

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](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

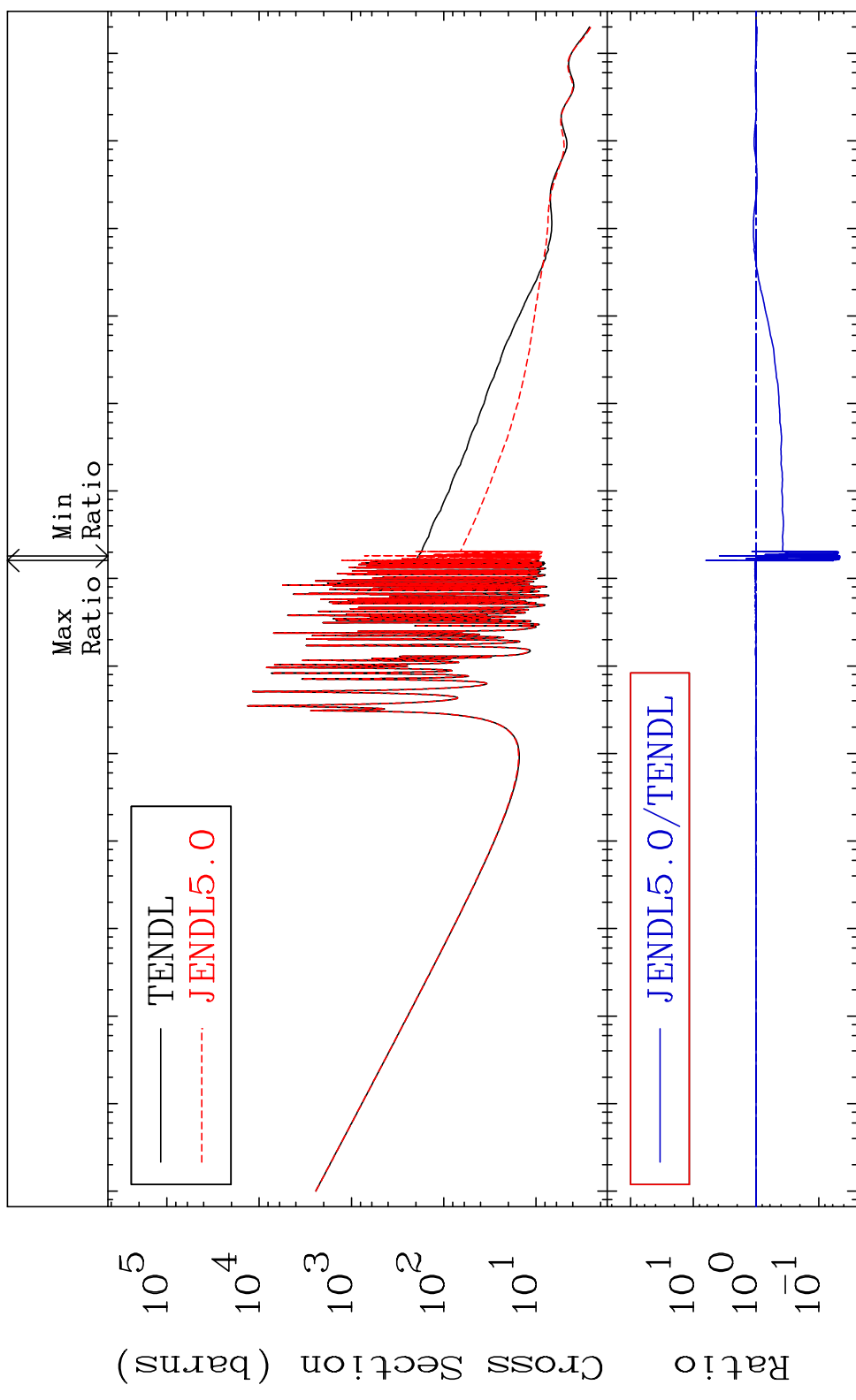
MAT 7119

Total

71-Lu-173

Cross Section

-95.48 To 534.7 %



10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
Cross Section (barns)

10<sup>1</sup>  
10<sup>0</sup>  
10<sup>-1</sup>  
Ratio

10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>  
Incident Energy (eV)

1

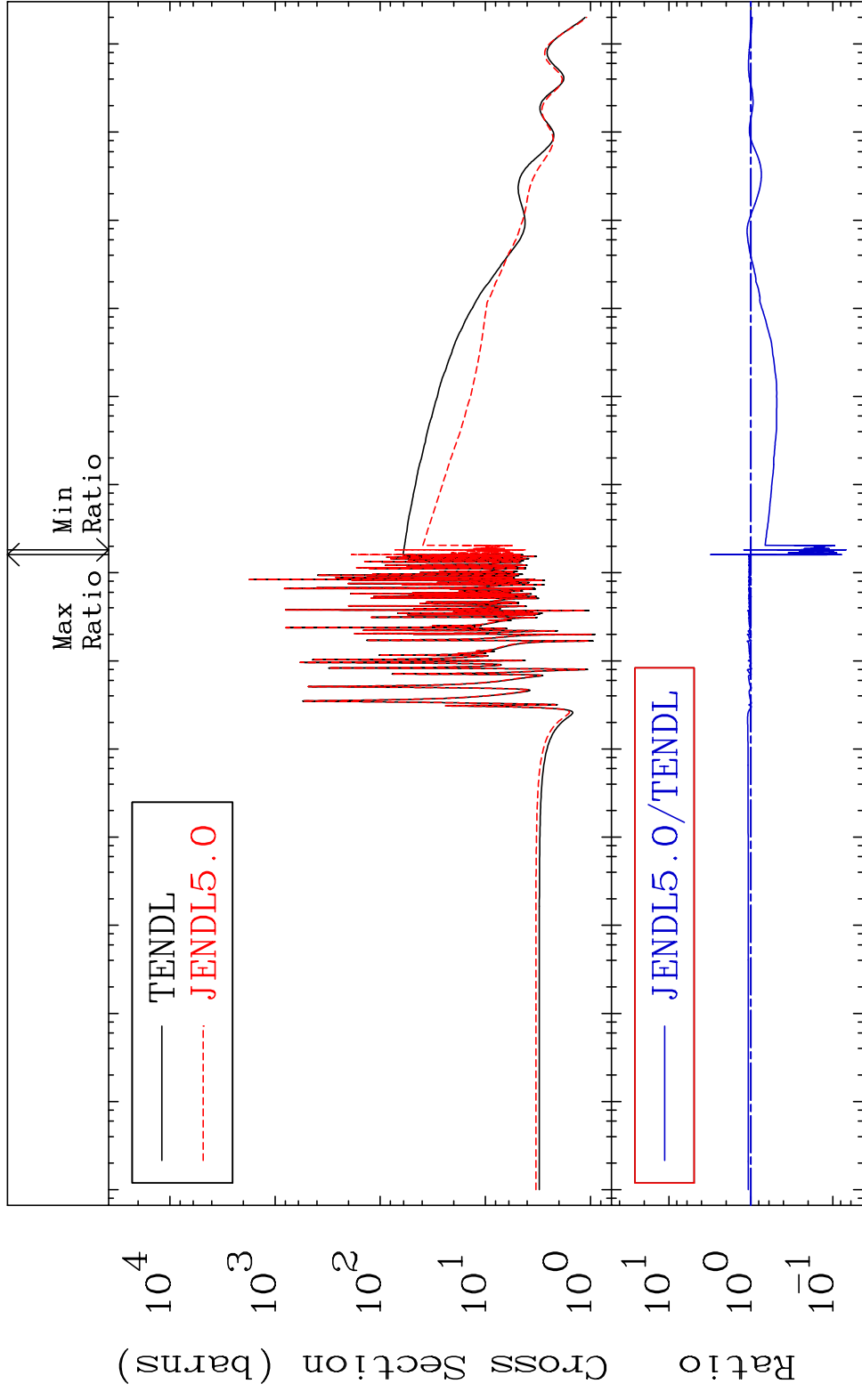
71-Lu-173

MAT 7119

Elastic

71-Lu-173

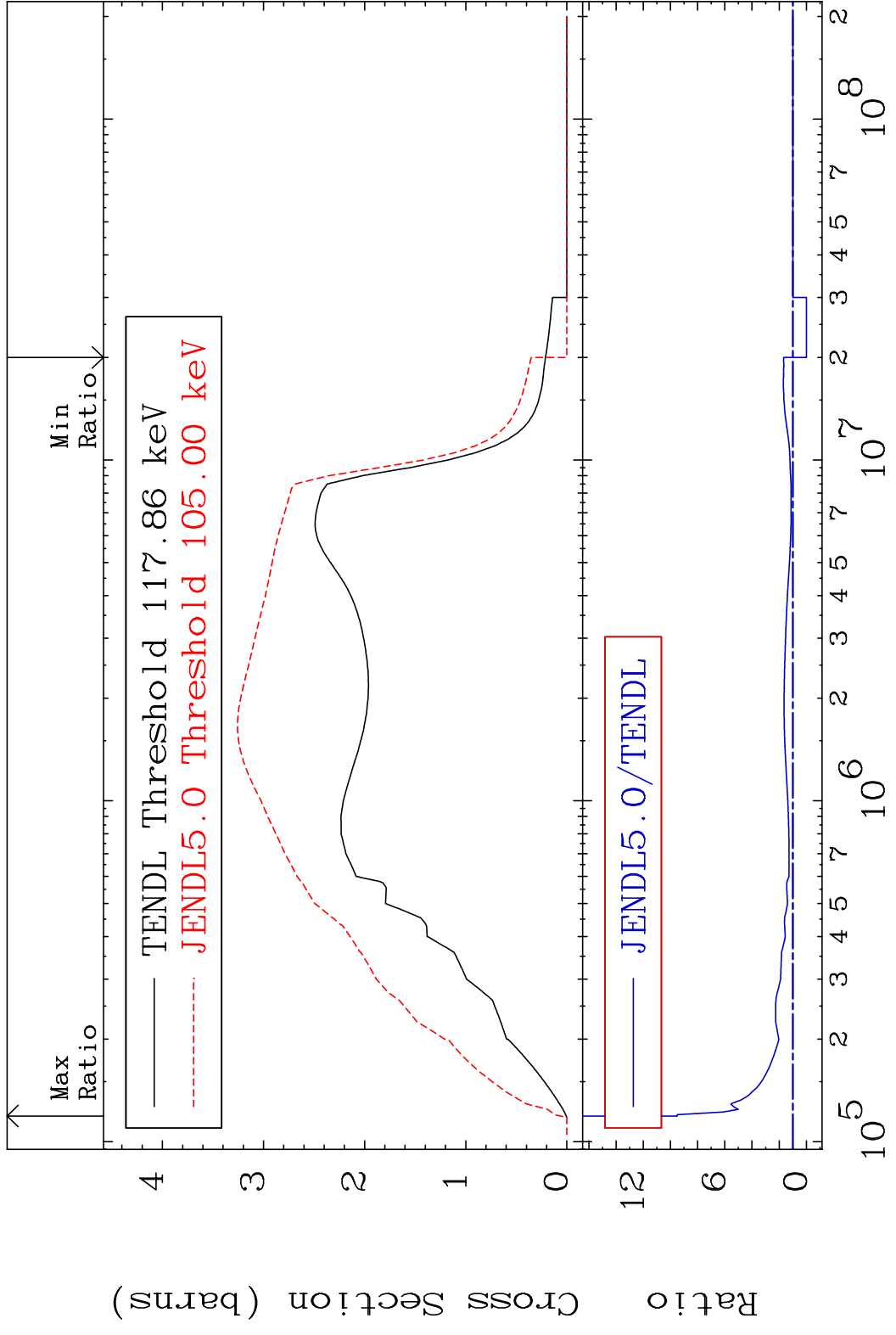
Cross Section -93.18 To 209.0 %



10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>  
10<sup>-1</sup>  
Ratio

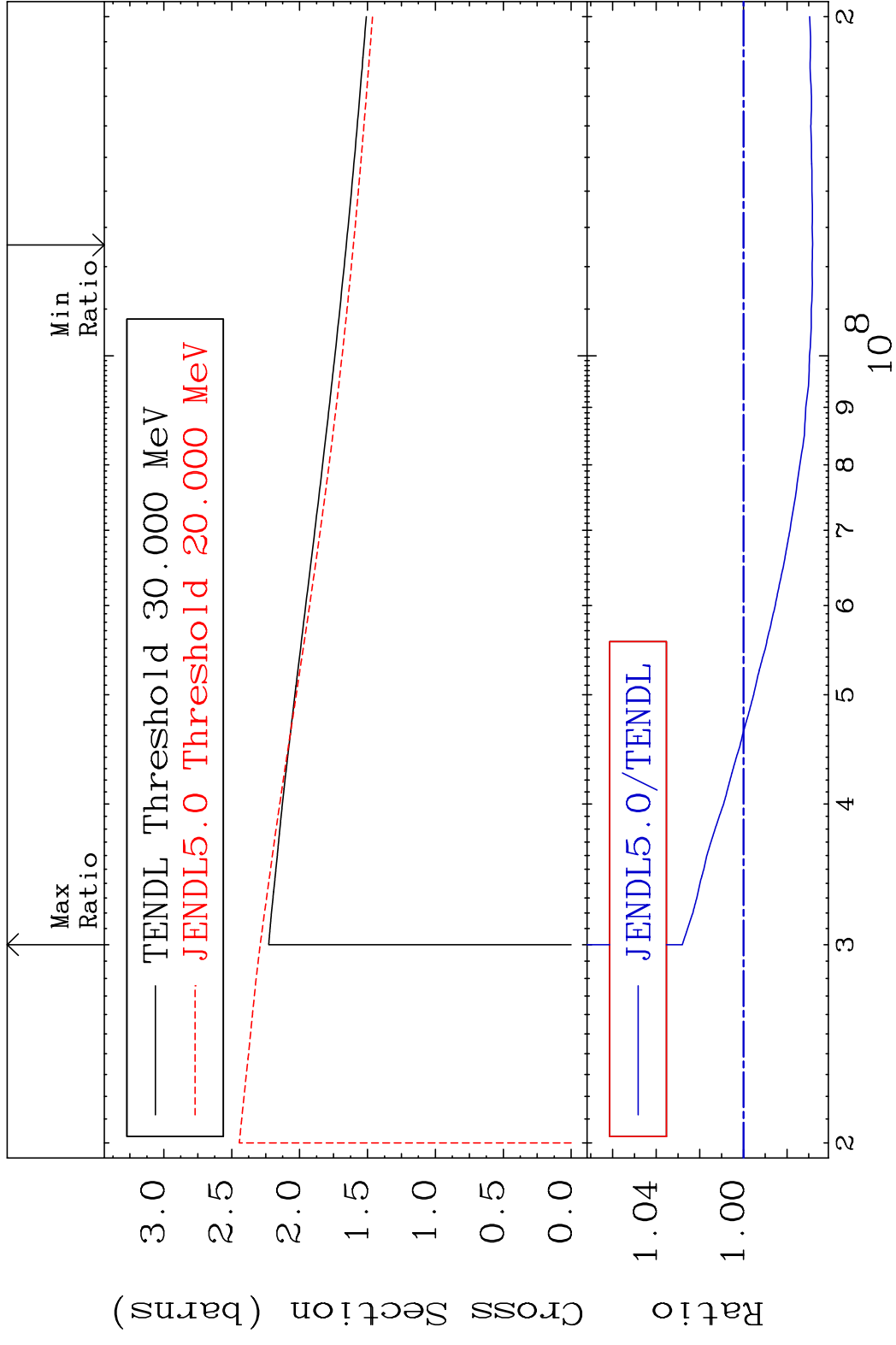
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>  
Incident Energy (eV)

MAT 7119 Inelastic 71-Lu-173  
 Cross Section -100.0 To 850.4 %



3 12 6 0 2 3 4 5 7 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup> 2 3 4 5 7 10<sup>8</sup> 2 71-Lu-173

MAT 7119 (n, remainder) 71-Lu-173  
 Cross Section -3.171 To 2.801 %



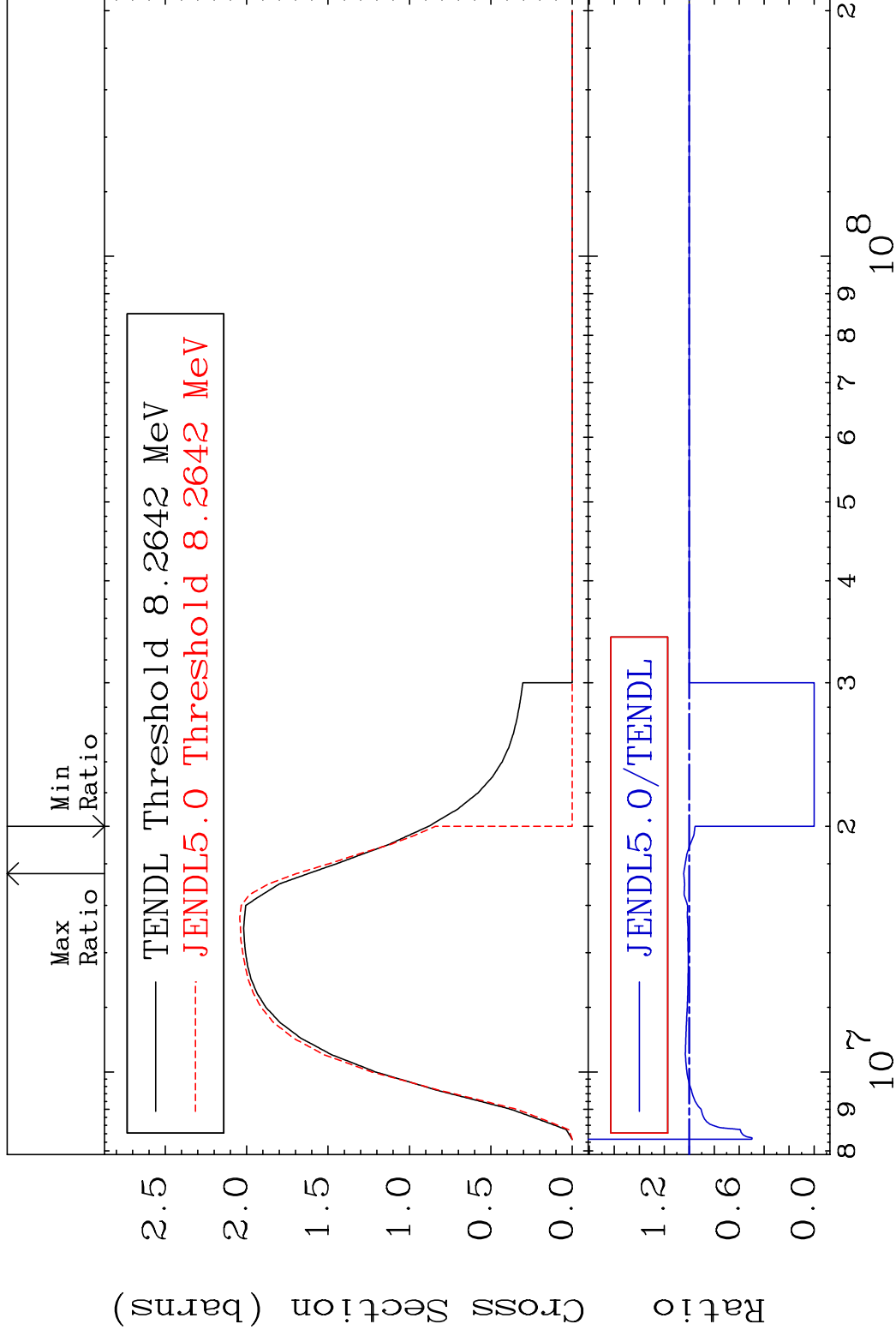
4 Incident Energy (eV) 71-Lu-173

MAT 7119

(n,2n)

71-Lu-173

Cross Section -100.0 To 4.456 %



5

Incident Energy (eV)

