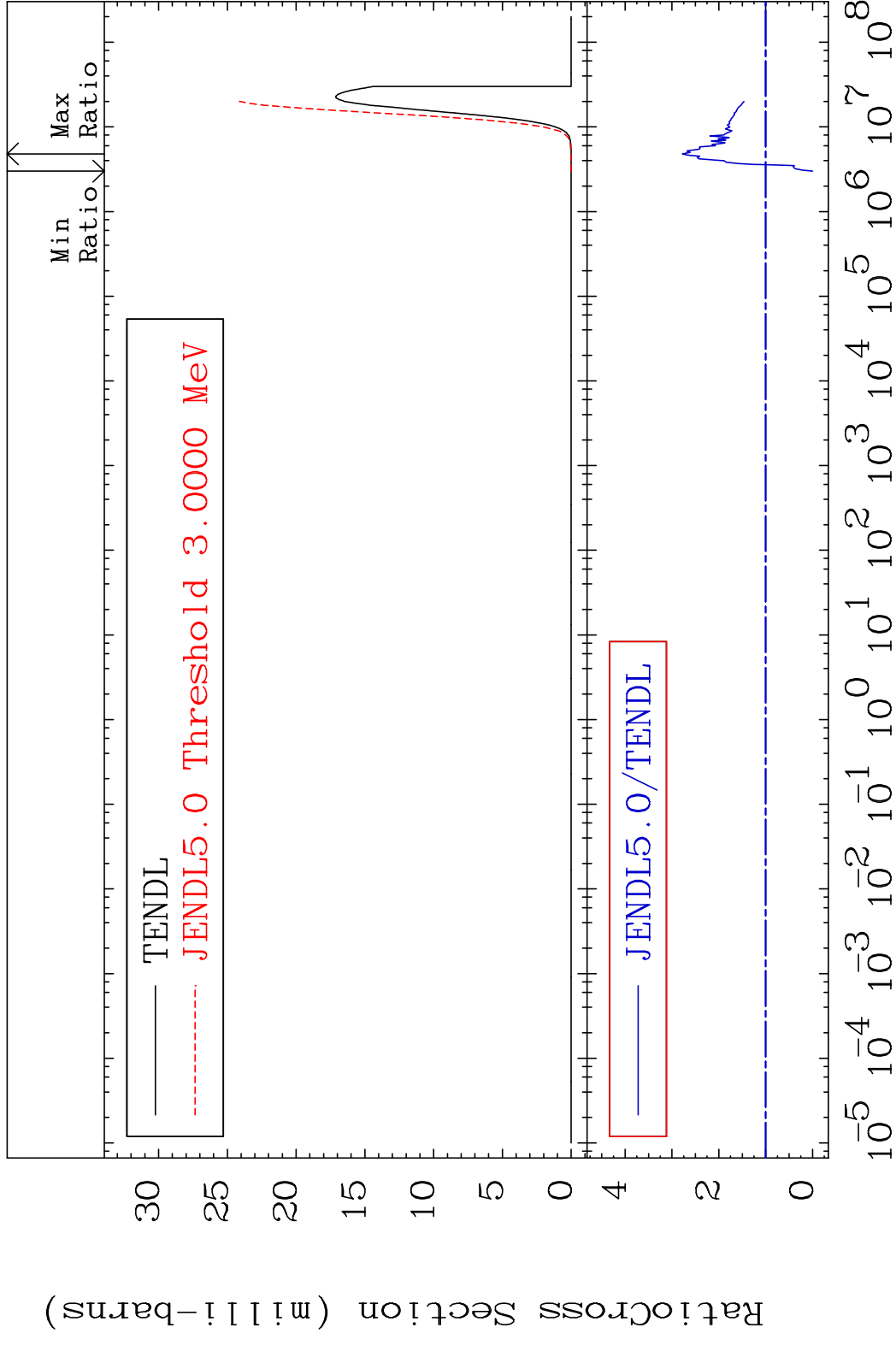


62 Incident Energy (eV) 72-Hf-174

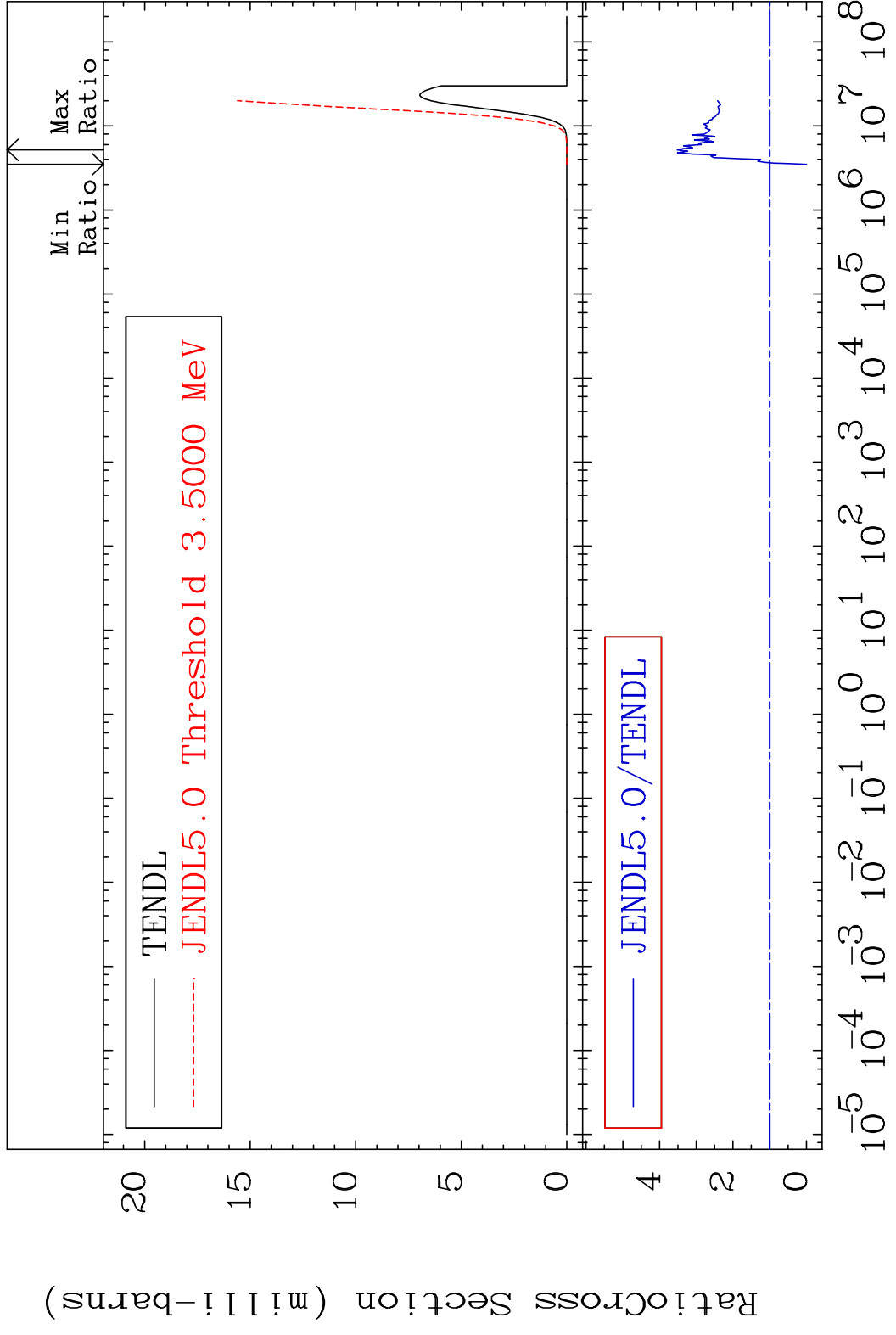




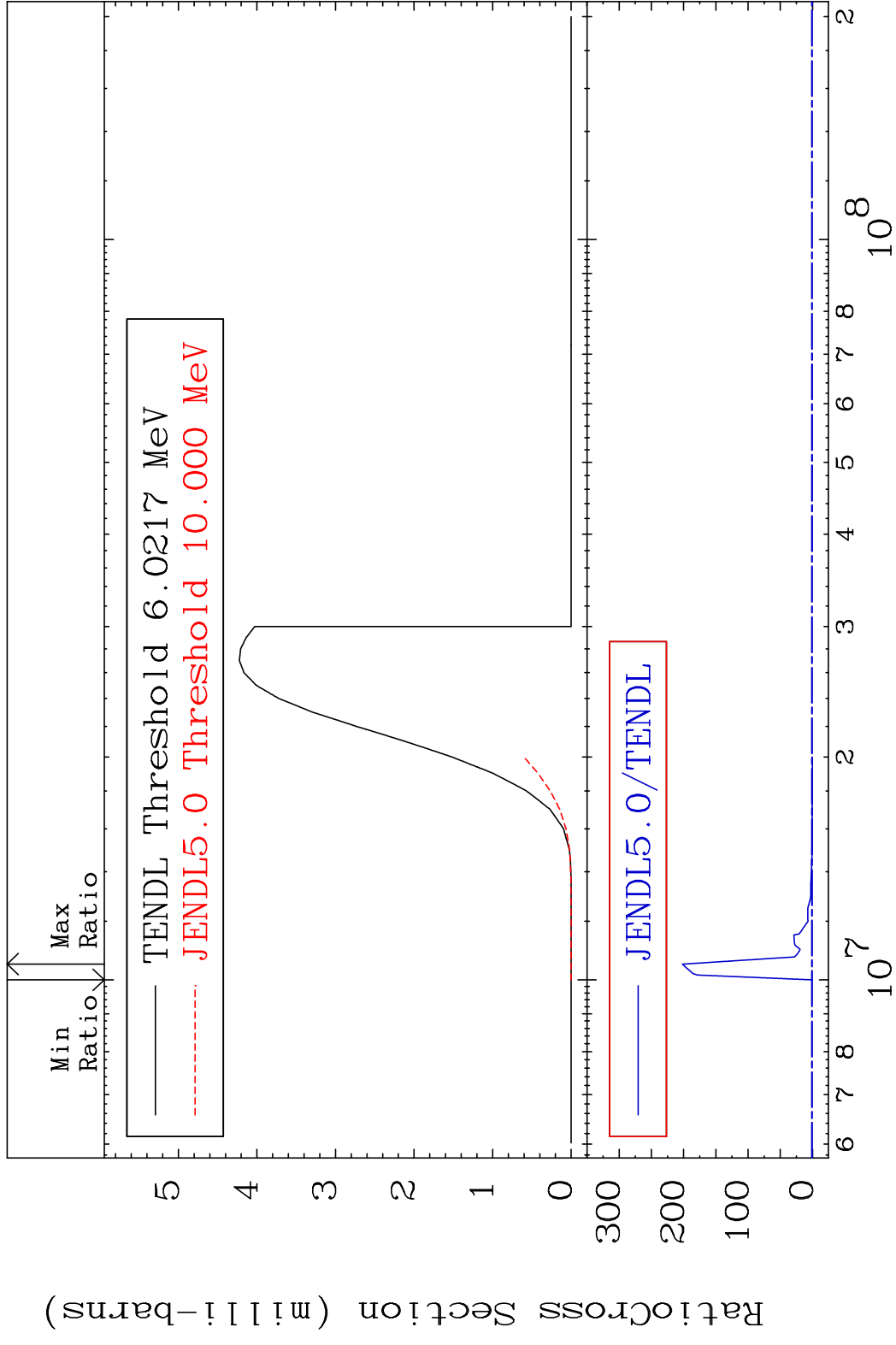
MAT 7225 (n,p):71-Lu-174g 72-Hf-174