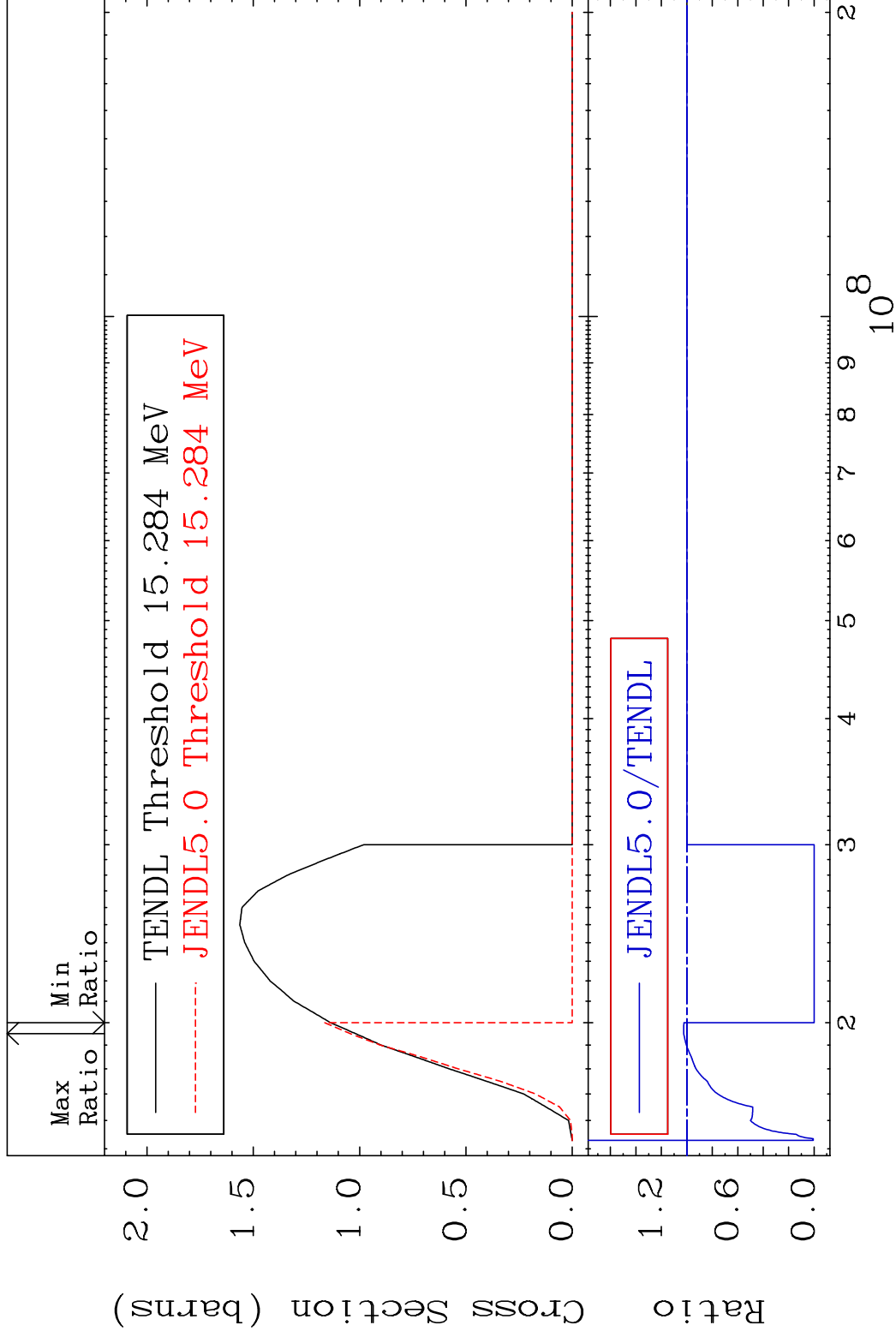
71-Lu-173

MAT 7119

(n,3n)

71-Lu-173

Cross Section -100.0 To 2.486 %



6

Incident Energy (eV)

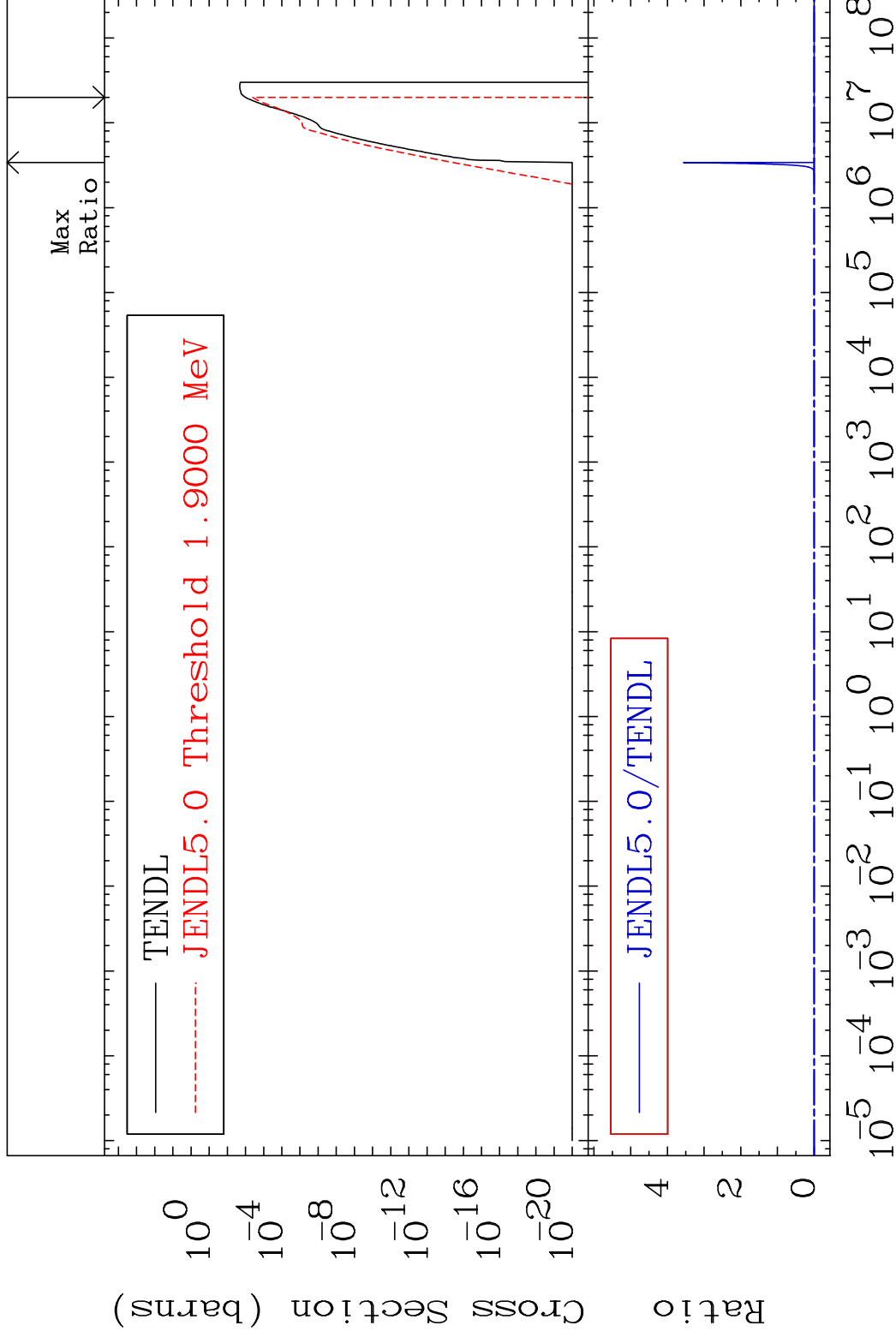
71-Lu-173

MAT 7119

(n, n')  $\alpha$

71-Lu-173

Cross Section -100.0 To 9999. %



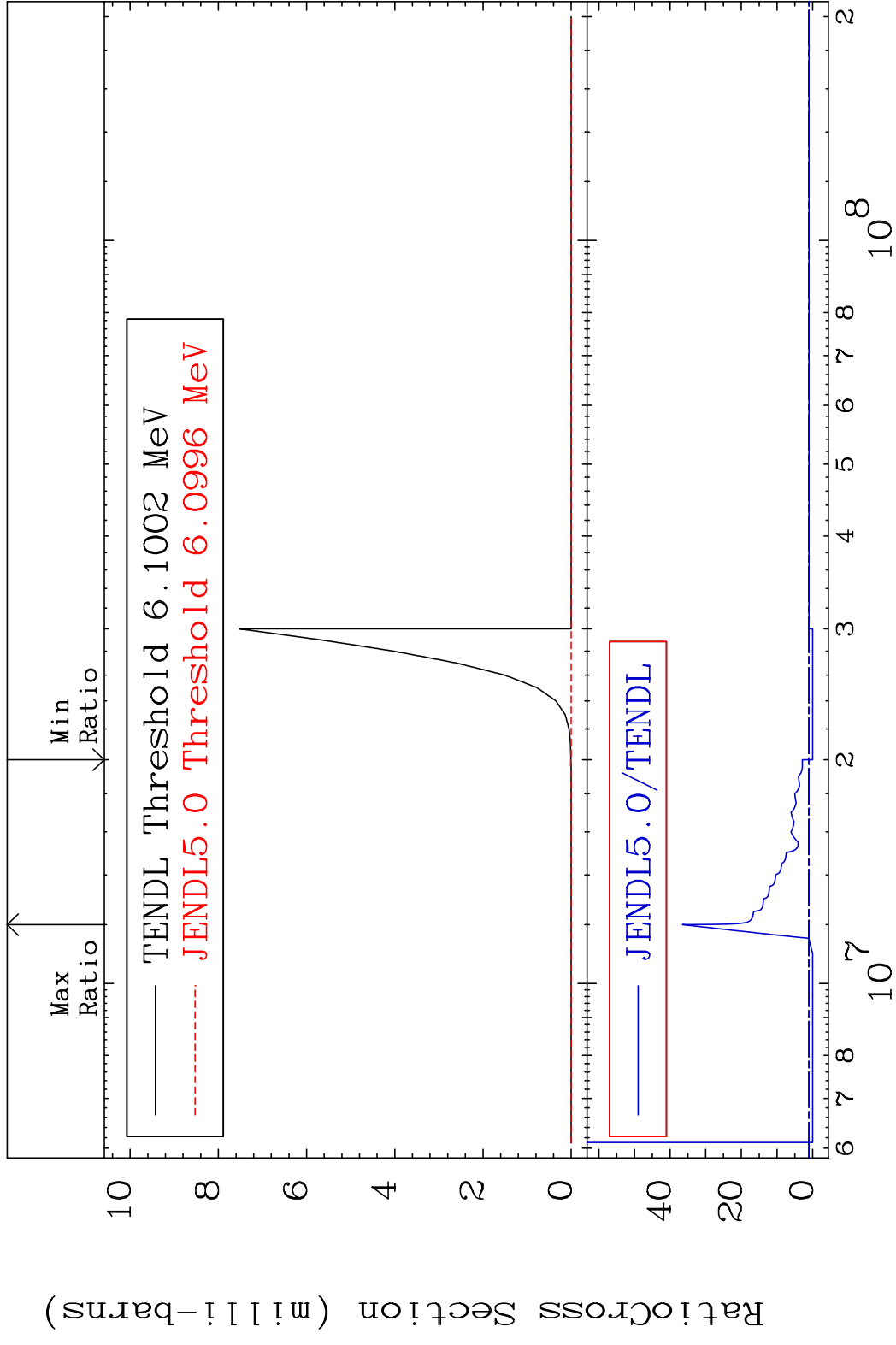
7

Incident Energy (eV)

71-Lu-173



MAT 7119 (n,2n)  $\alpha$  71-Lu-173  
 Cross Section -100.0 To 3557. %

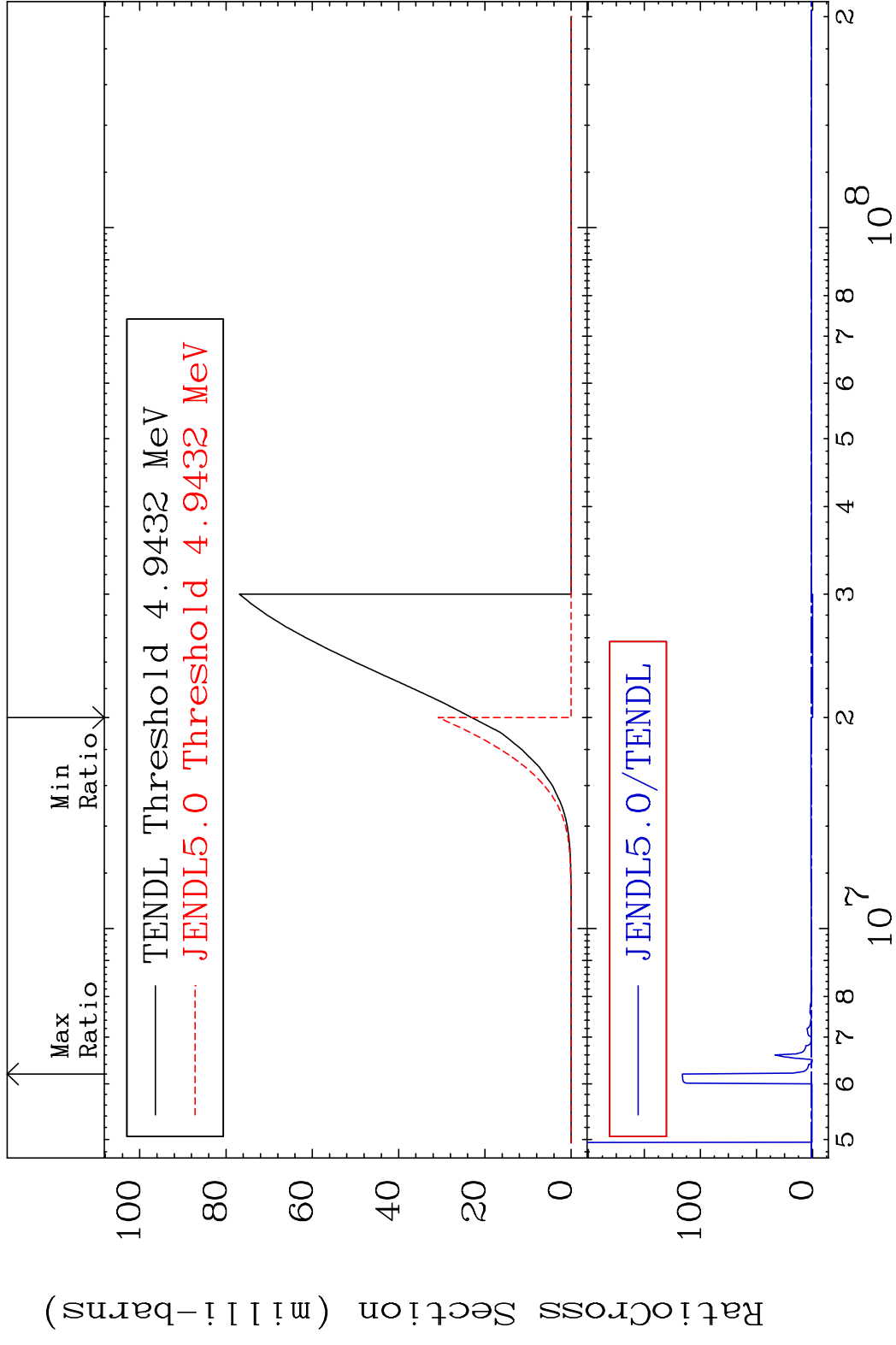


8 Incident Energy (eV) 71-Lu-173

MAT 7119

(n, n') p 71-Lu-173

Cross Section -100.0 To 9999. %



9

Incident Energy (eV)