 Radionuclide Production Cross Section 180.0 mb 177.9 %



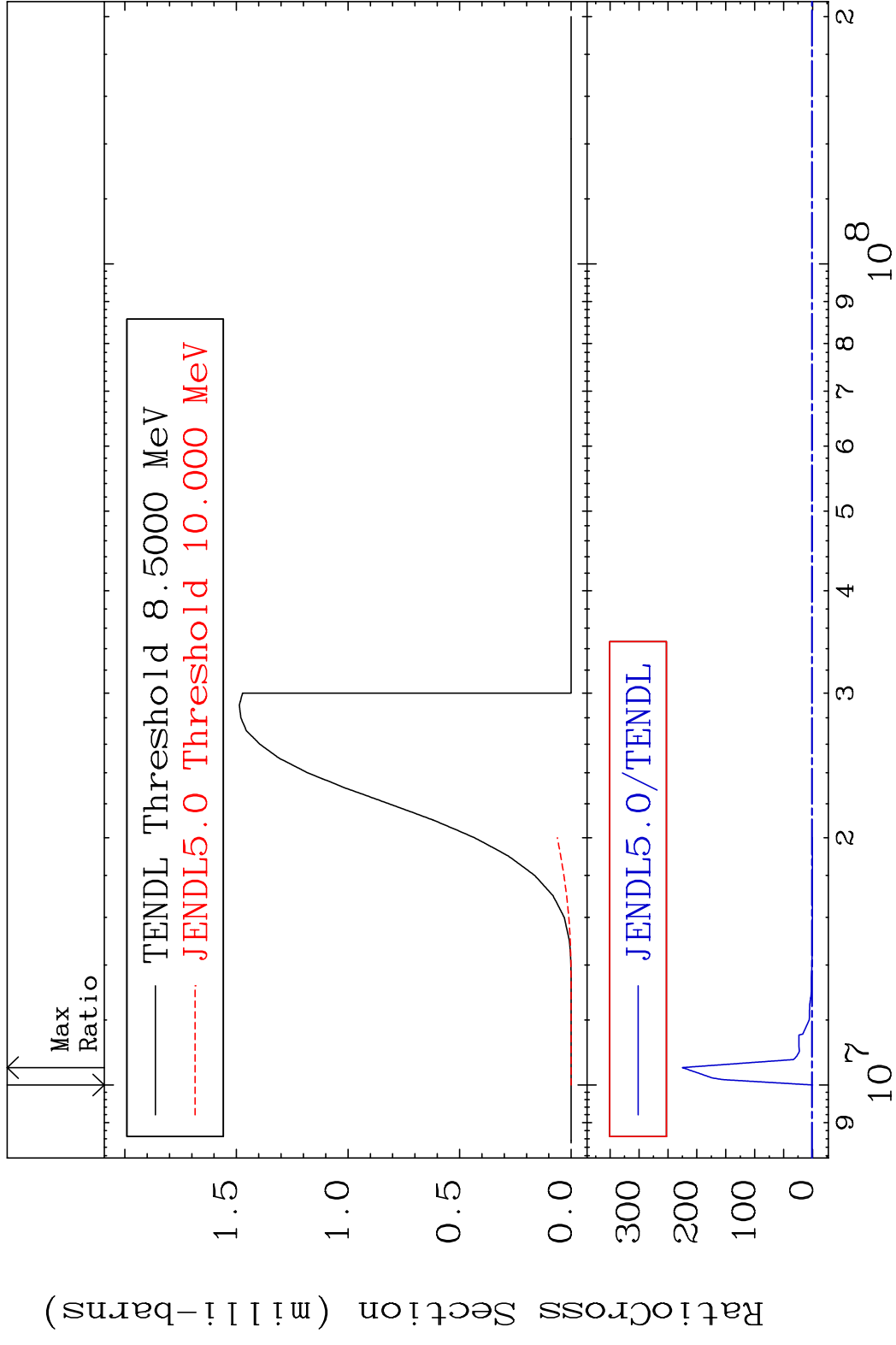
MAT 7225 (n, p): 71-Lu-174m3 72-Hf-174
 Radionuclide Production Cross Section 180.01 dth 251.9 %



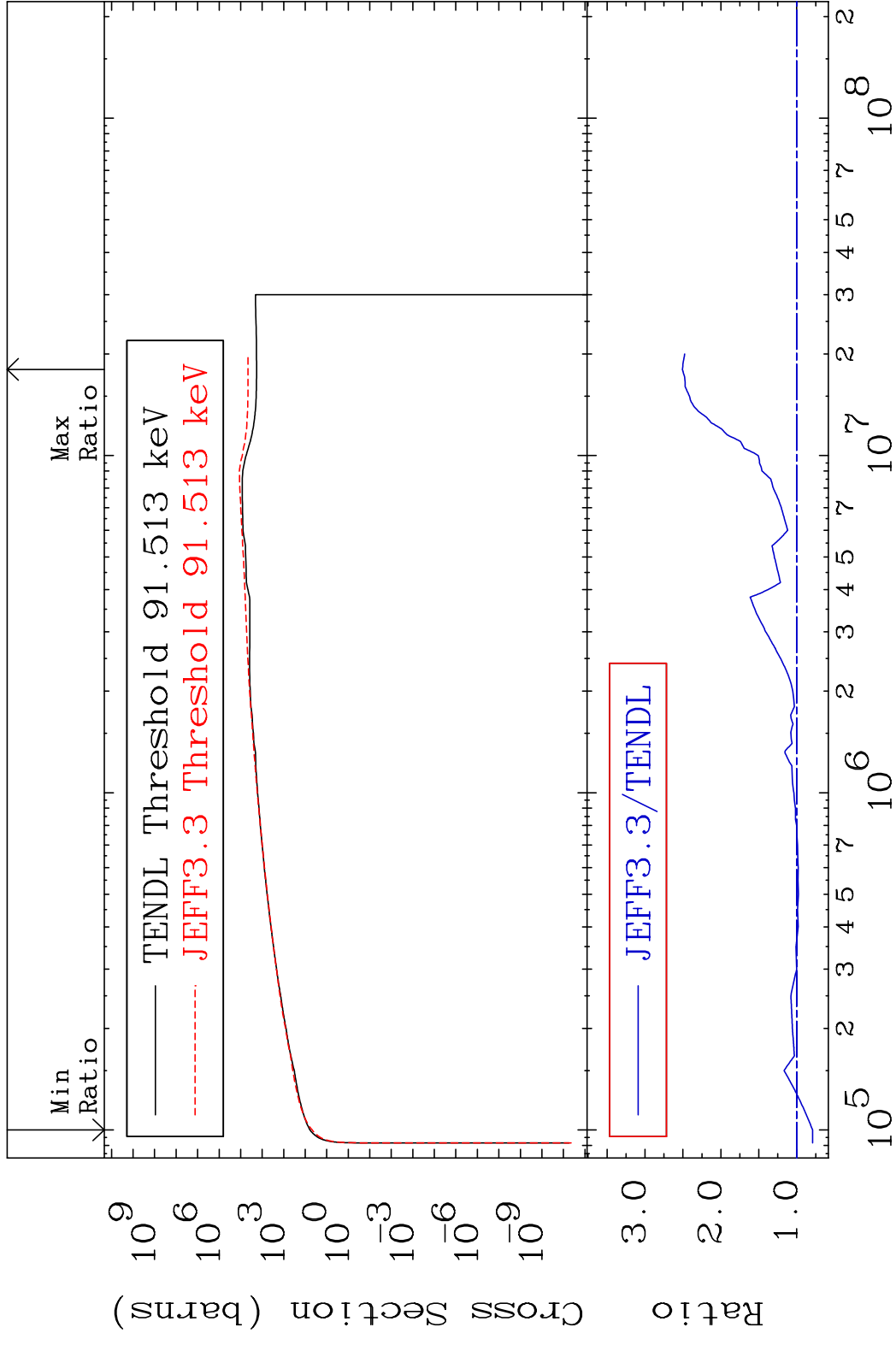
MAT 7225 (n, t): 71-Lu-172g 72-Hf-174
 Radionuclide Production Cross Section (%) 9999. %



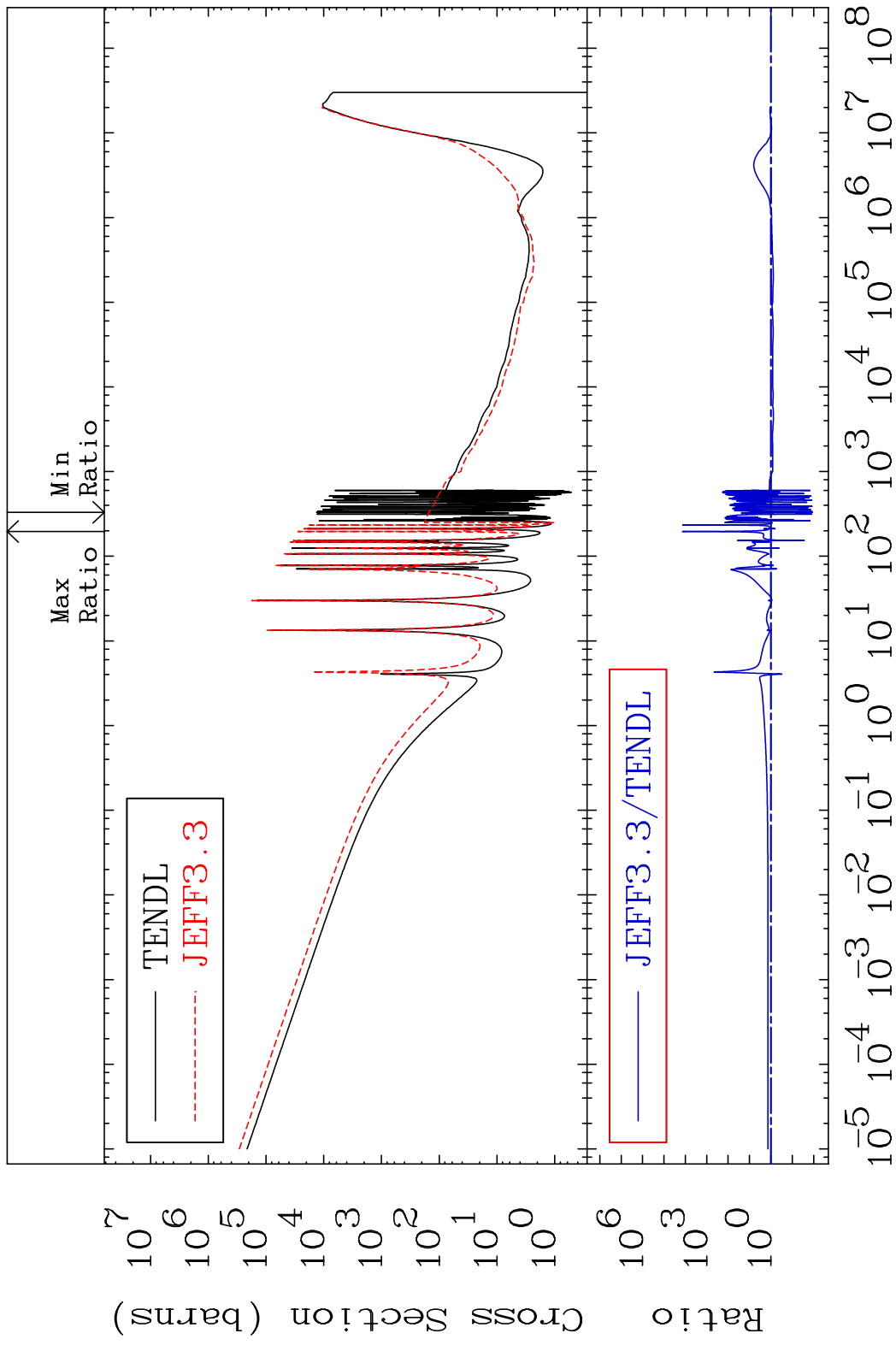
MAT 7225 (n, t):71-Lu-172m1 72-Hf-174
 Radionuclide Production Cross Section Ratio 9999. %