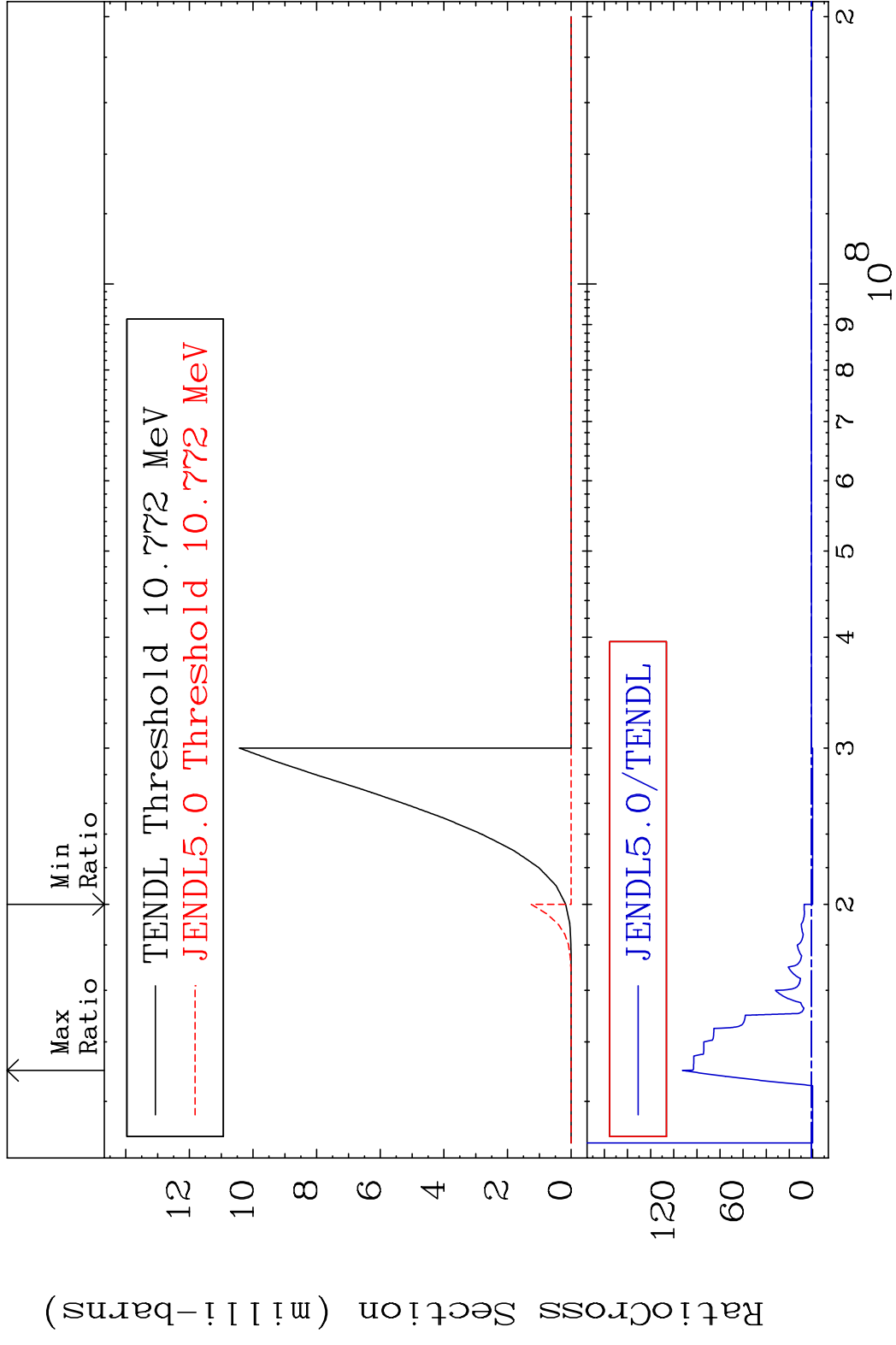
71-Lu-173

MAT 7119

(n, n') d

71-Lu-173

Cross Section -100.0 To 9999. %

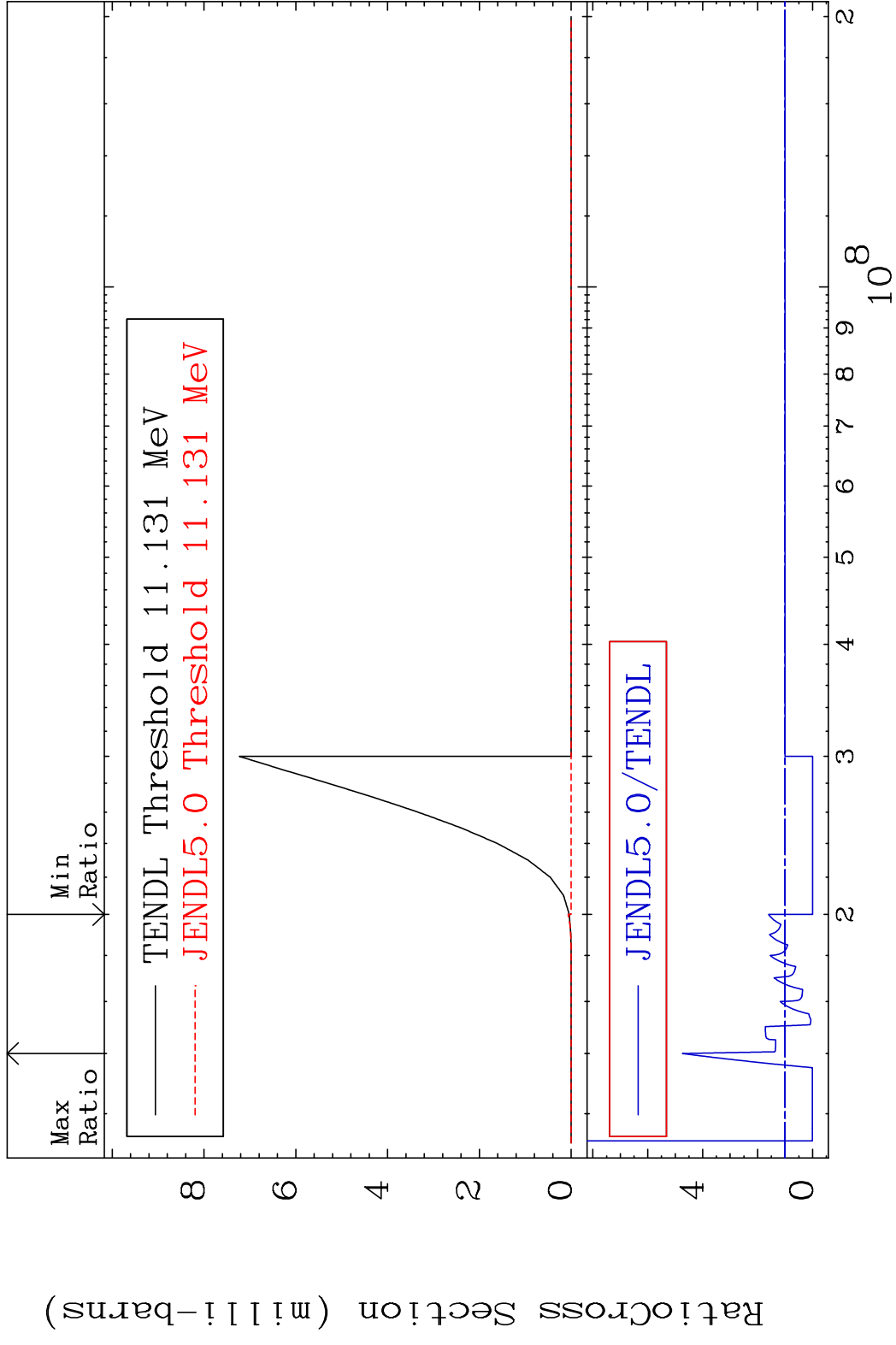


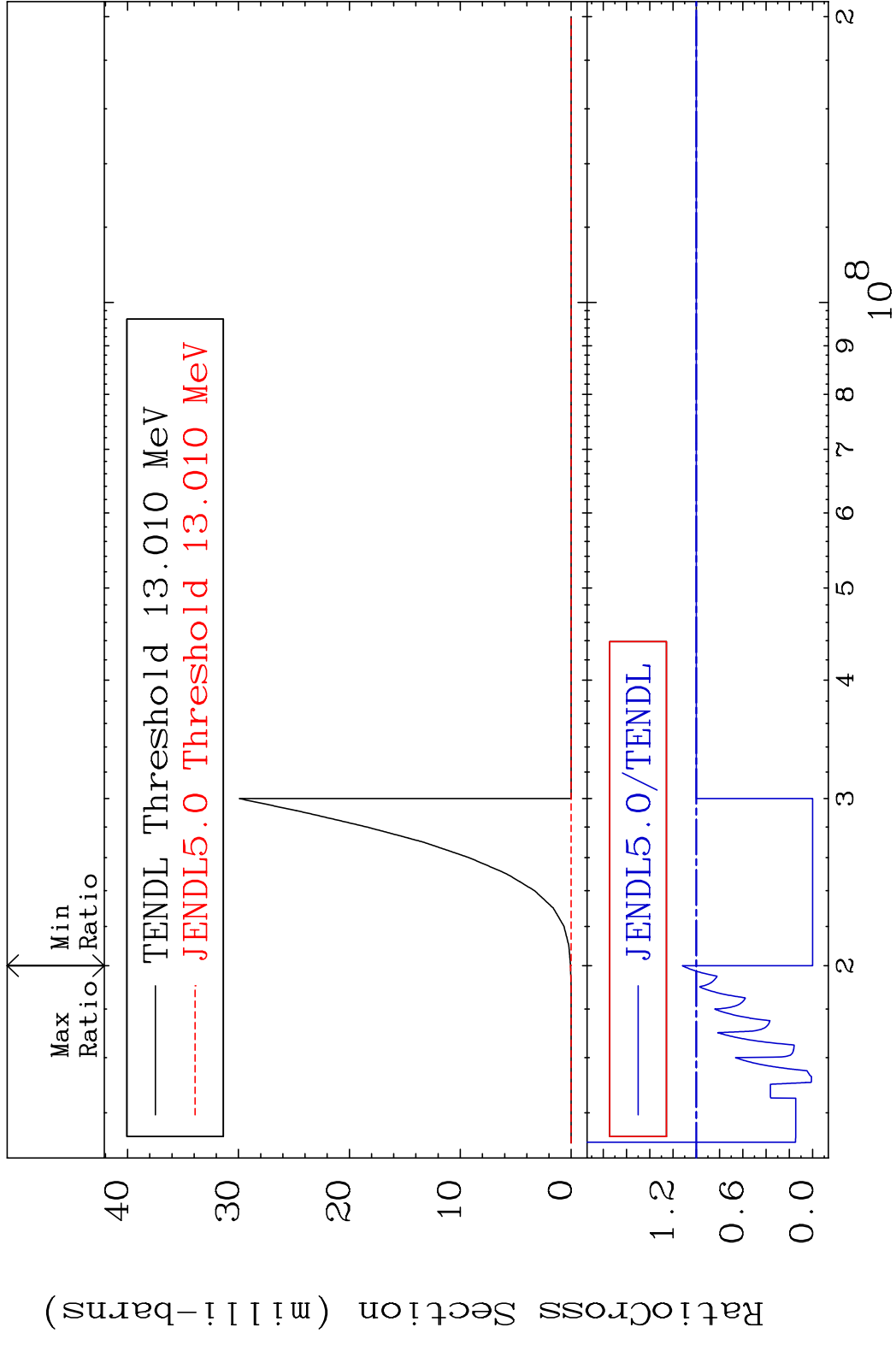
10

Incident Energy (eV)

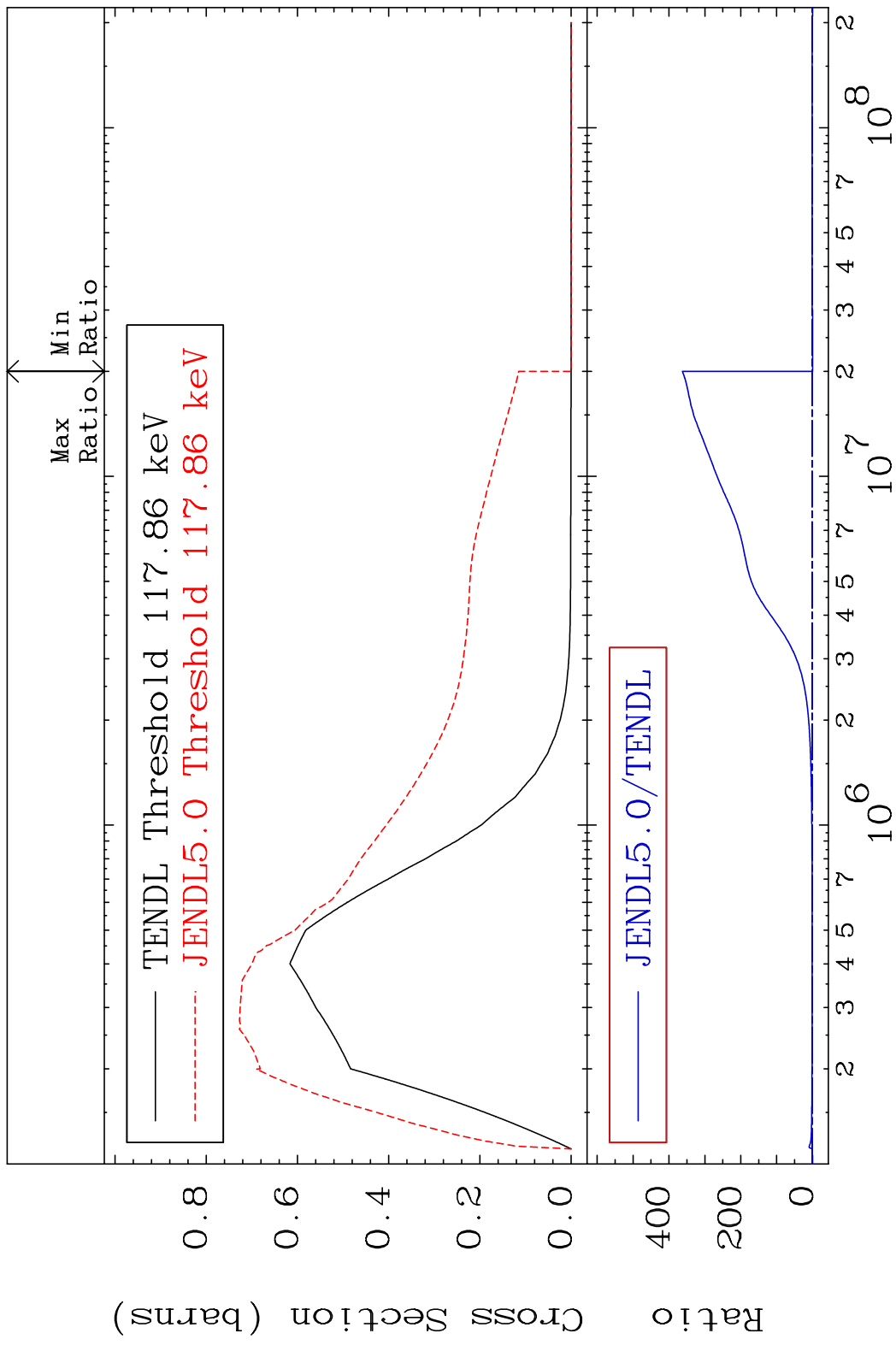
71-Lu-173

MAT 7119 (n, n') t 71-Lu-173  
 Cross Section -100.0 To 374.1 %

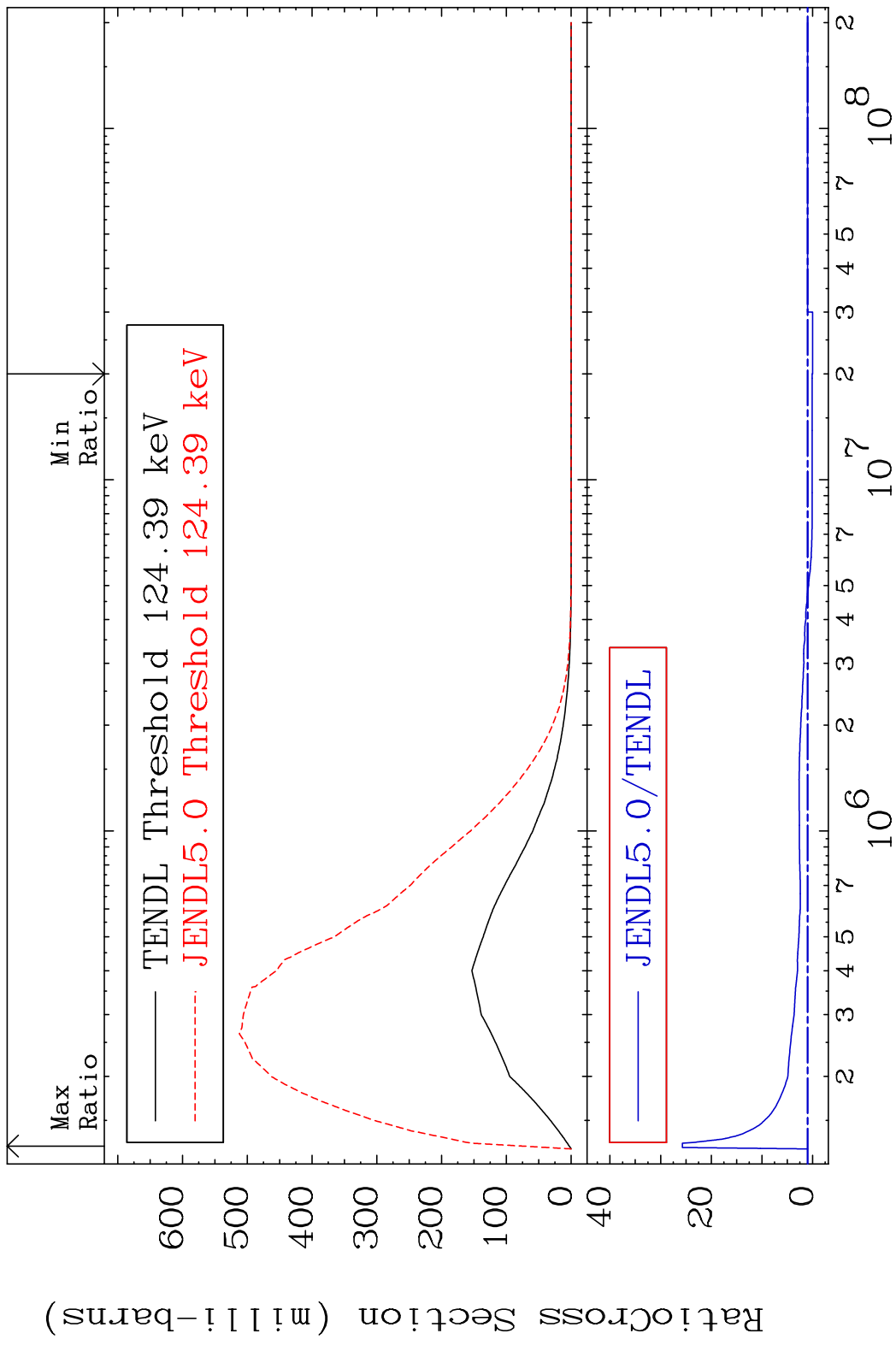




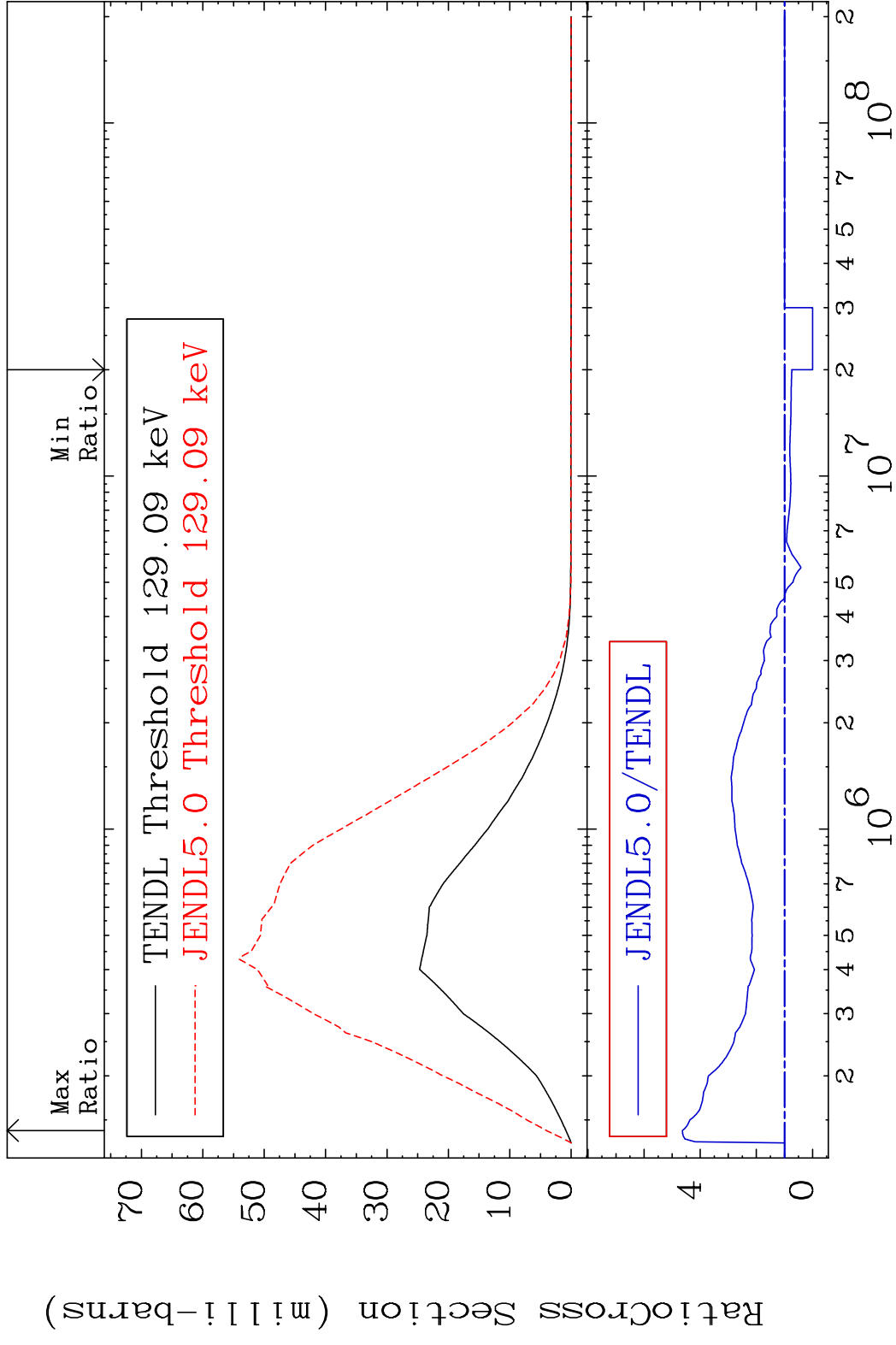
MAT 7119 MT= 51 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 9999. %



MAT 7119      MT= 52 (n, n') Level      71-Lu-173  
 Cross Section    -100.0 To 2471. %