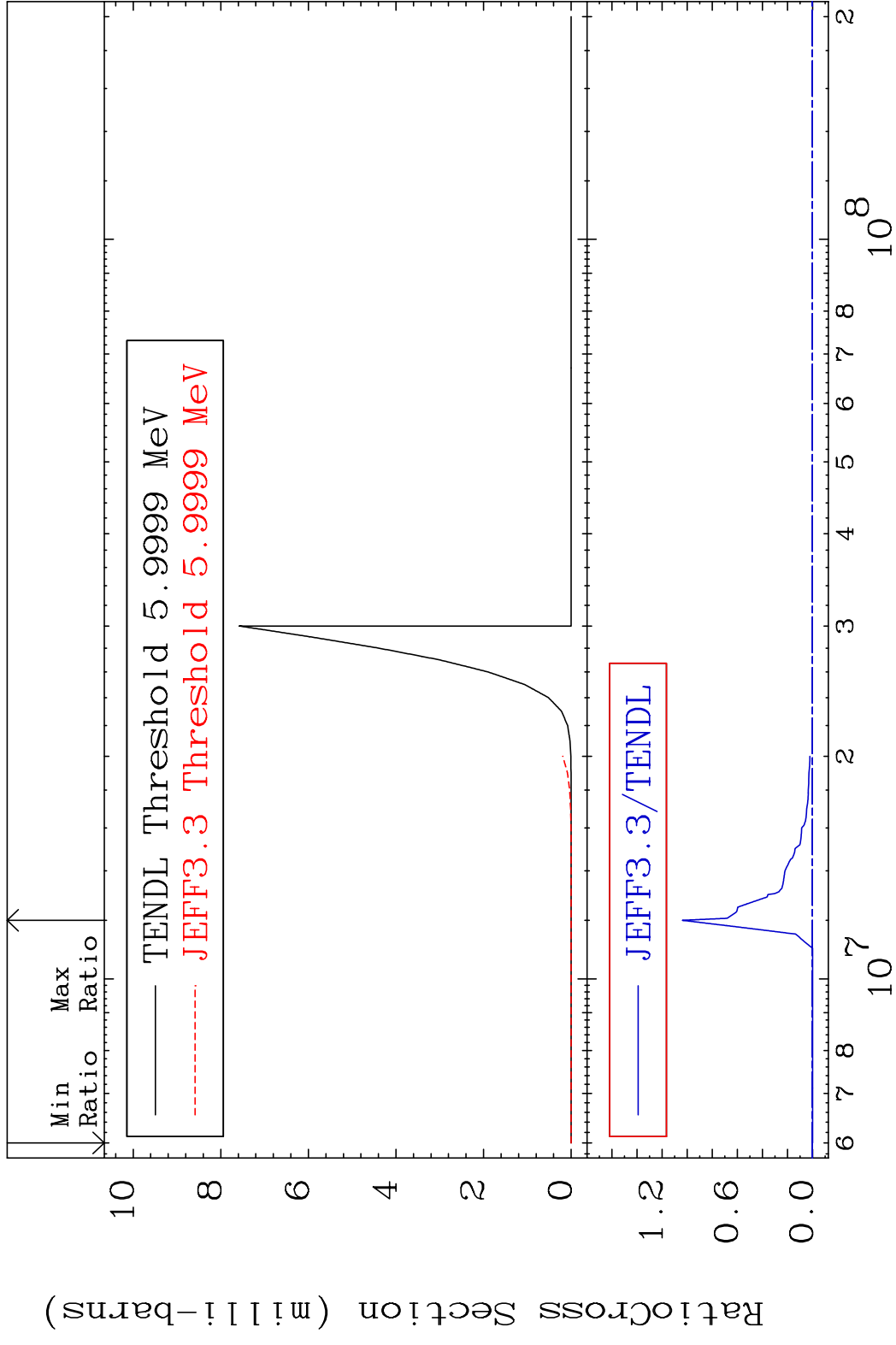
MAT 7225 Dpa inelastic (mt51-91) 72-Hf-174
 Cross Section -20.85 To 150.7 %

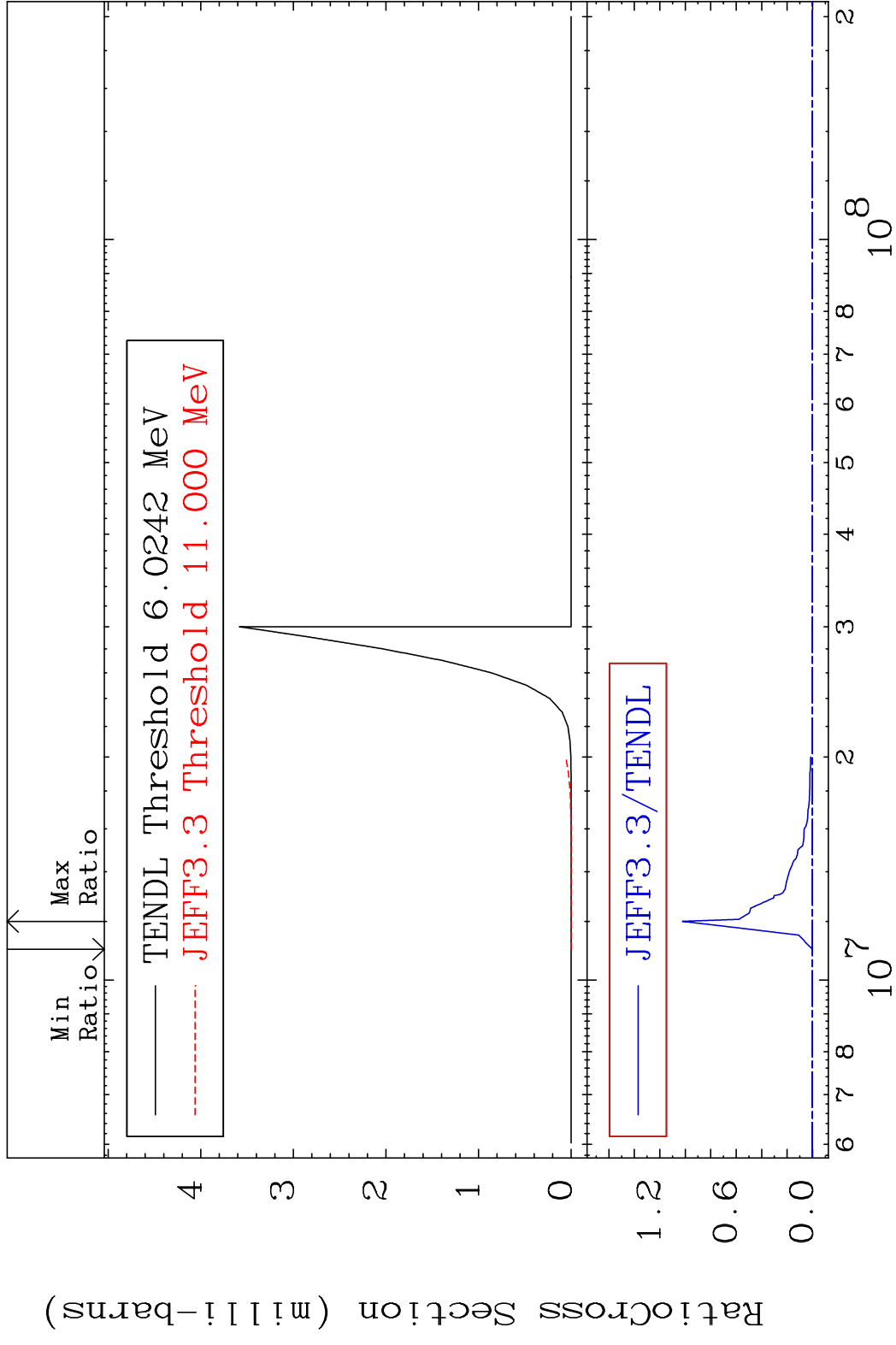


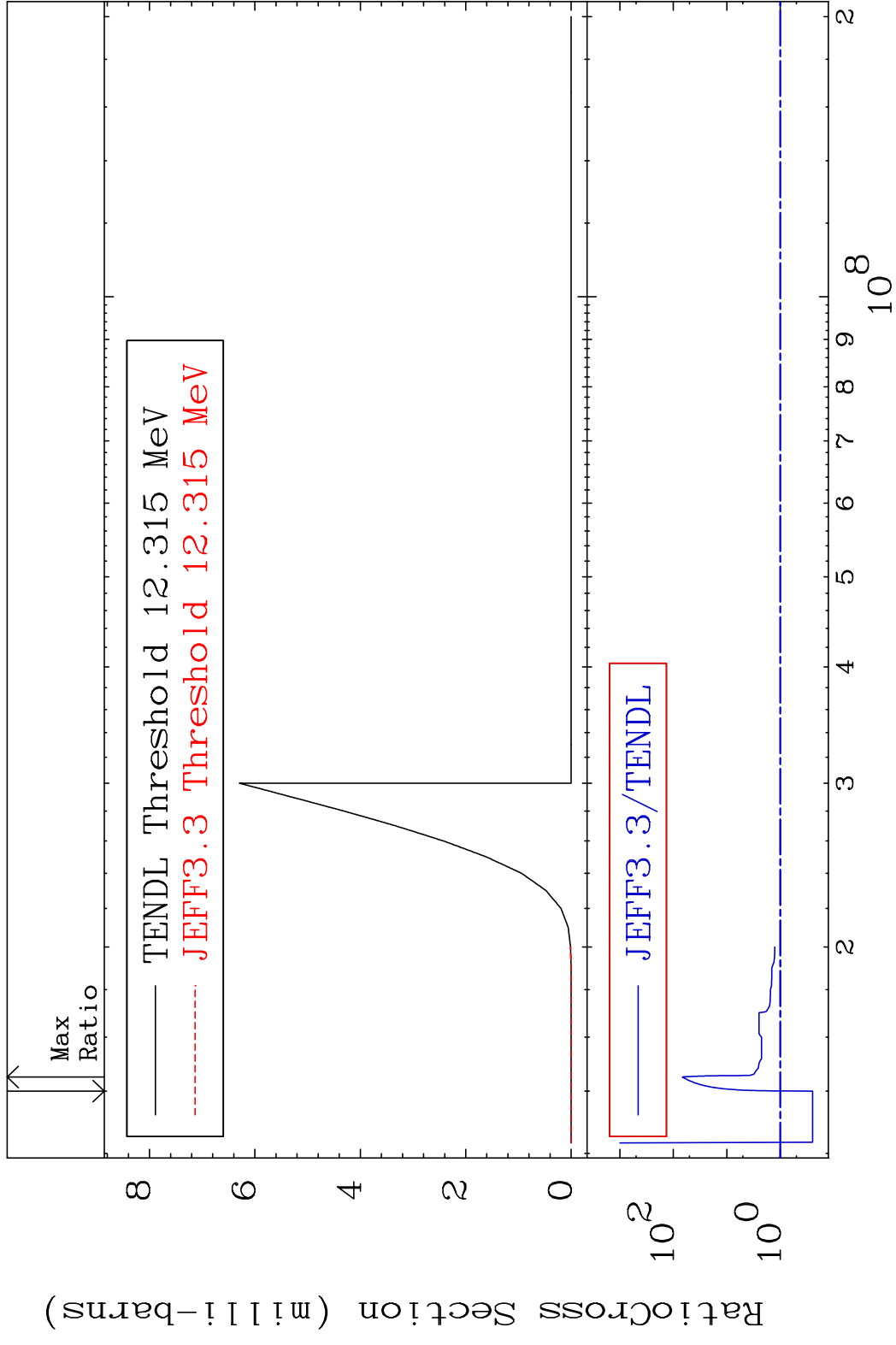
MAT 7225 Dpa disappearance (mt102 -120) 72-Hf-174
 Cross Section -98.88 To 9999. %