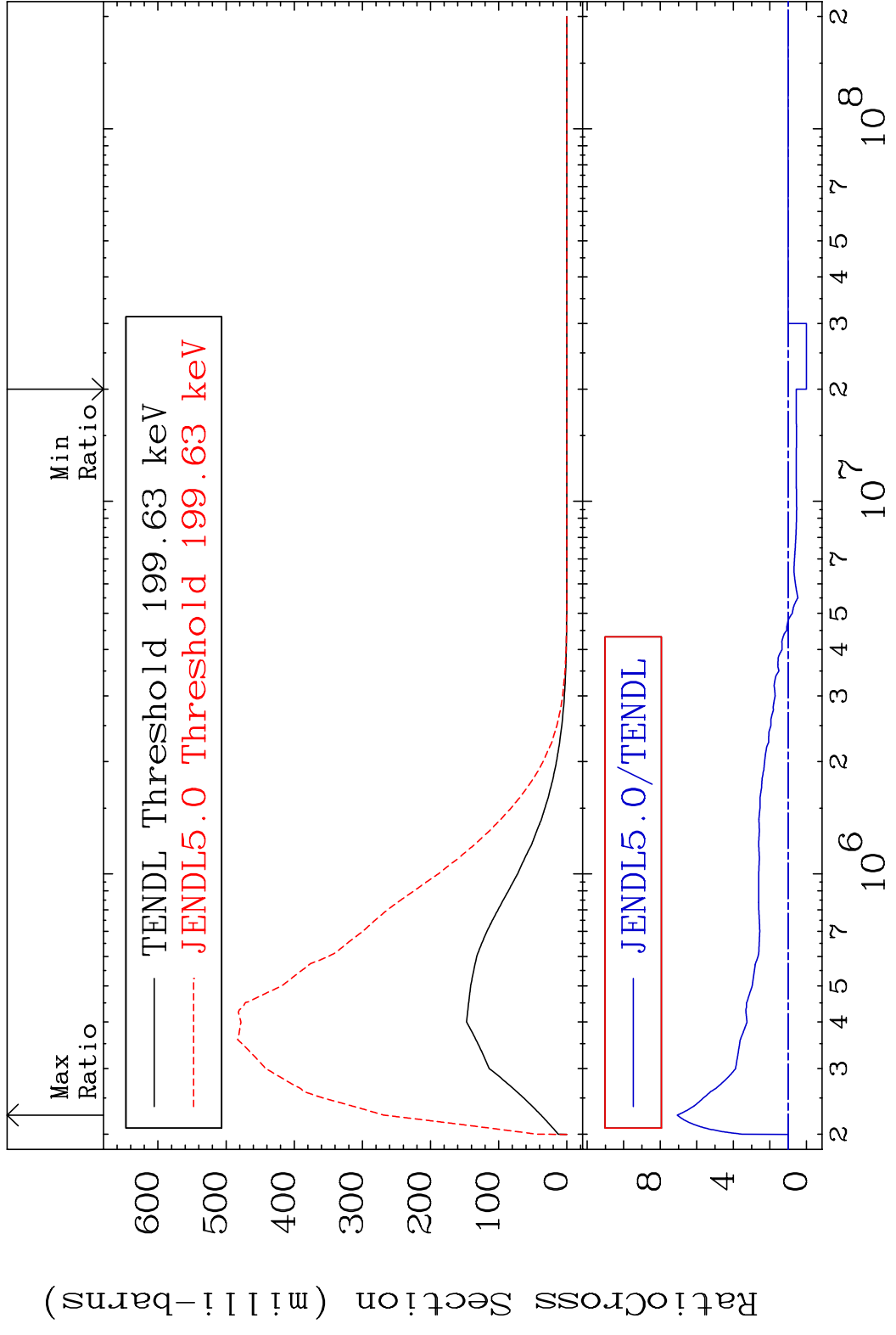


MAT 7119 MT= 53 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 363.6 %

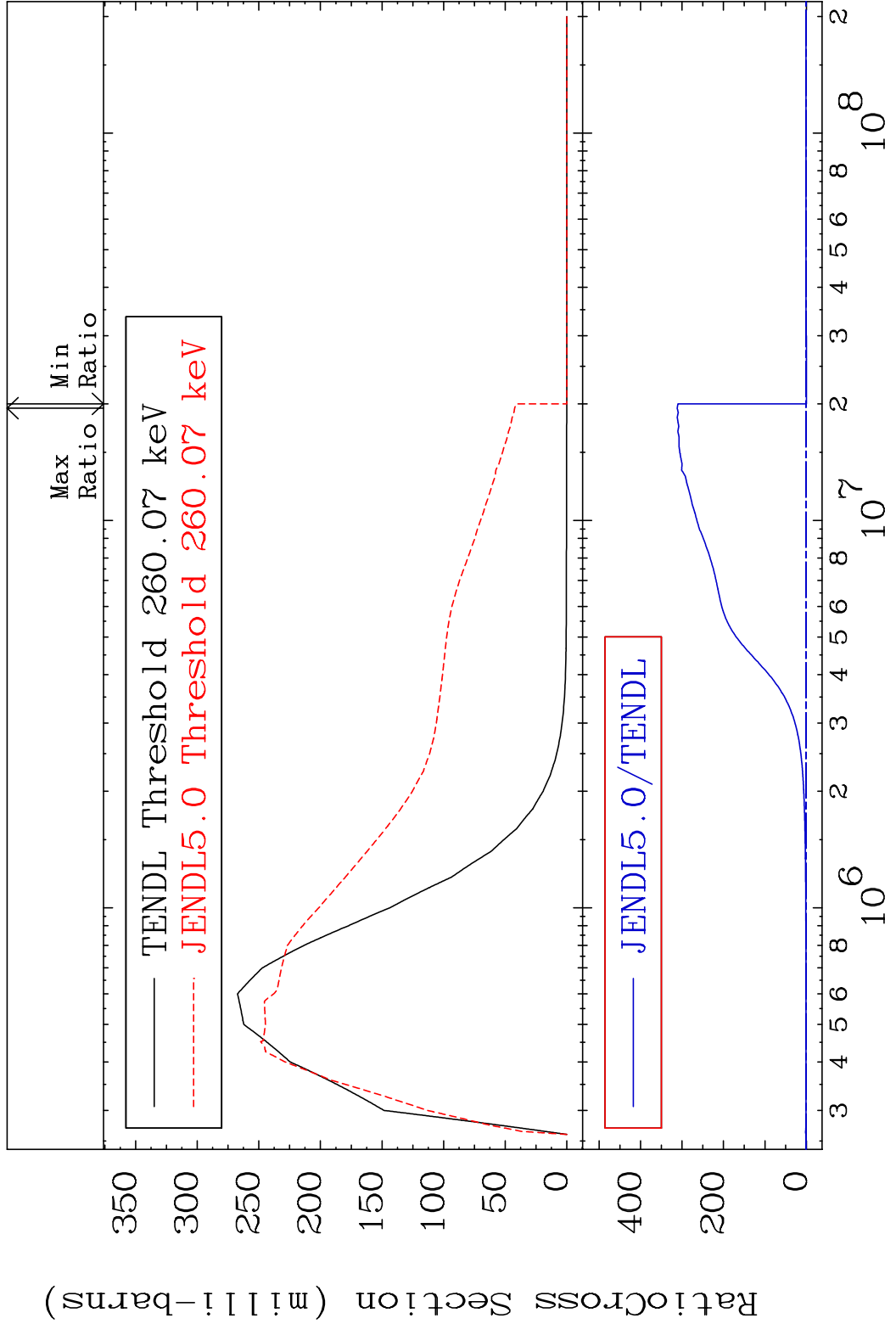




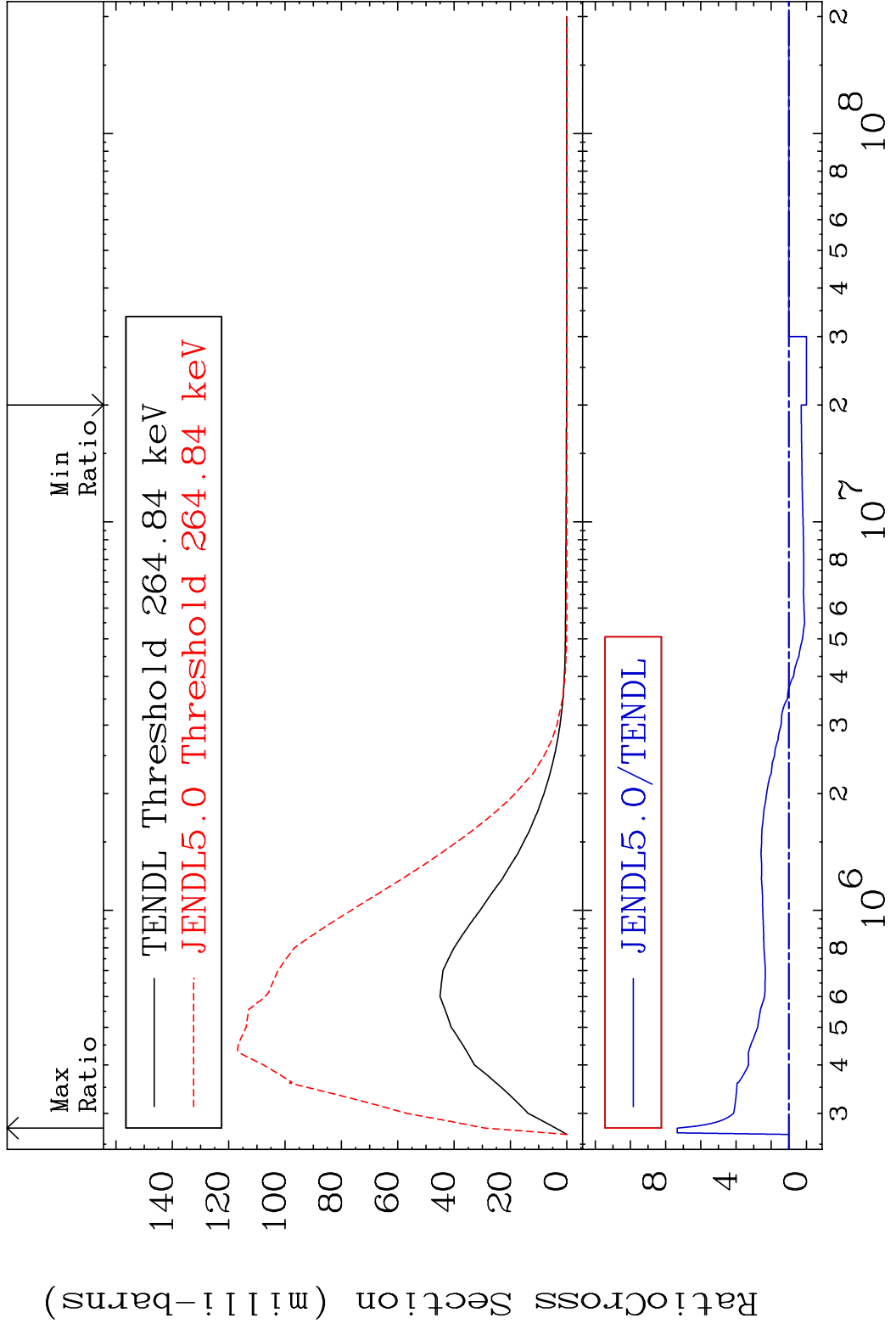
MAT 7119 MT= 54 (n,n') Level 71-Lu-173  
 Cross Section -100.0 To 607.2 %



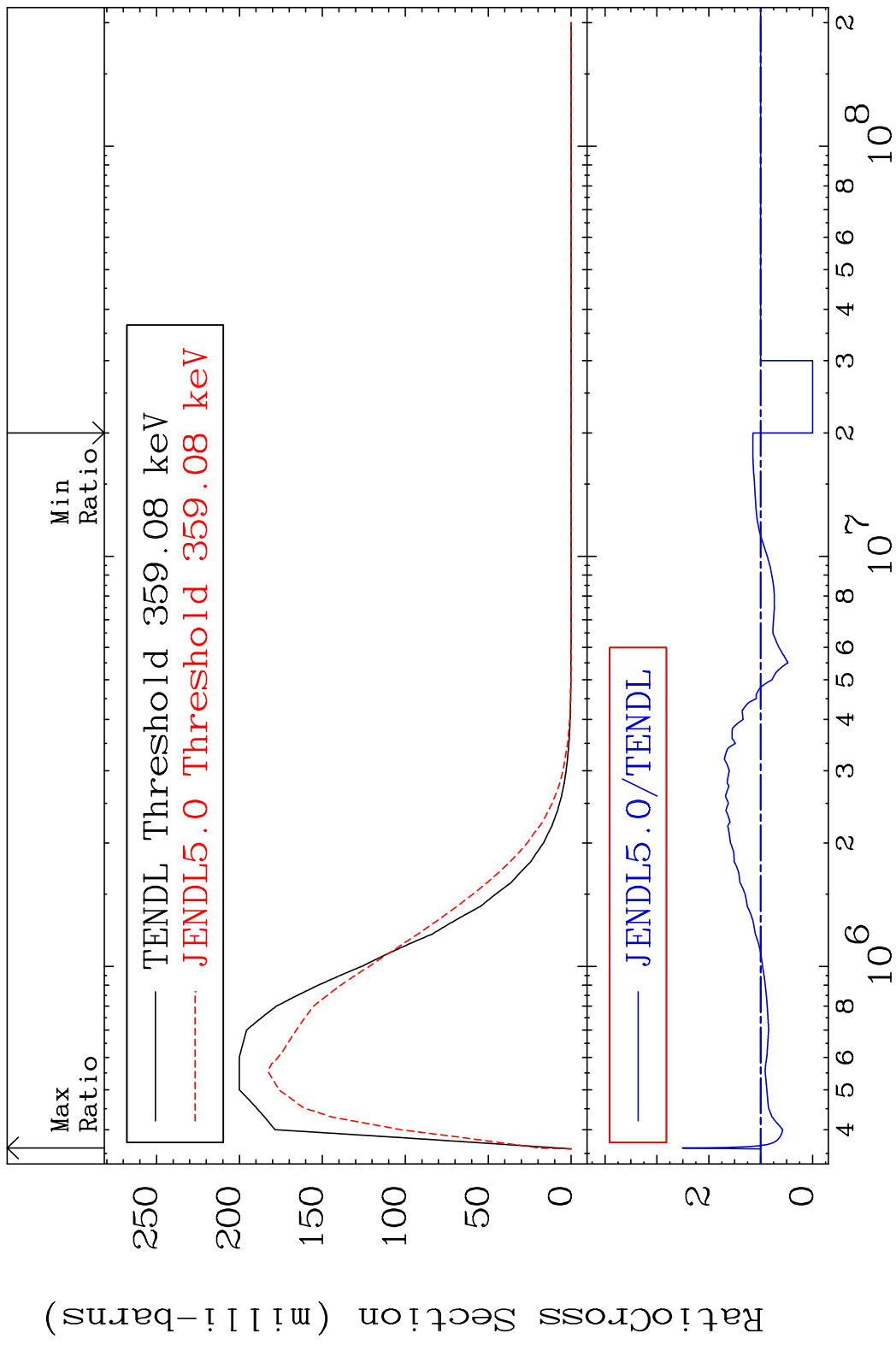
MAT 7119 MT= 55 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 9999. %



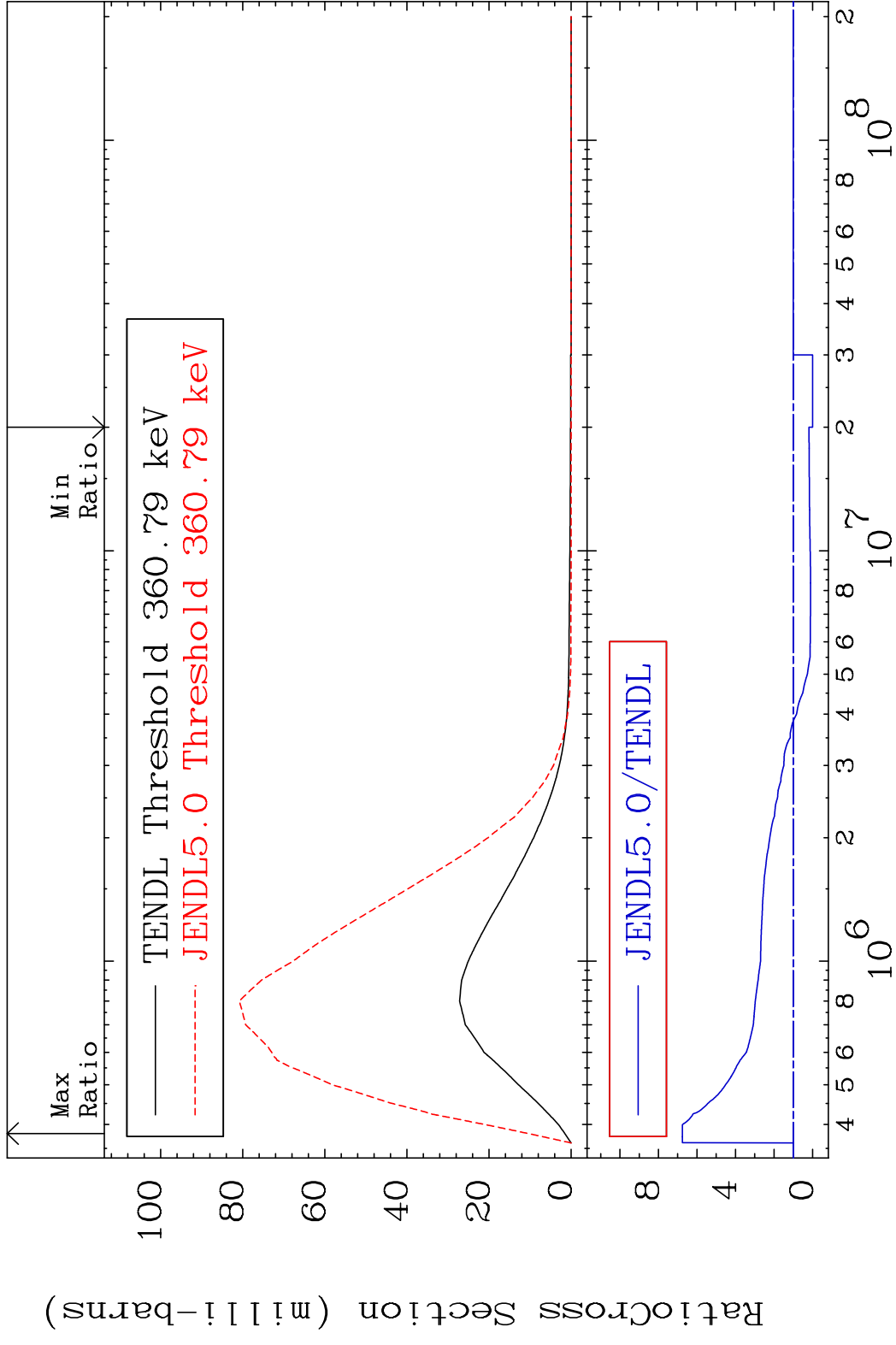
MAT 7119 MT= 56 (n,n') Level 71-Lu-173  
 Cross Section -100.0 To 634.5 %



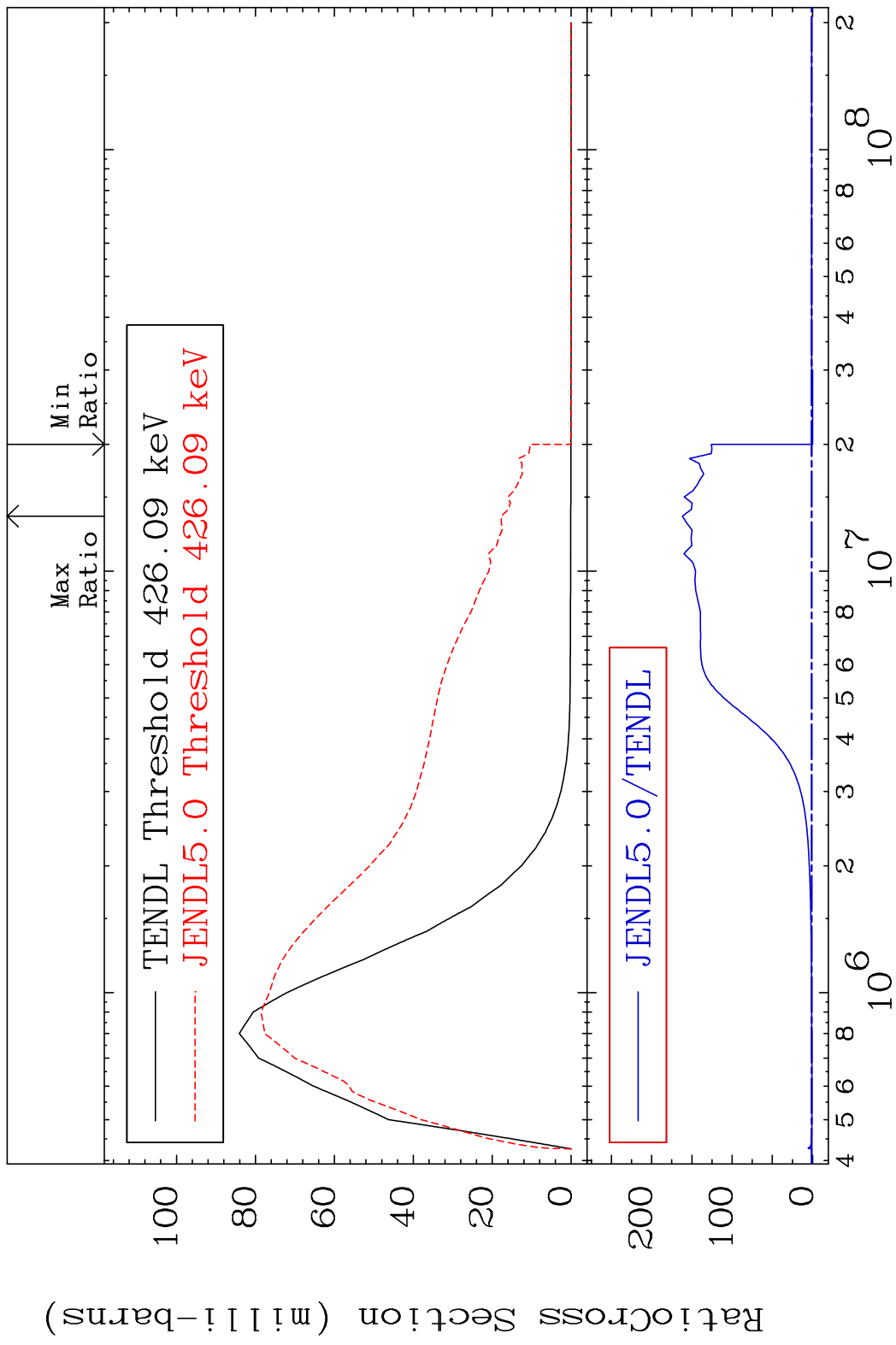
MAT 7119 MT= 57 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 150.9 %



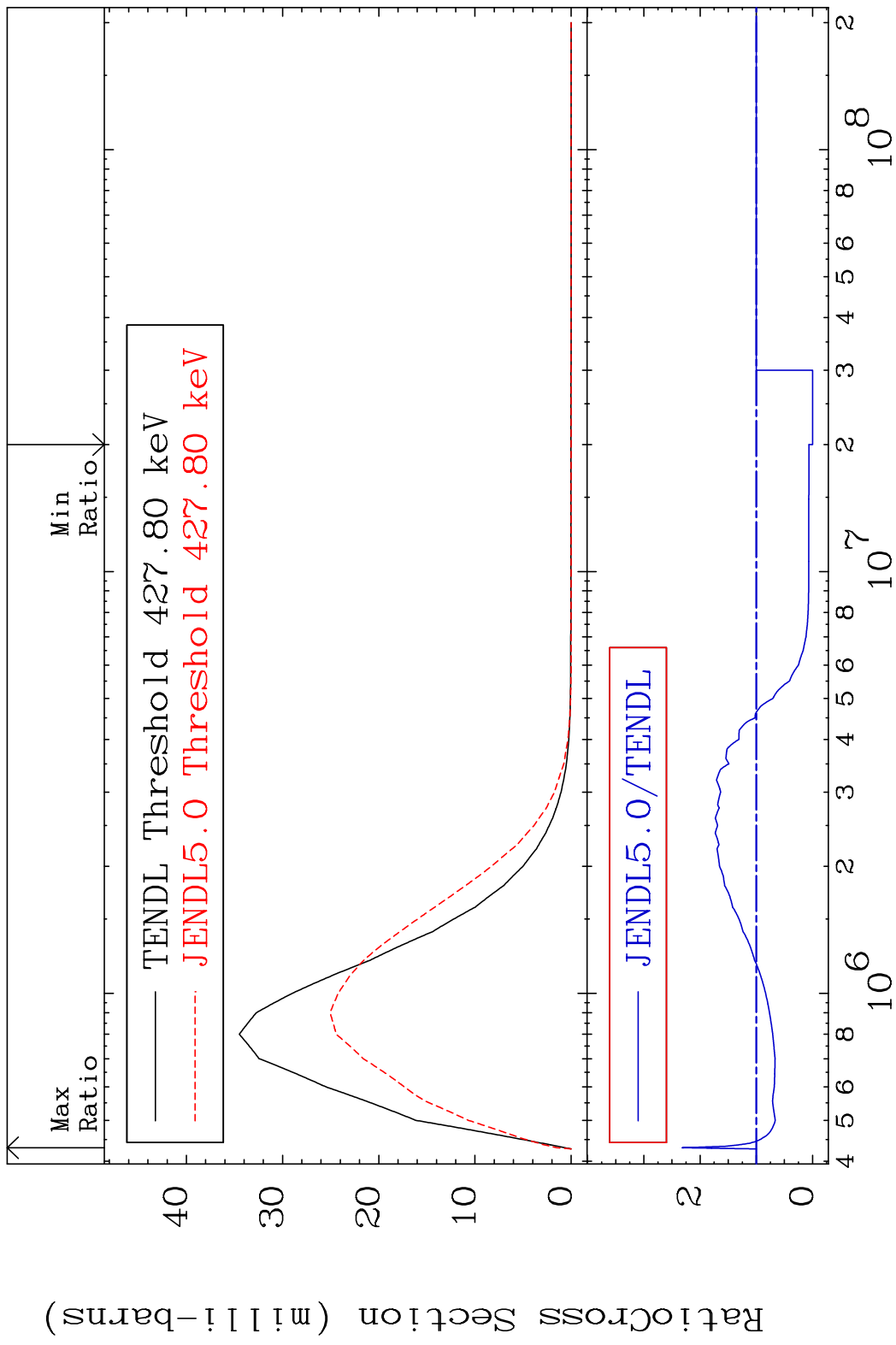
MAT 7119 MT= 58 (n,n') Level 71-Lu-173  
 Cross Section -100.0 To 575.9 %



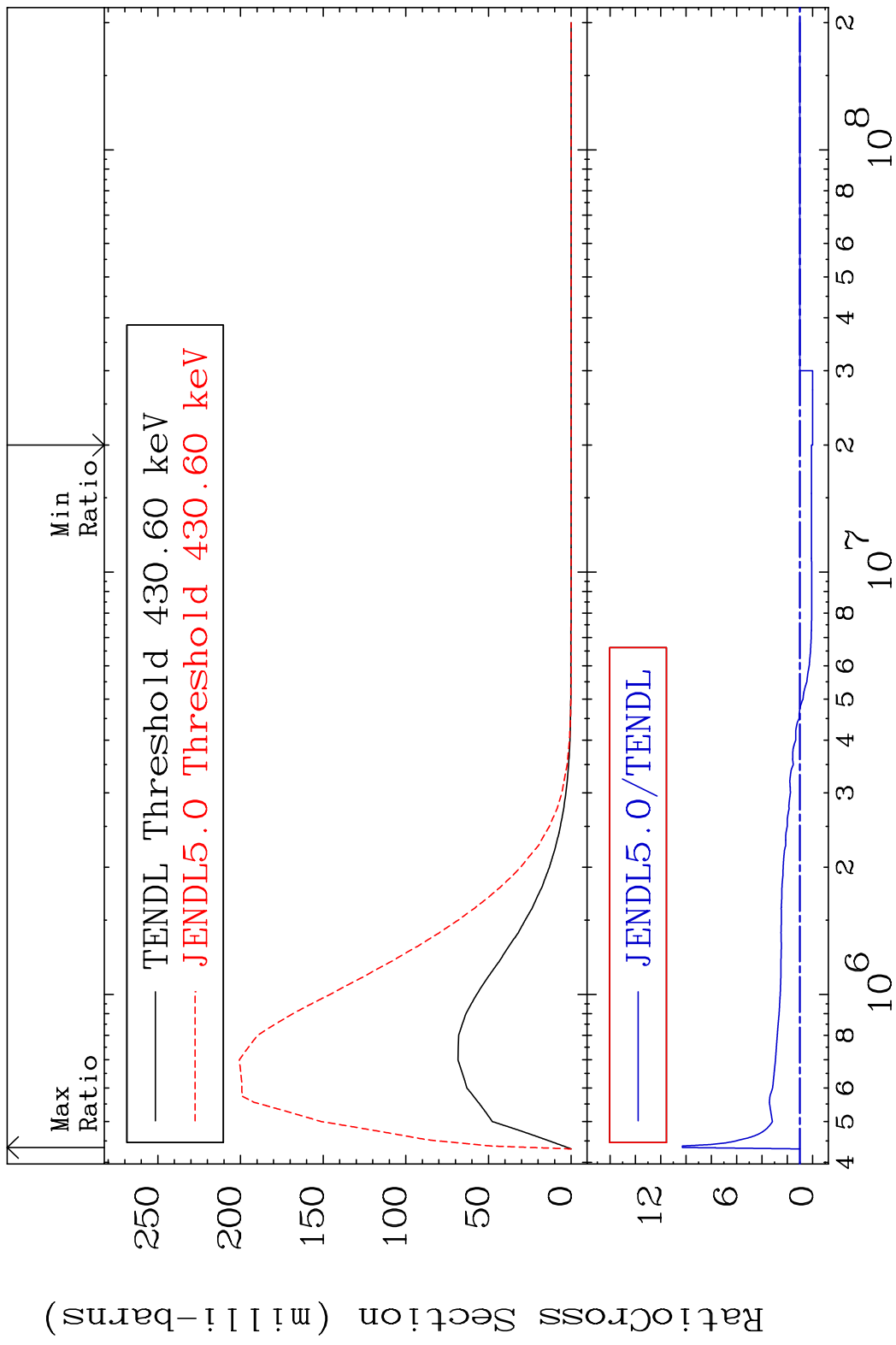
MAT 7119 MT= 59 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 9999. %



MAT 7119 MT= 60 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 131.5 %

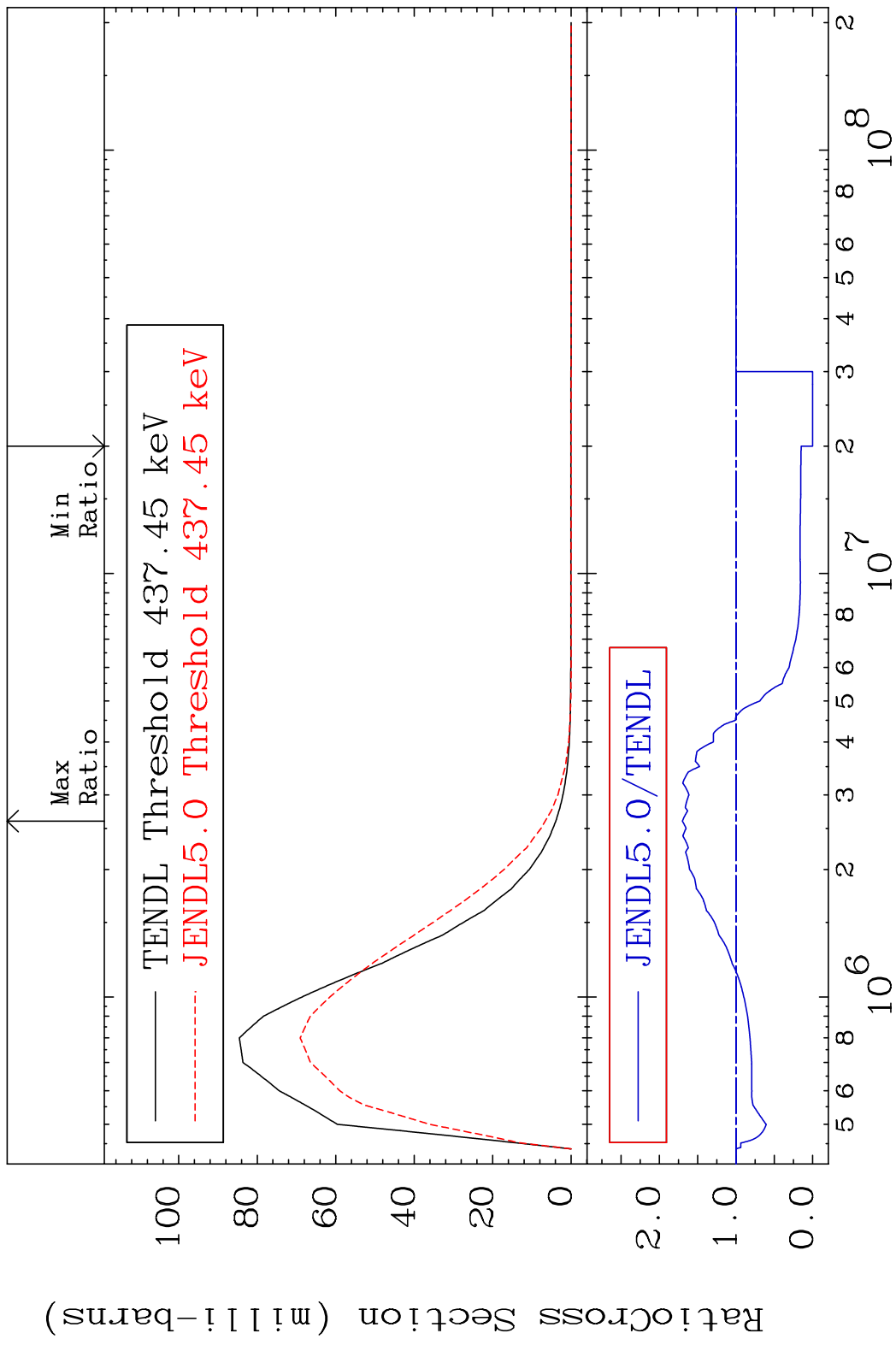


MAT 7119 MT= 61 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 928.9 %

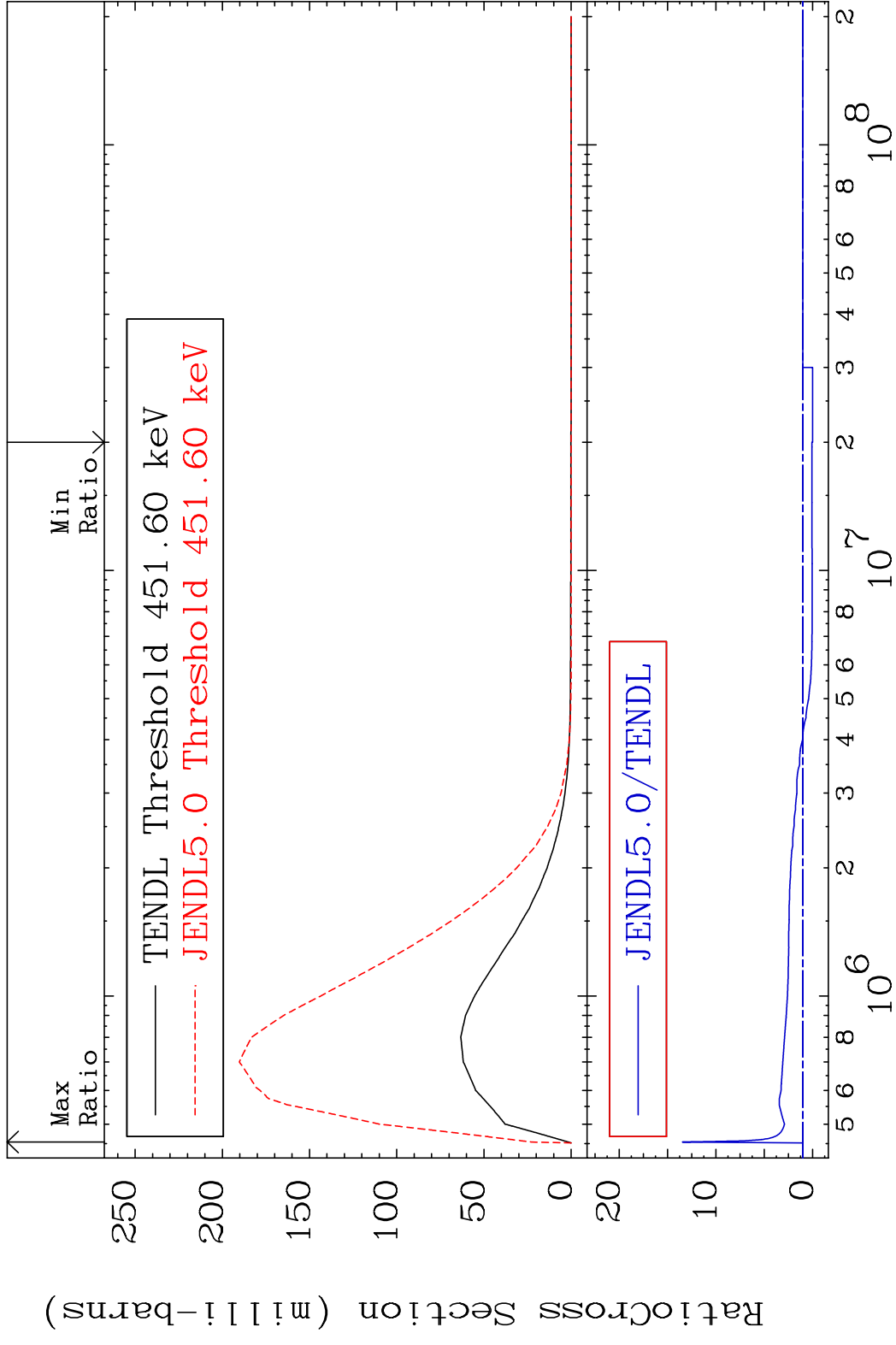




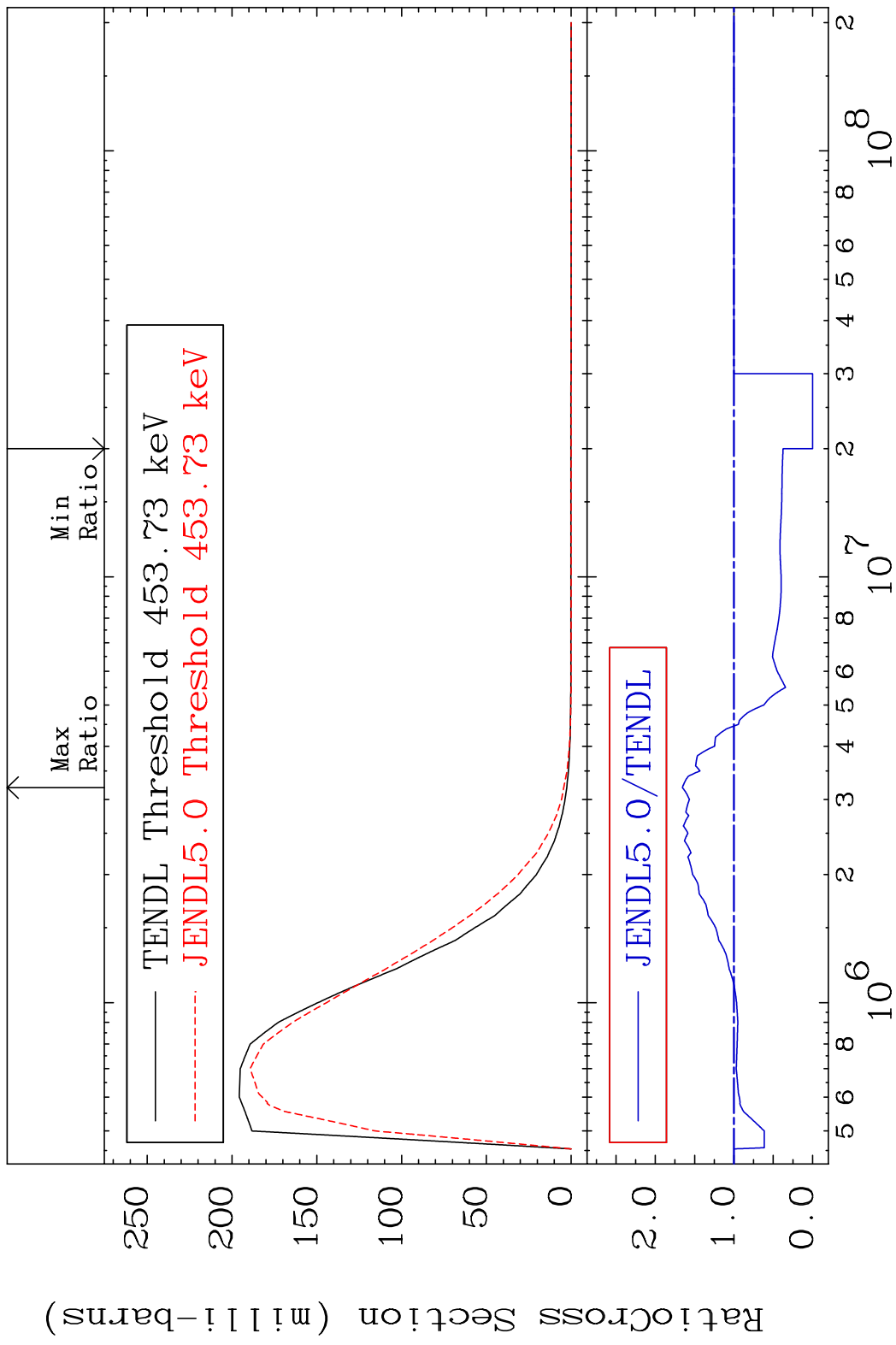
MAT 7119 MT= 62 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 69.89 %