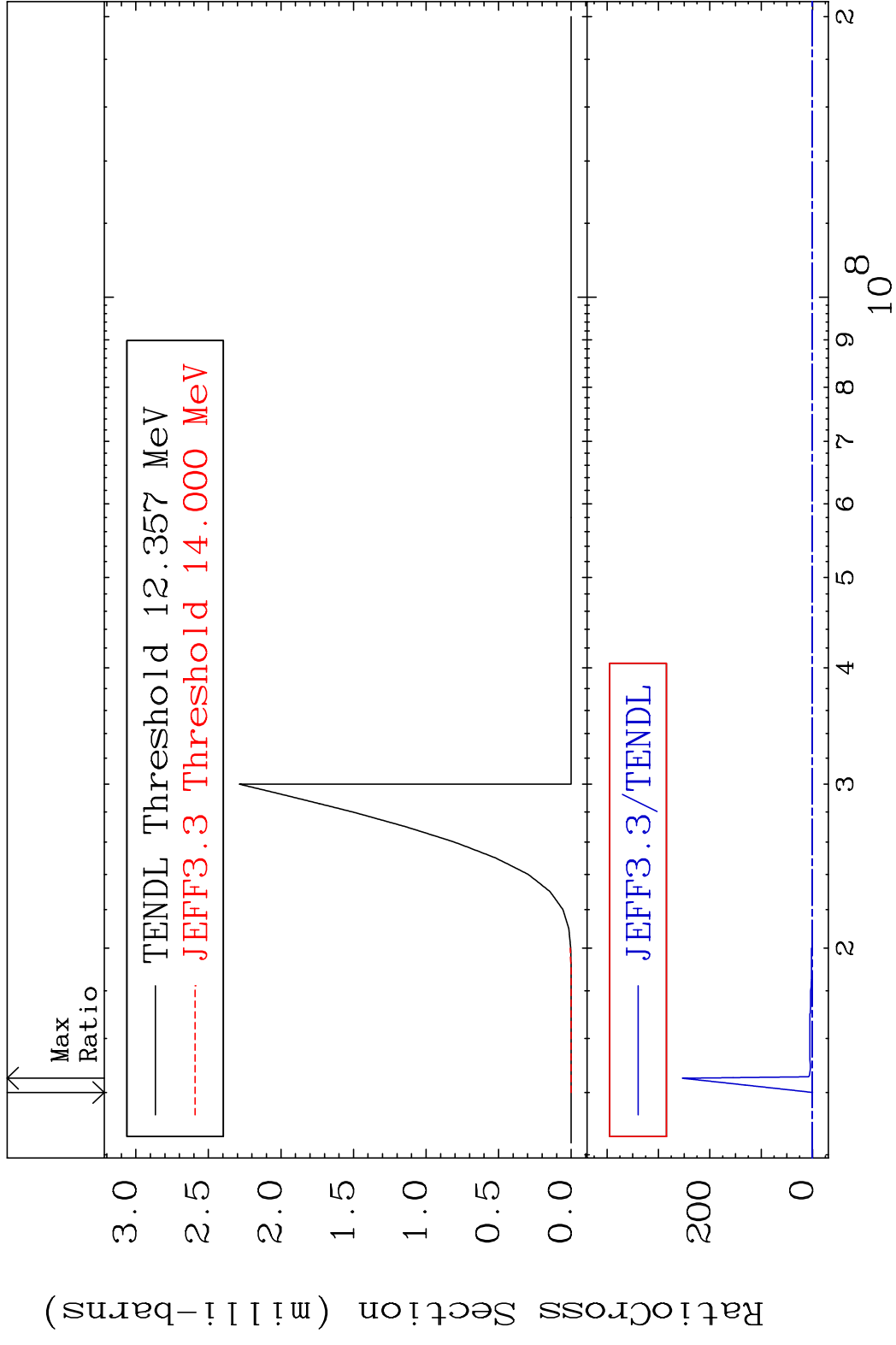


70 Incident Energy (eV) 72-Hf-174

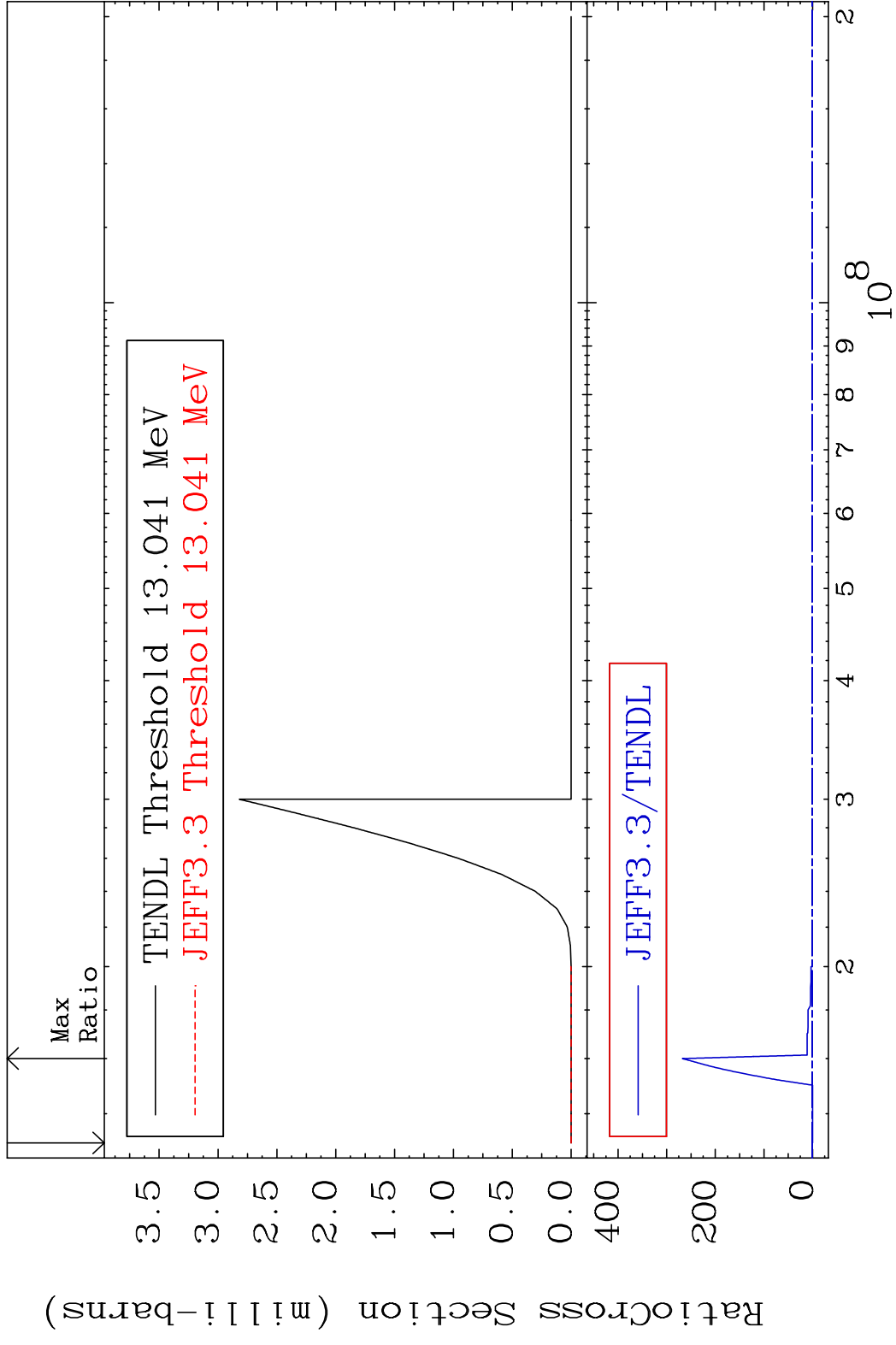


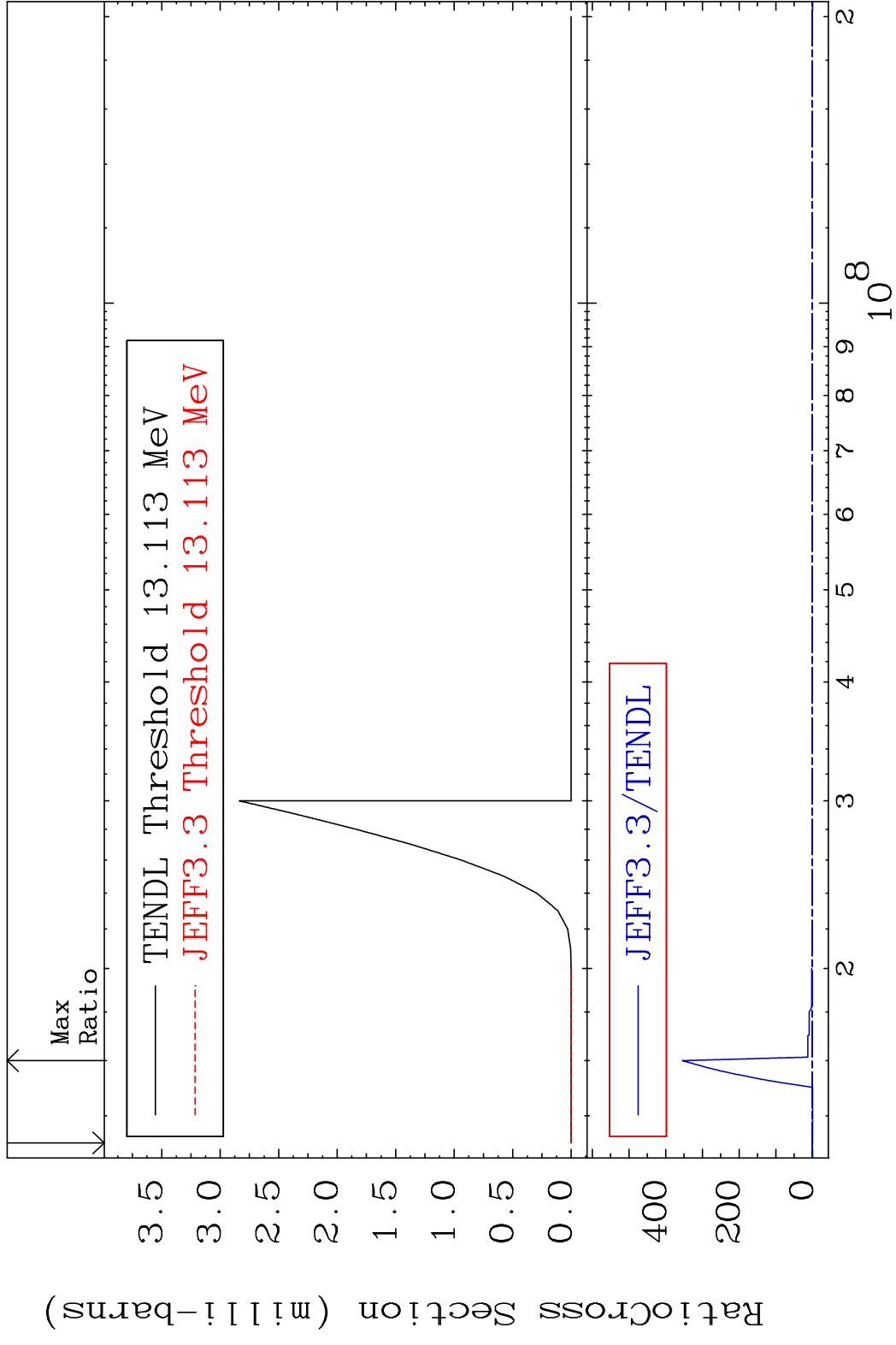


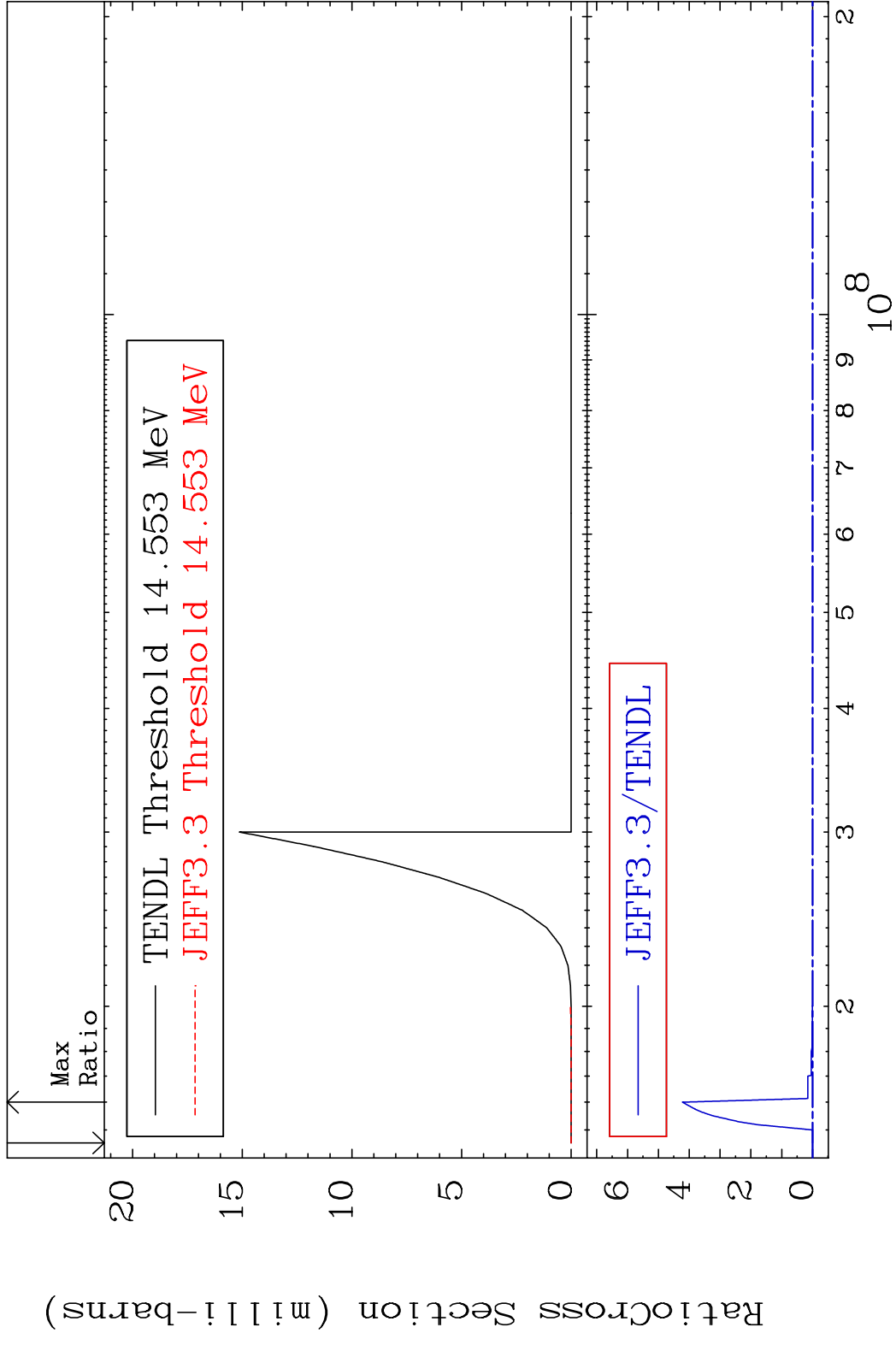


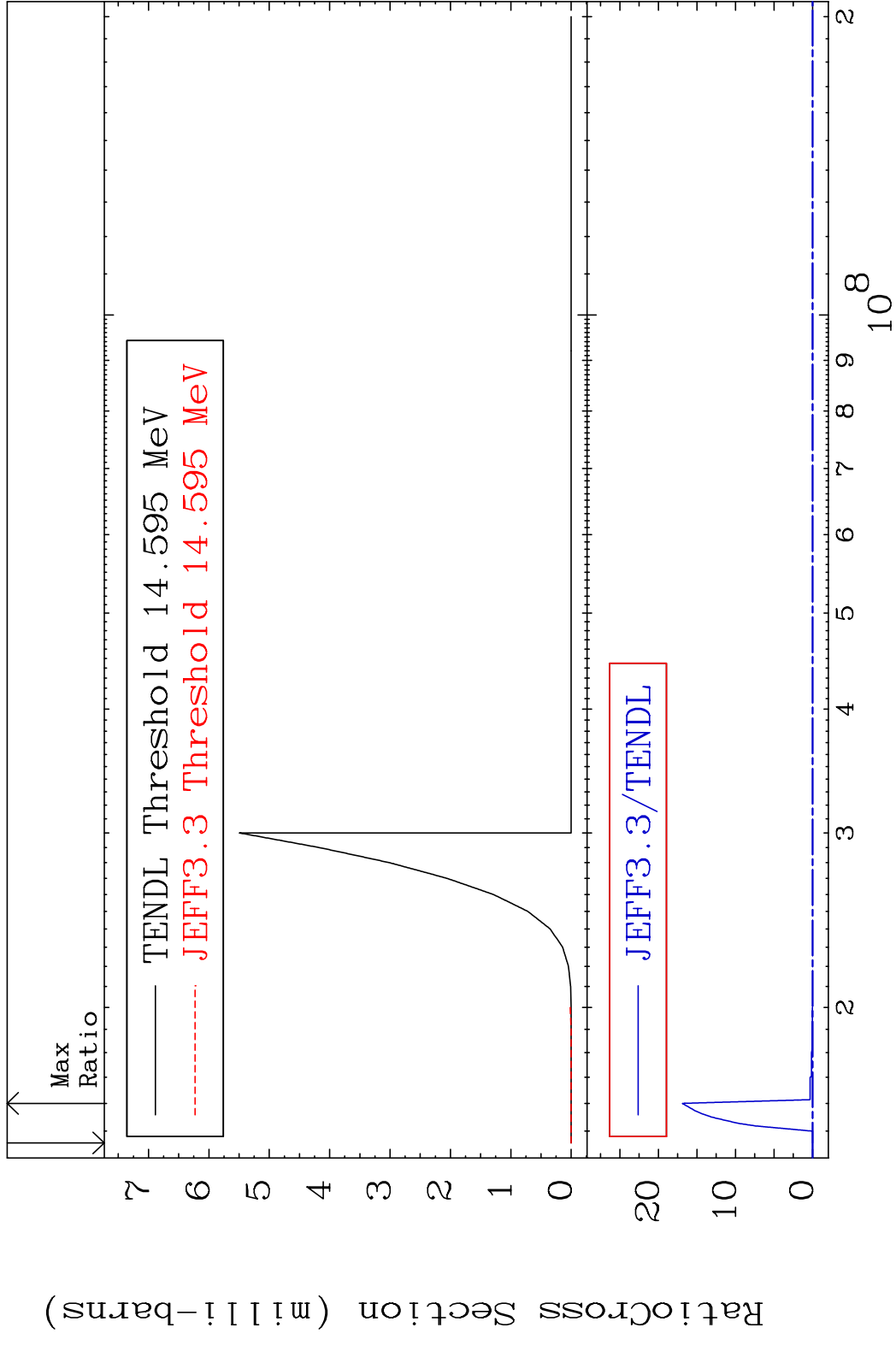


MAT 7225 (n, n') t:71-Lu-171g 72-Hf-174
 Radionuclide Production Cross Section Ratio 9999. %