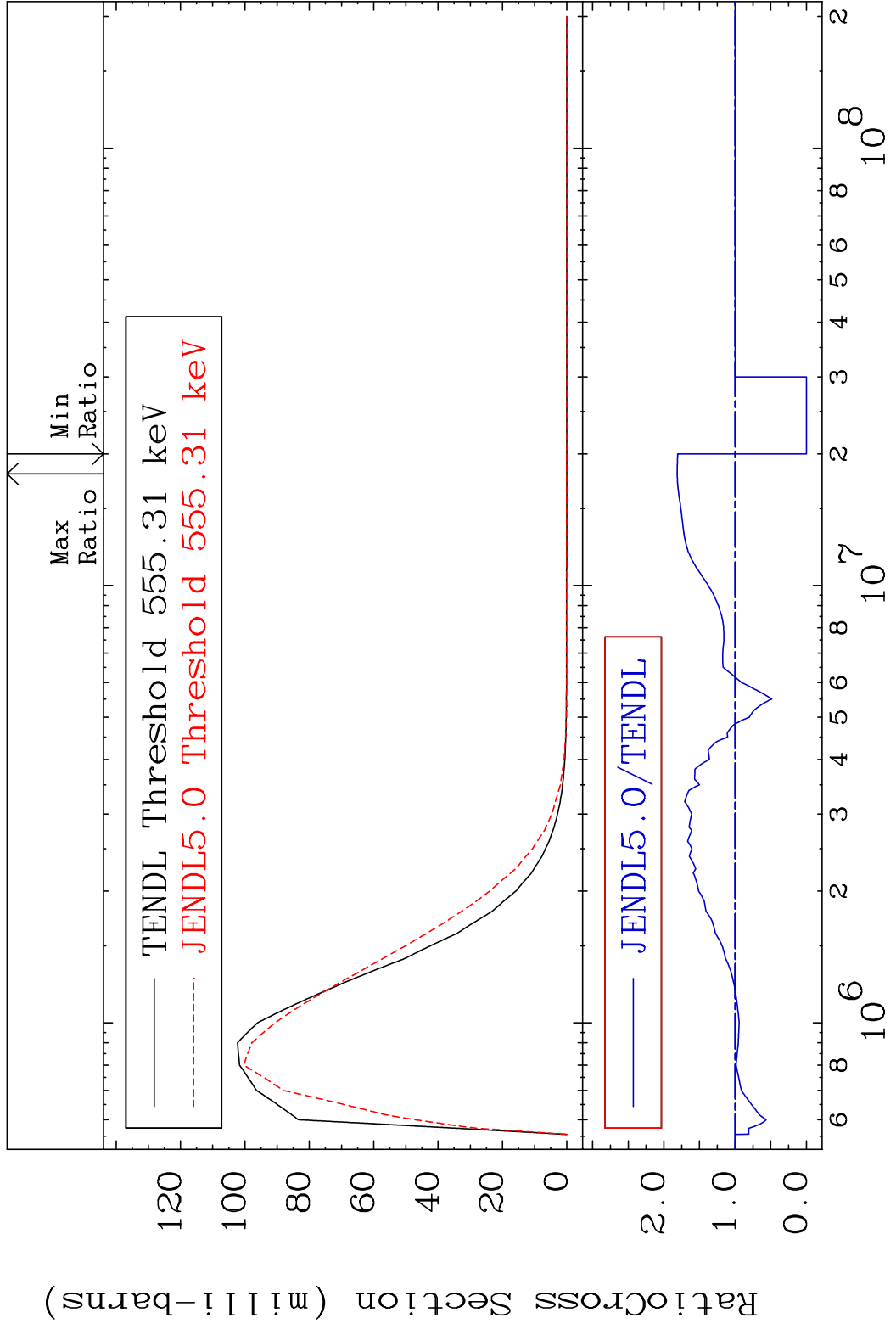
MAT 7119 MT= 63 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 1247. %



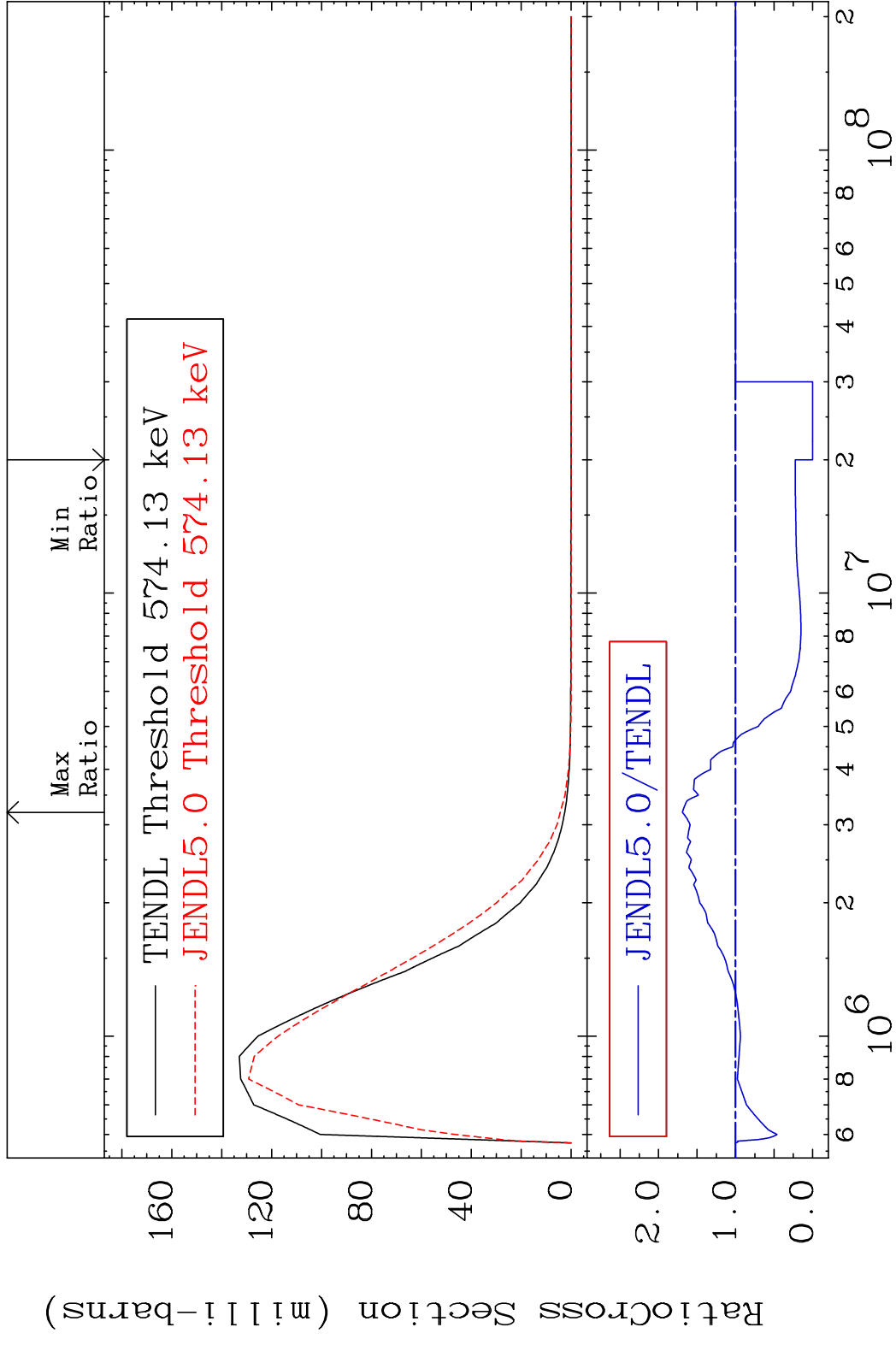
MAT 7119 MT= 64 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 65.57 %



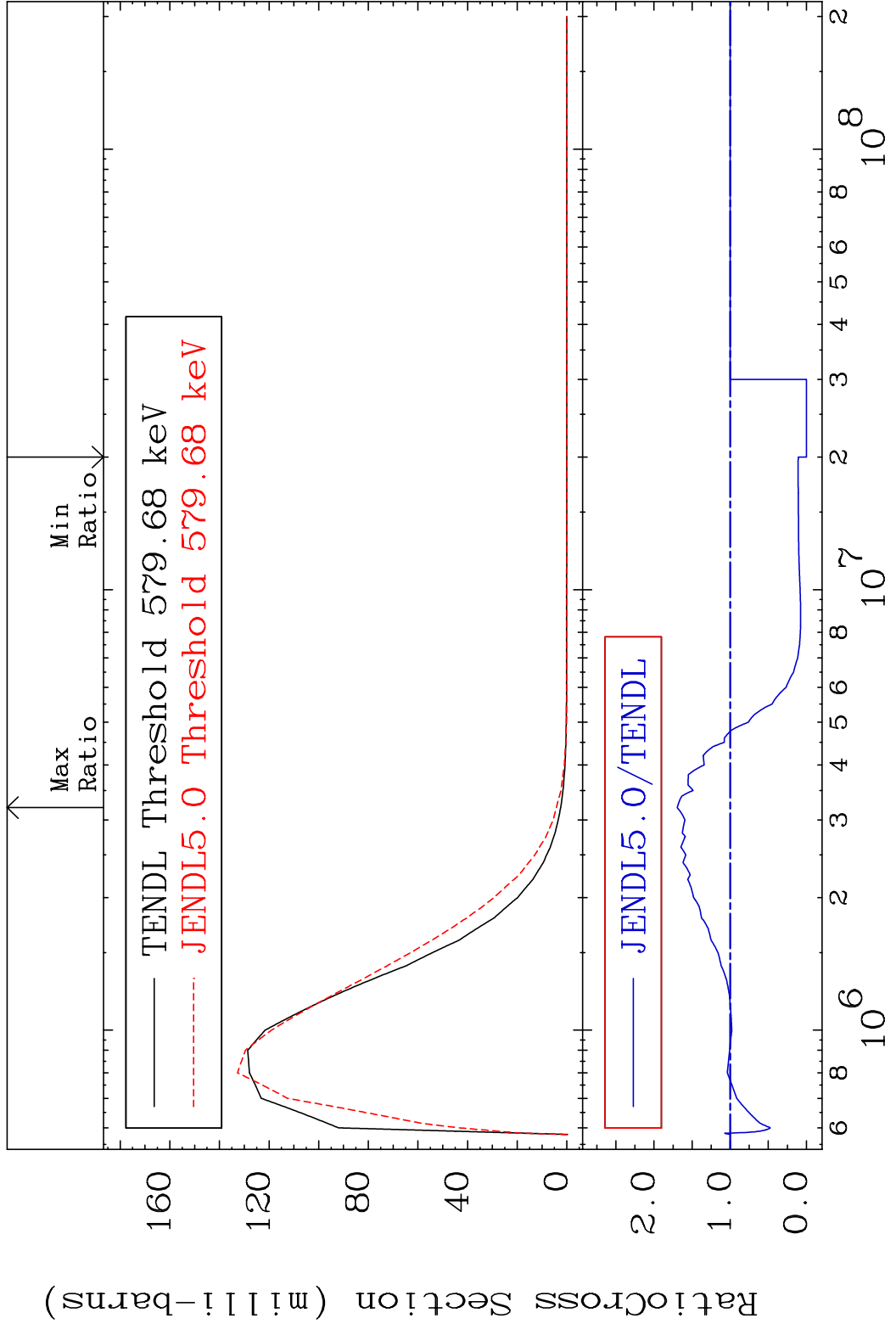
MAT 7119 MT= 65 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 81.33 %



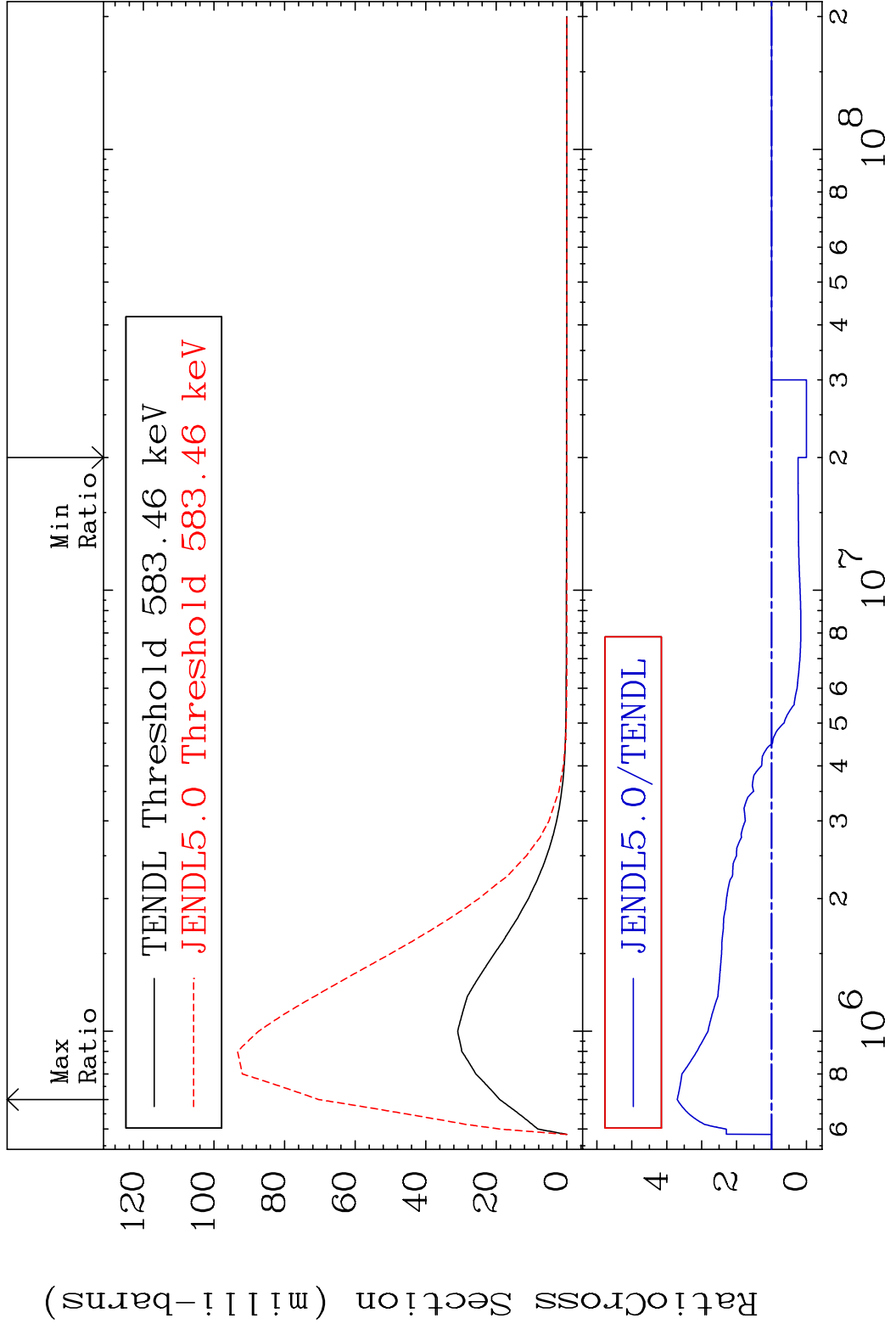
MAT 7119 MT= 66 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 69.07 %



MAT 7119 MT= 67 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 69.56 %



MAT 7119 MT= 68 (n, n') Level 71-Lu-173  
 Cross Section -100.0 To 270.1 %

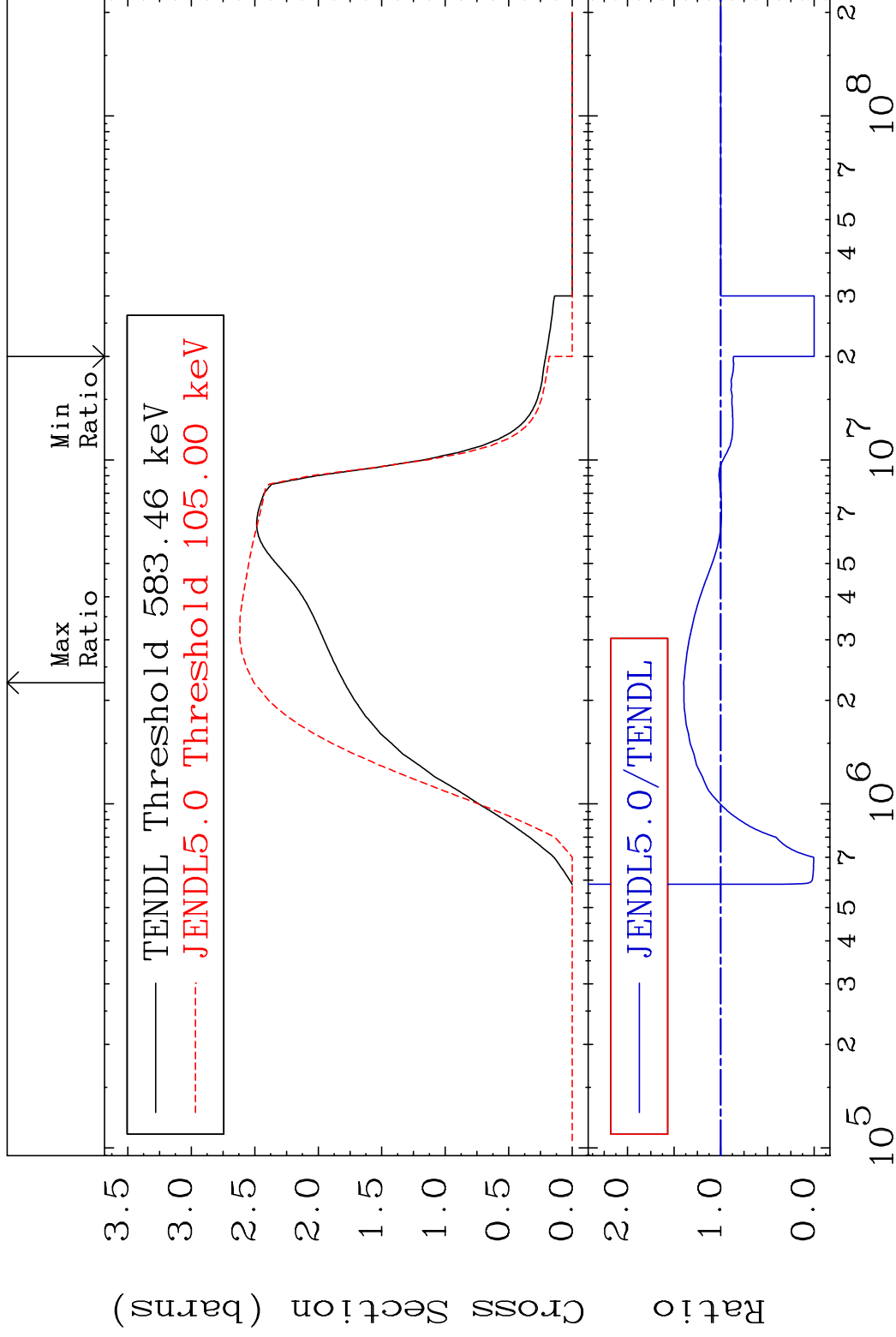


MAT 7119

(n, n') Continuum

71-Lu-173

Cross Section -100.0 To 39.77 %



31

Incident Energy (eV)