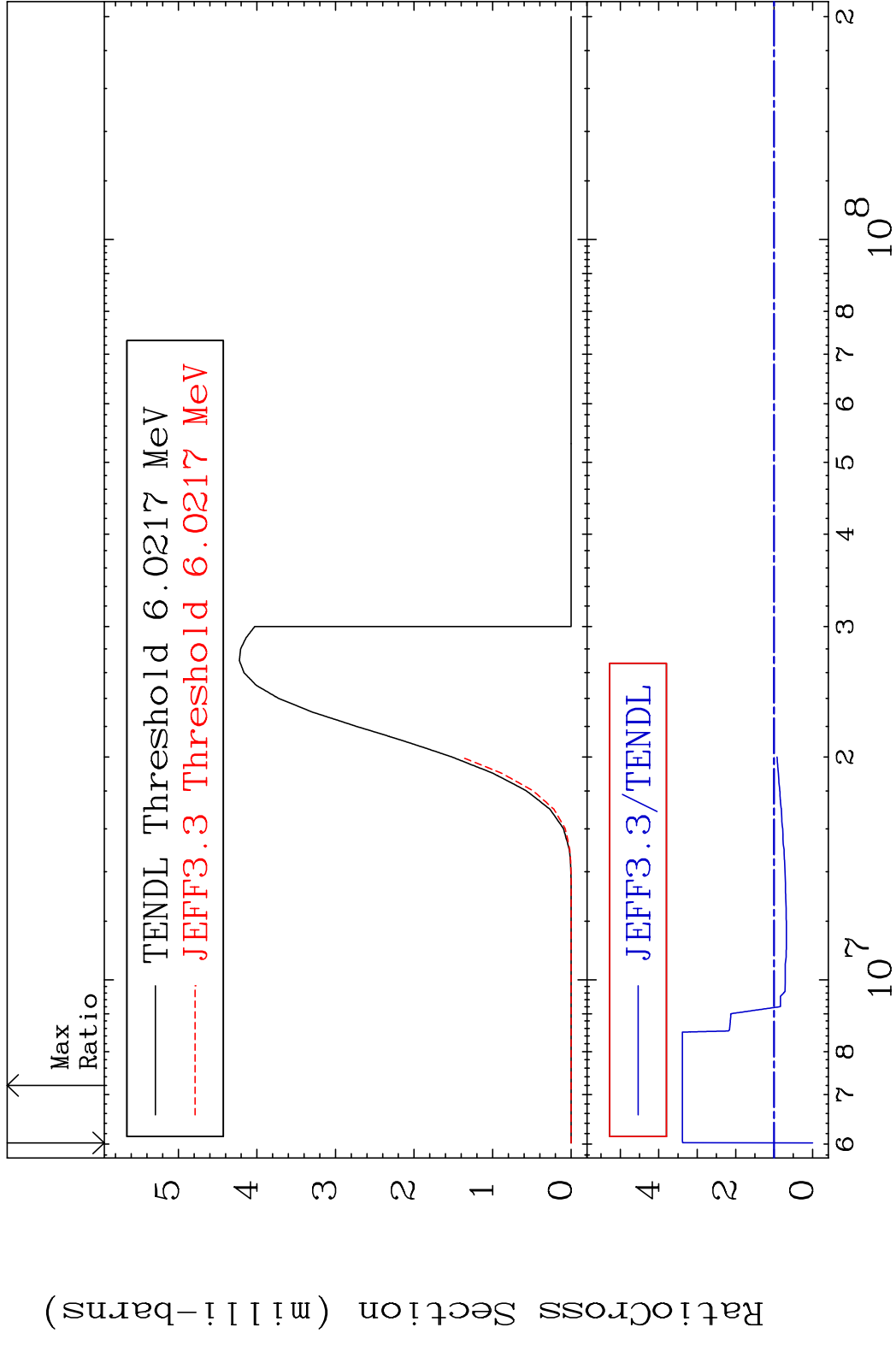




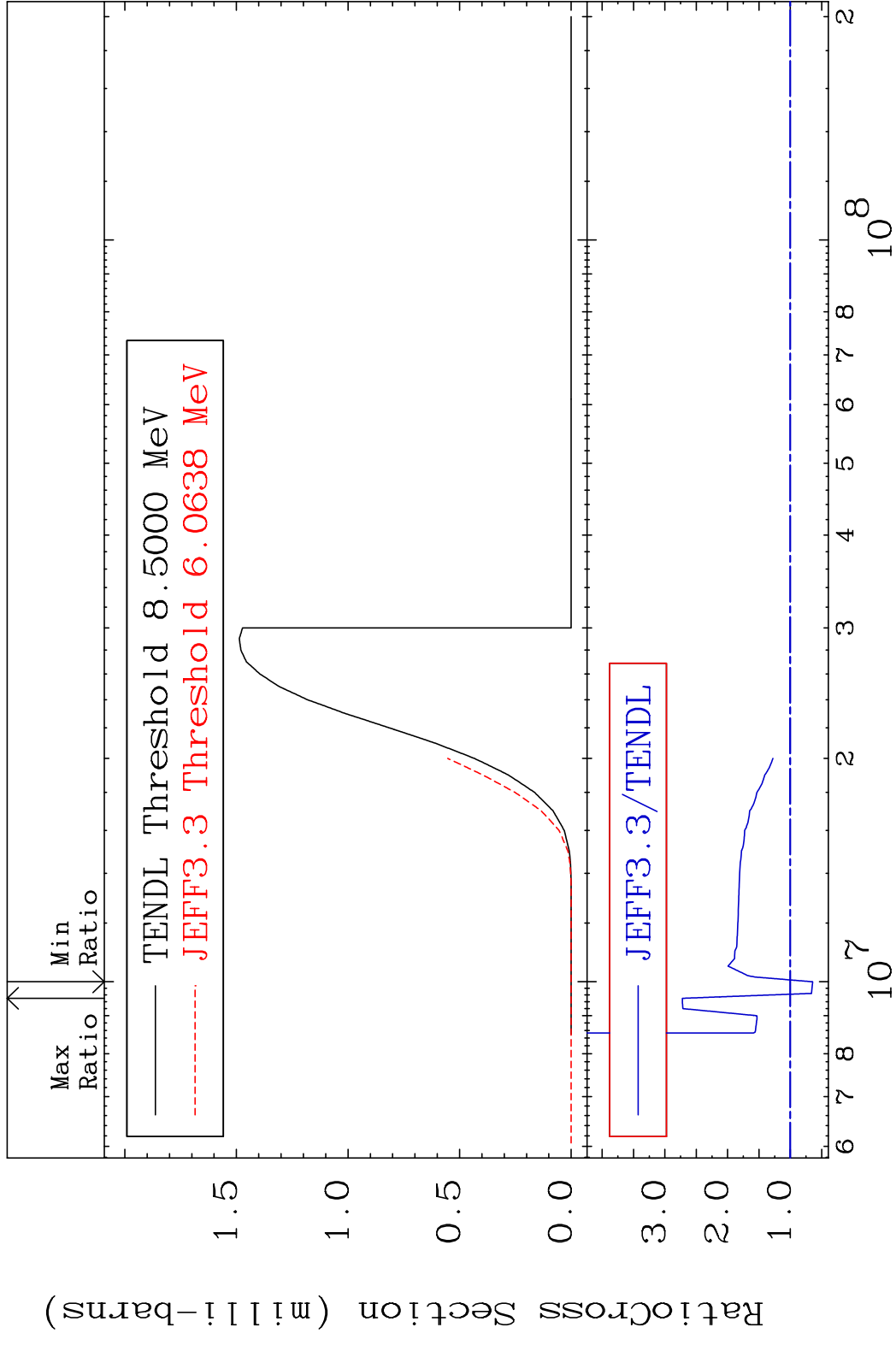




MAT 7225 (n, t): 71-Lu-172g 72-Hf-174
 Radionuclide Production Cross Section 238.6 %



MAT 7225 (n, t): 71-Lu-172m1 72-Hf-174
 Radionuclide Production Cross Section 172.2 %



80 Incident Energy (eV) 72-Hf-174