71-Lu-173

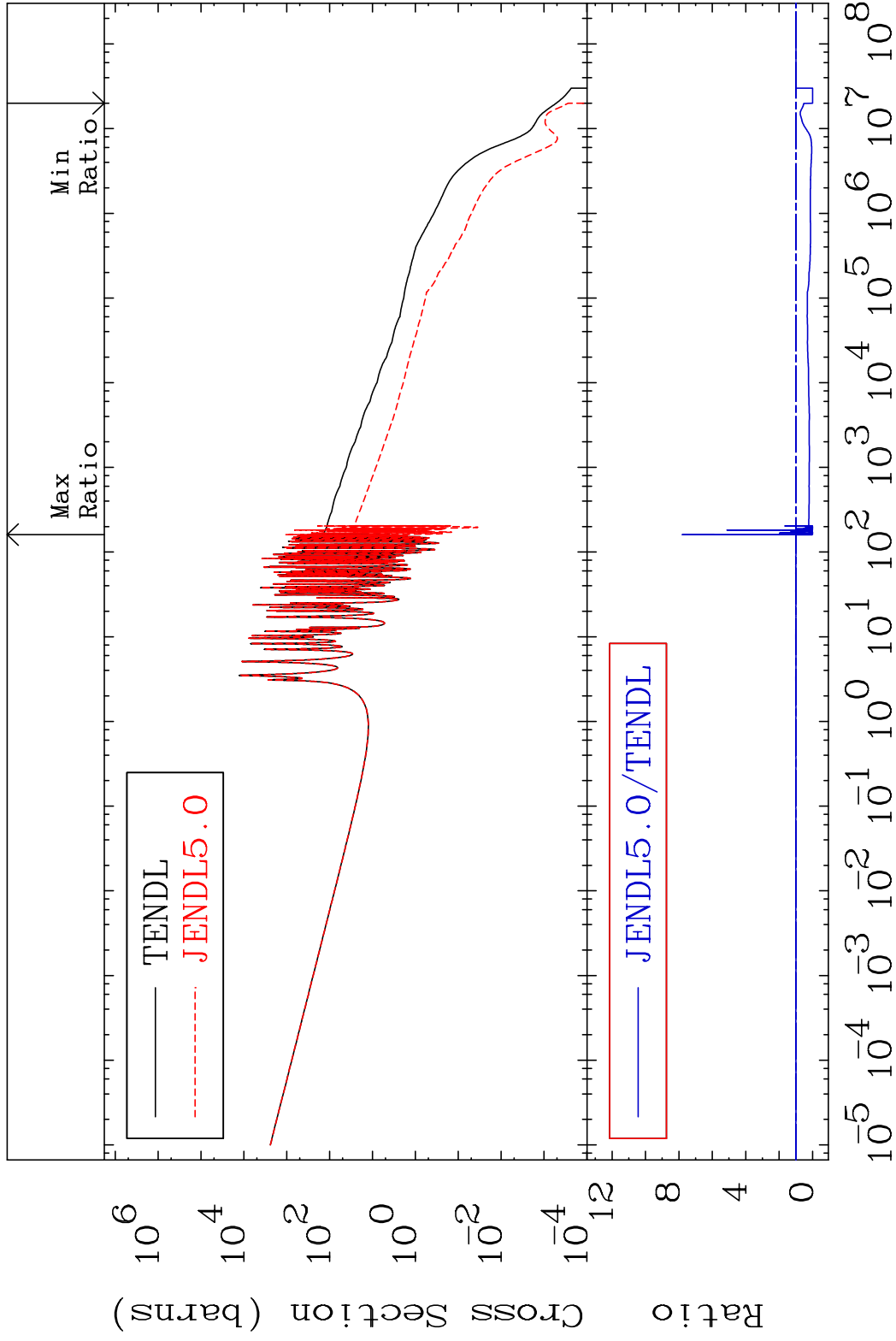


MAT 7119

(n,  $\gamma$ )

71-Lu-173

Cross Section -100.0 To 679.3 %



32

Incident Energy (eV)

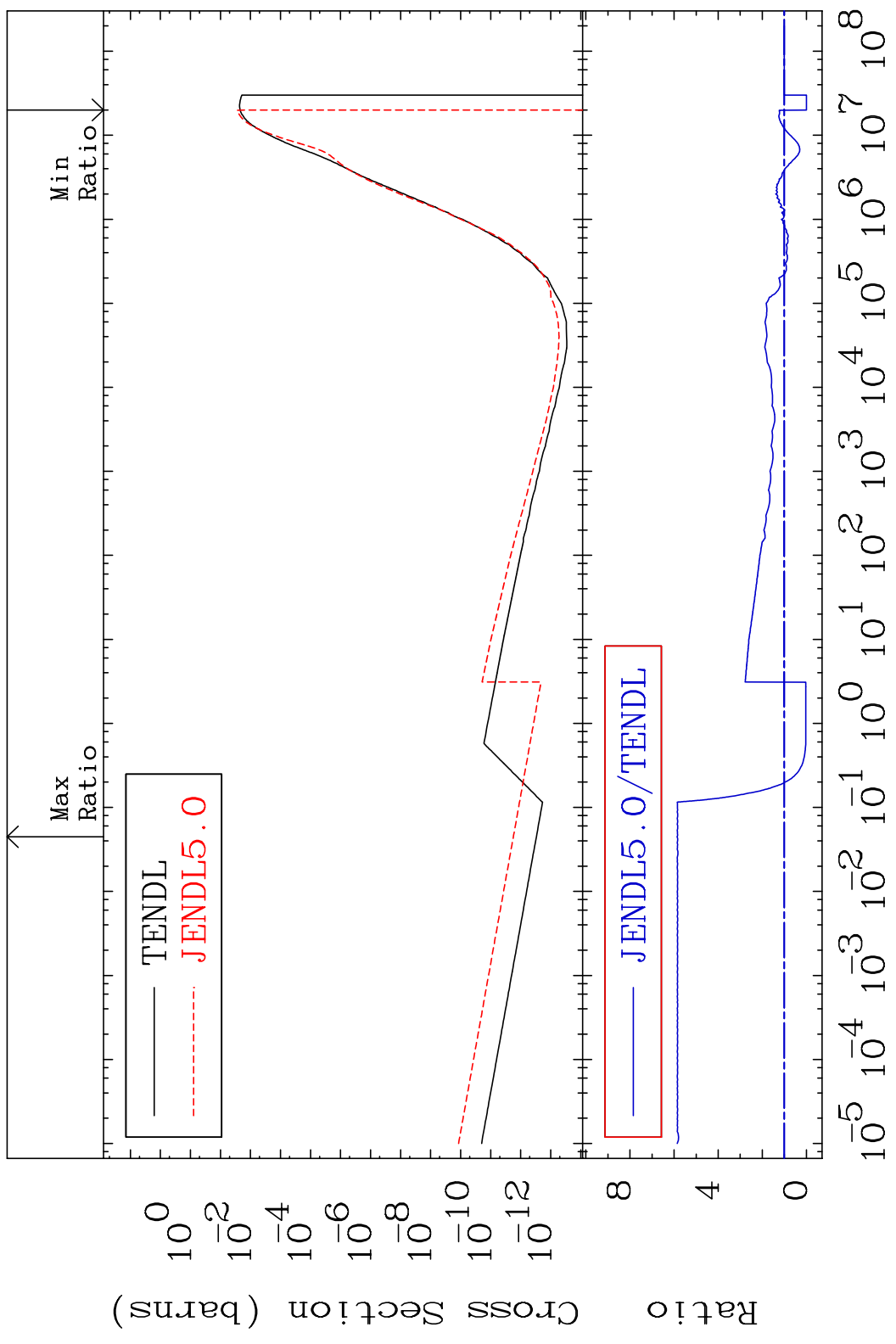
71-Lu-173

MAT 7119

(n,p)

71-Lu-173

Cross Section -100.0 To 485.9 %

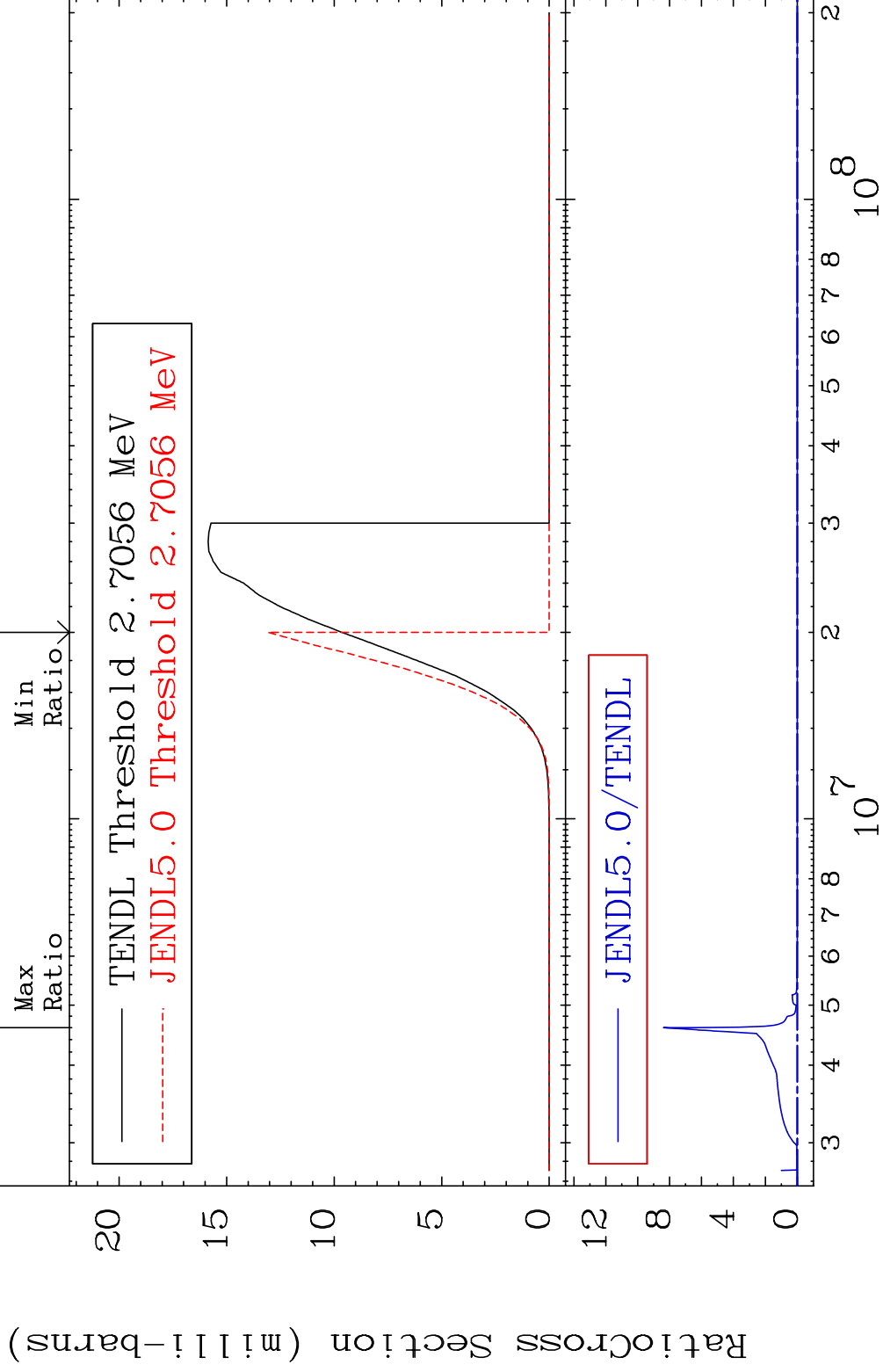


MAT 7119

(n,d)

71-Lu-173

Cross Section -100.0 To 9999. %

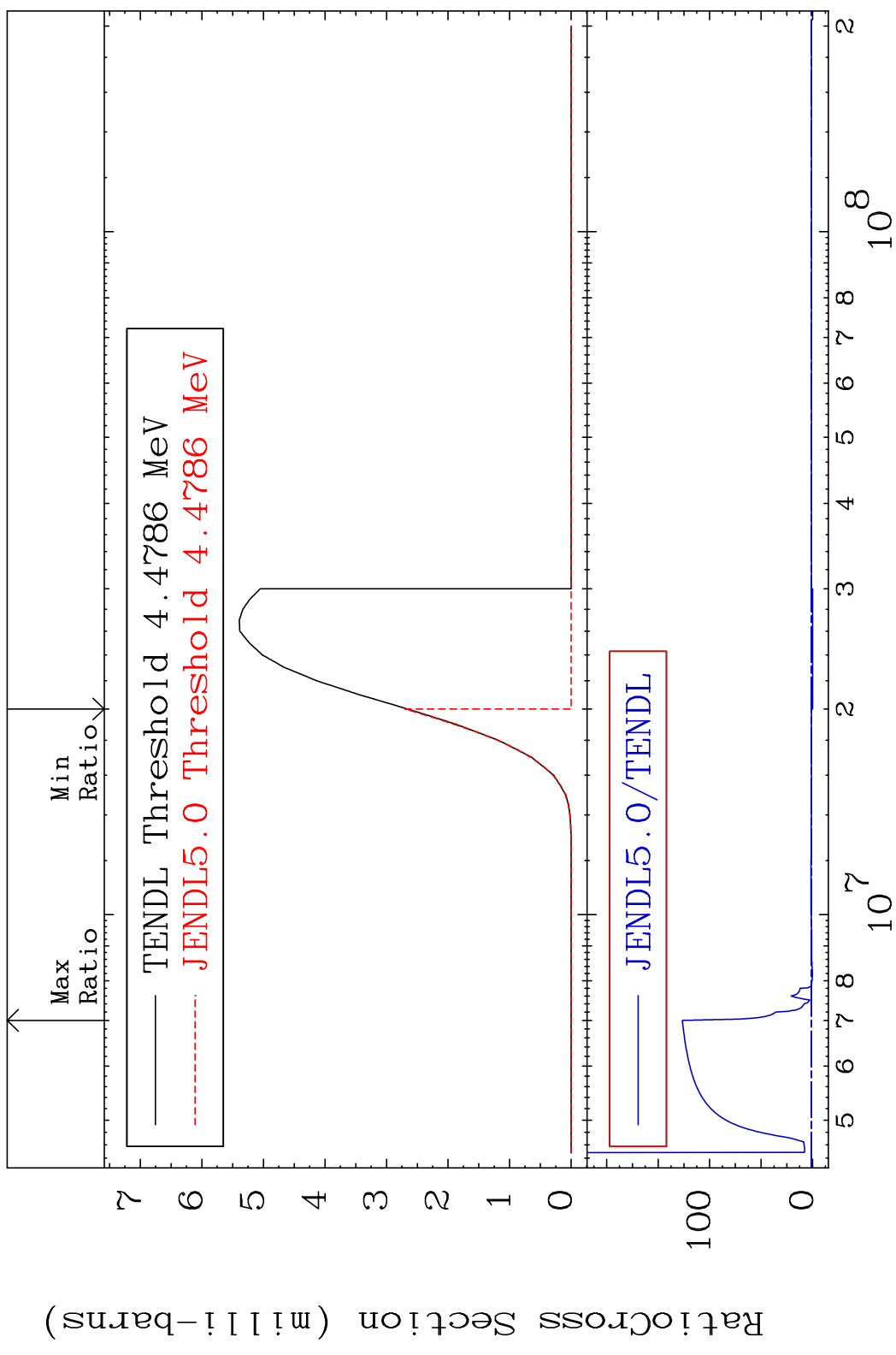


34

Incident Energy (eV)

71-Lu-173

Cross Section -100.0 To 9999. %

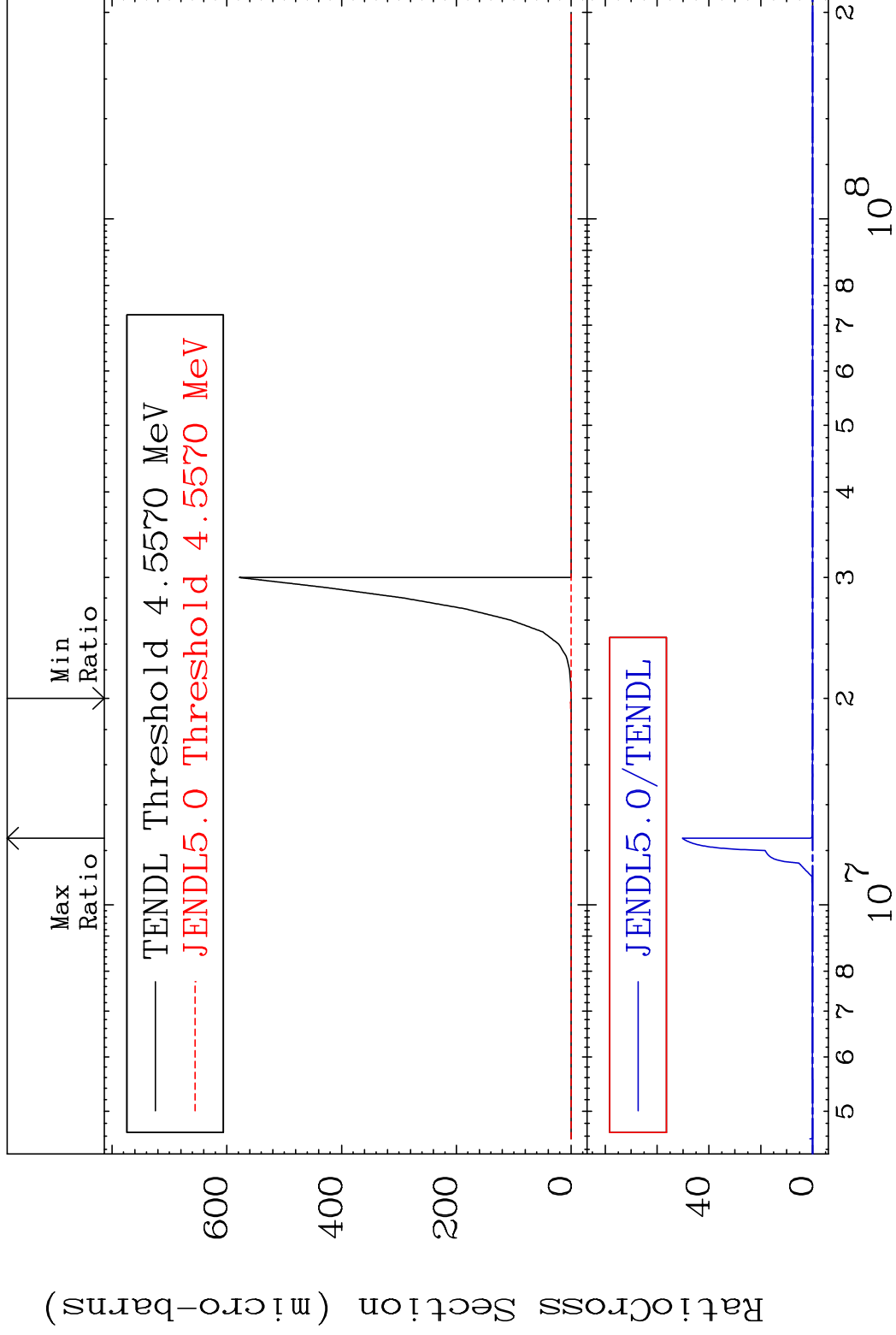


MAT 7119

(n, He-3)

71-Lu-173

Cross Section -100.0 To 9999. %



36

Incident Energy (eV)

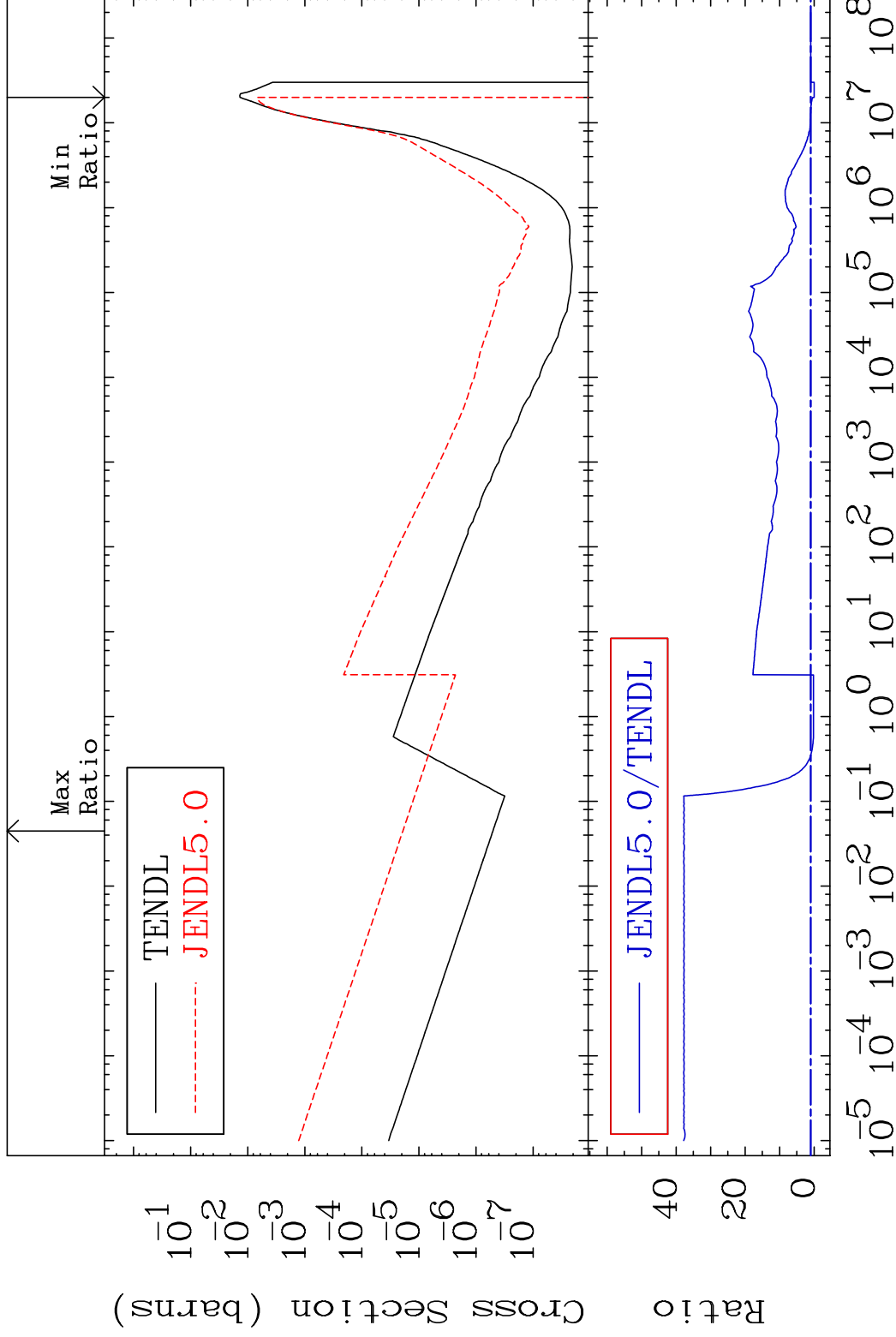
71-Lu-173

MAT 7119

(n,  $\alpha$ )

71-Lu-173

Cross Section -100.0 To 3680. %



37

Incident Energy (eV)

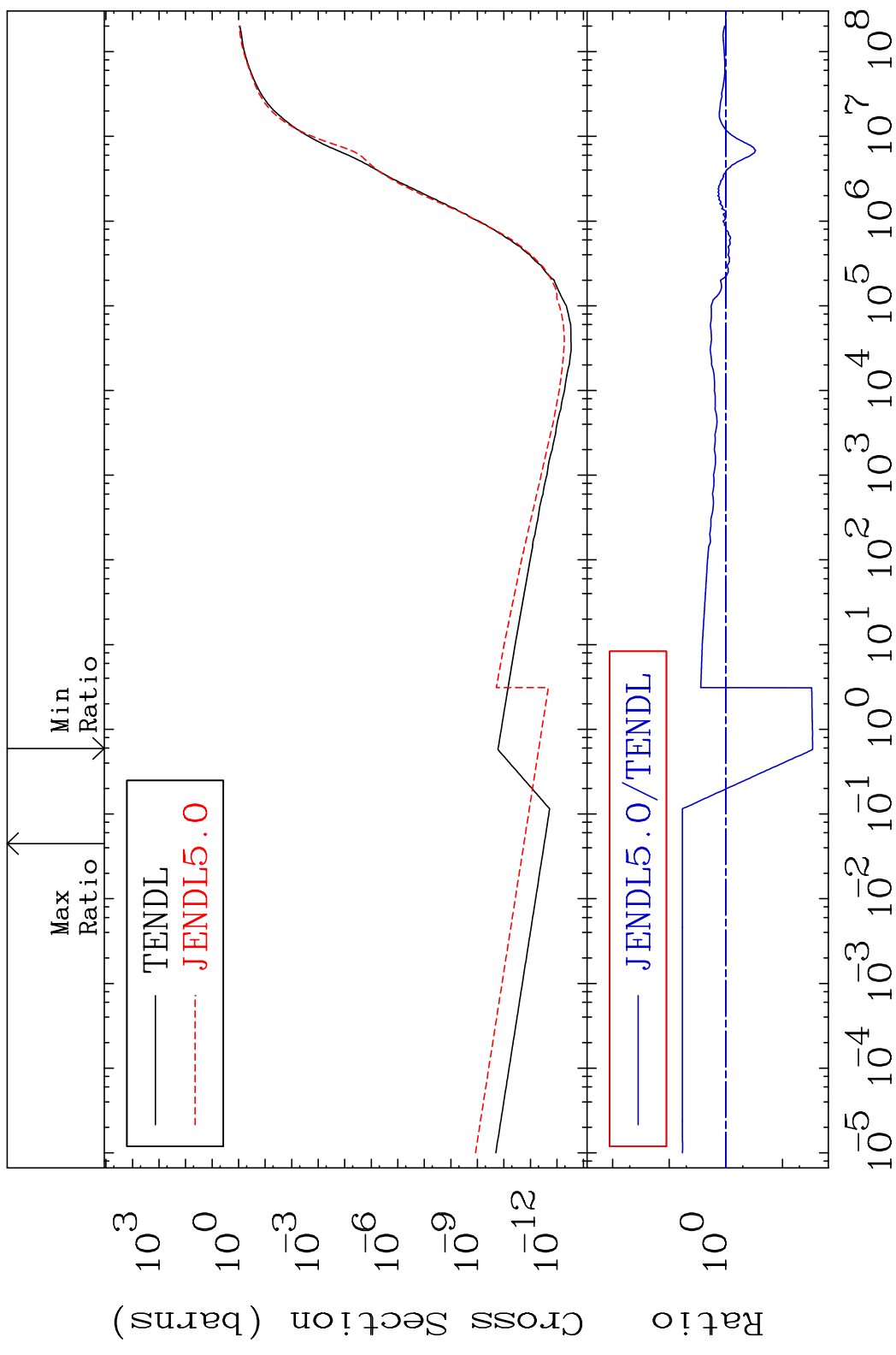
71-Lu-173

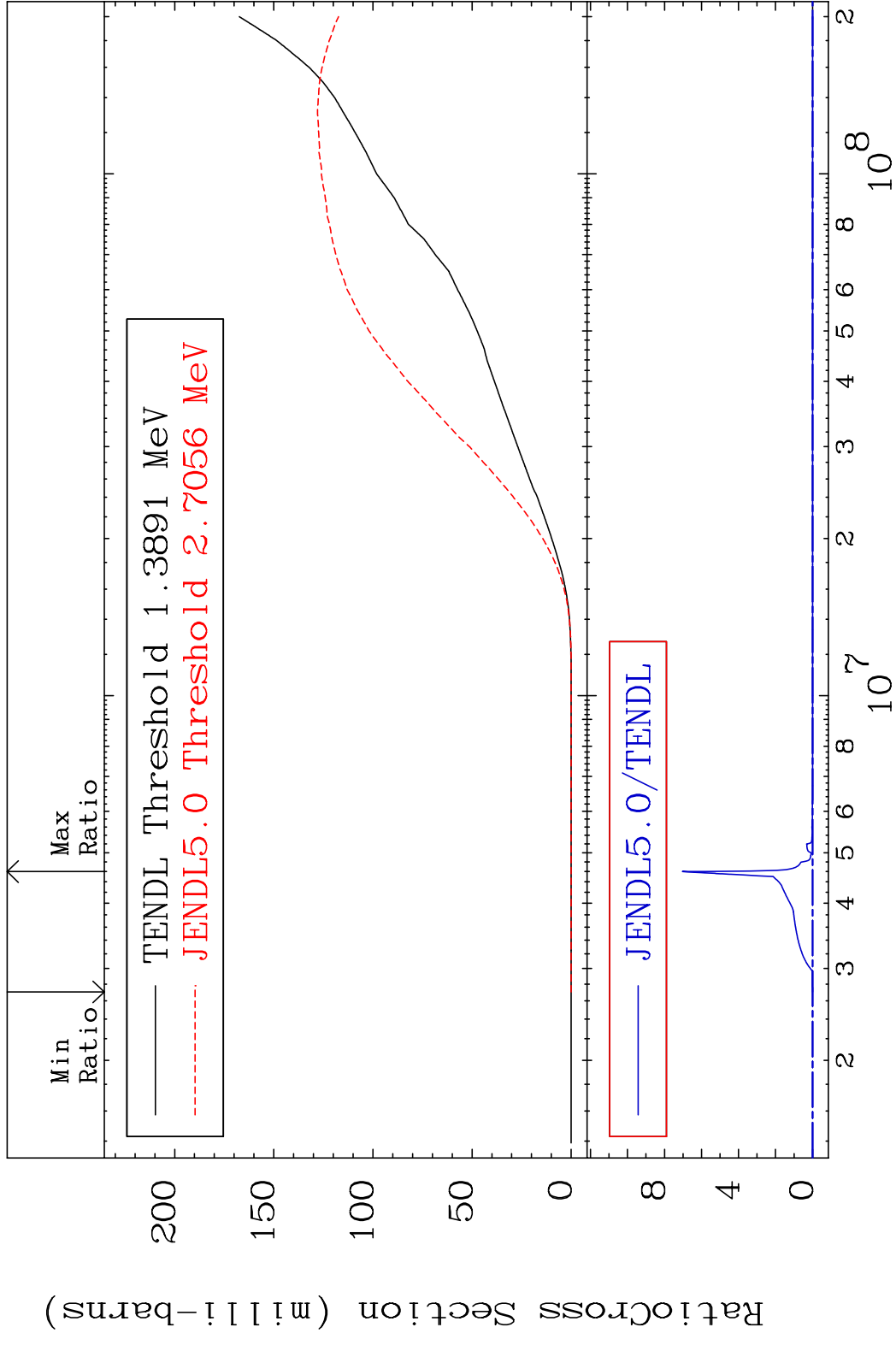
MAT 7119

Hydrogen Production

71-Lu-173

Cross Section -97.07 To 485.9 %

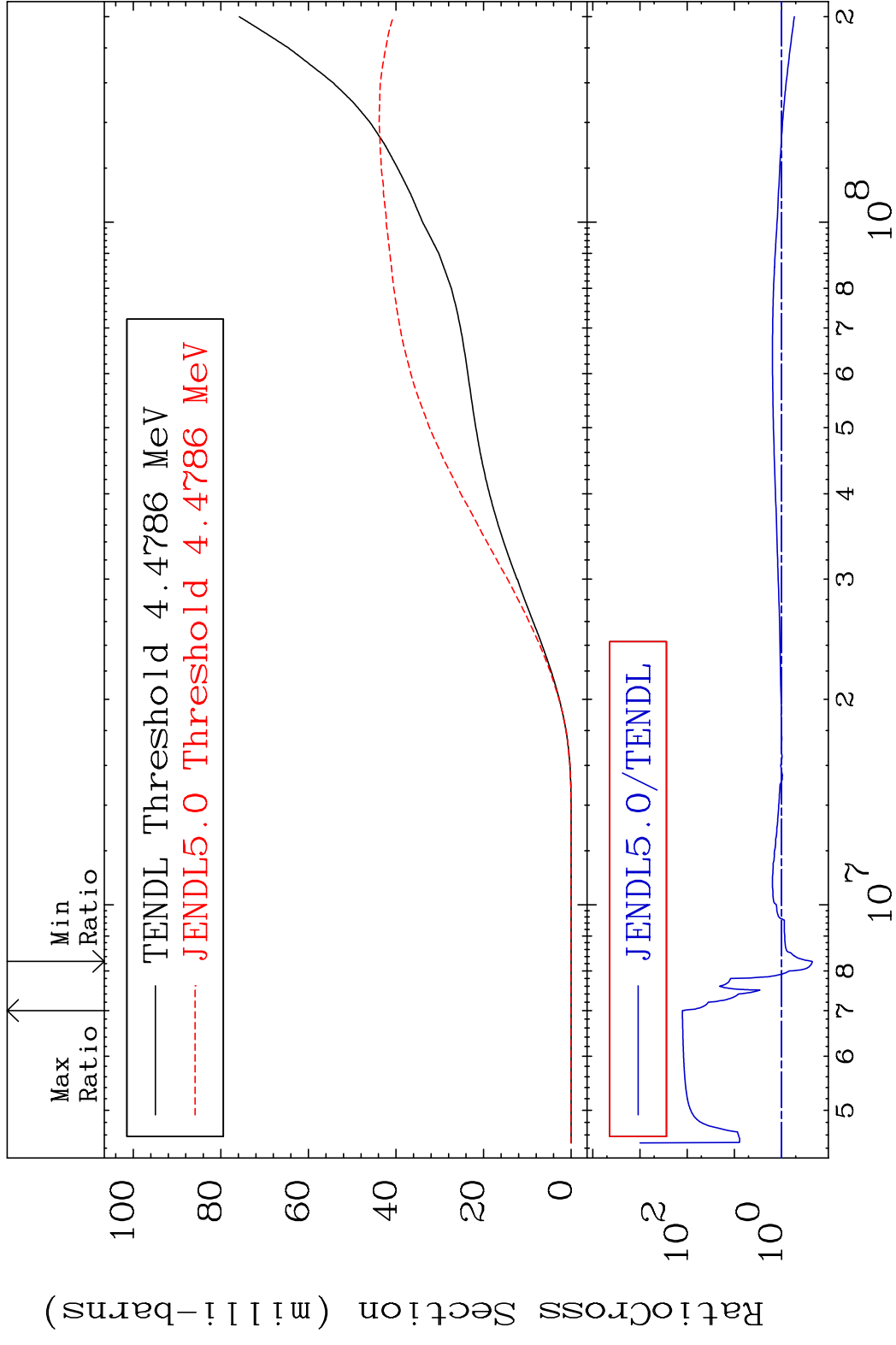






MAT 7119

Tritium Production 71-Lu-173  
Cross Section -77.93 To 9999. %



40

Incident Energy (eV)

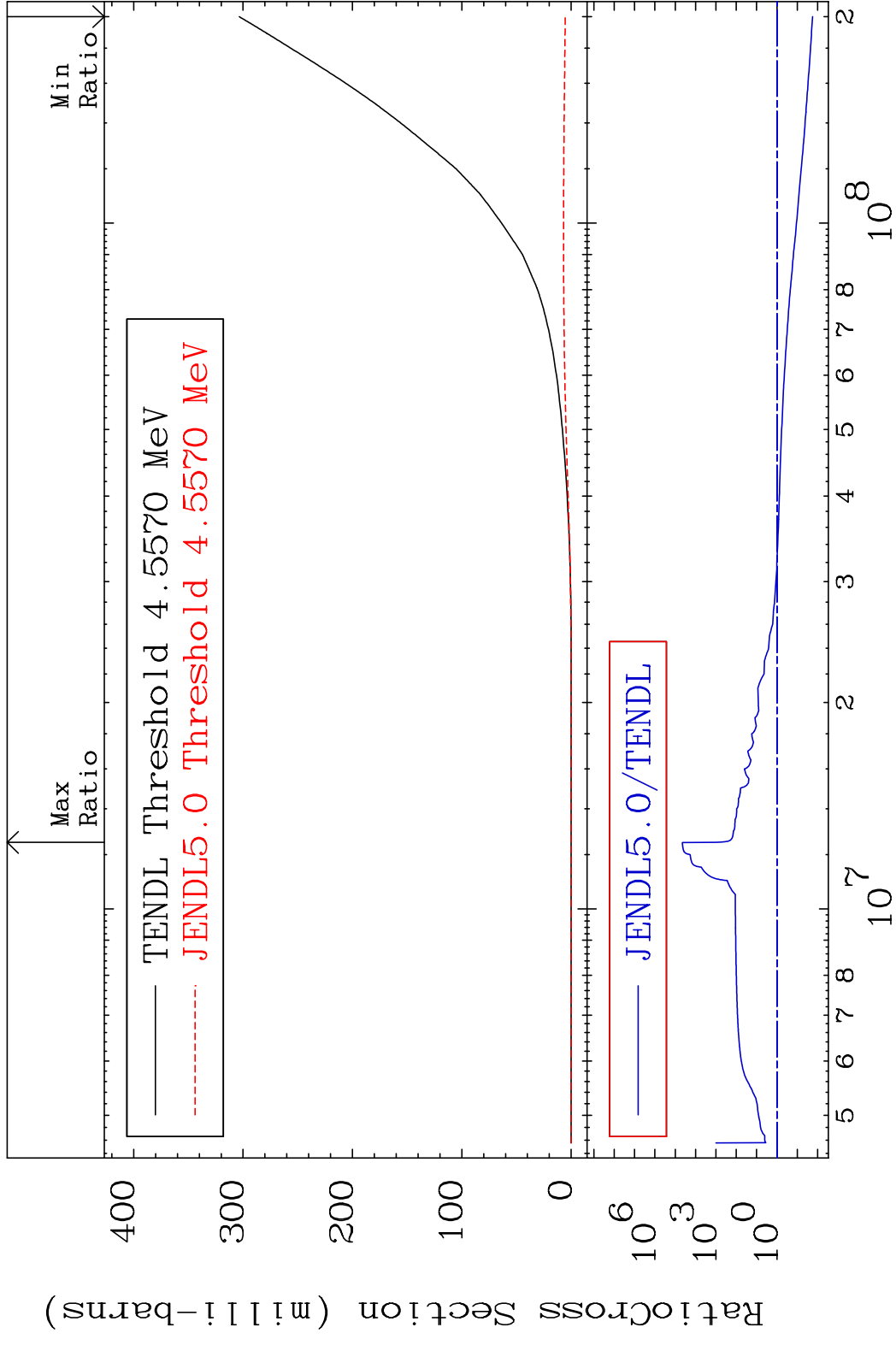
71-Lu-173

MAT 7119

He-3 Production

71-Lu-173

Cross Section -98.22 To 9999. %



41

Incident Energy (eV)

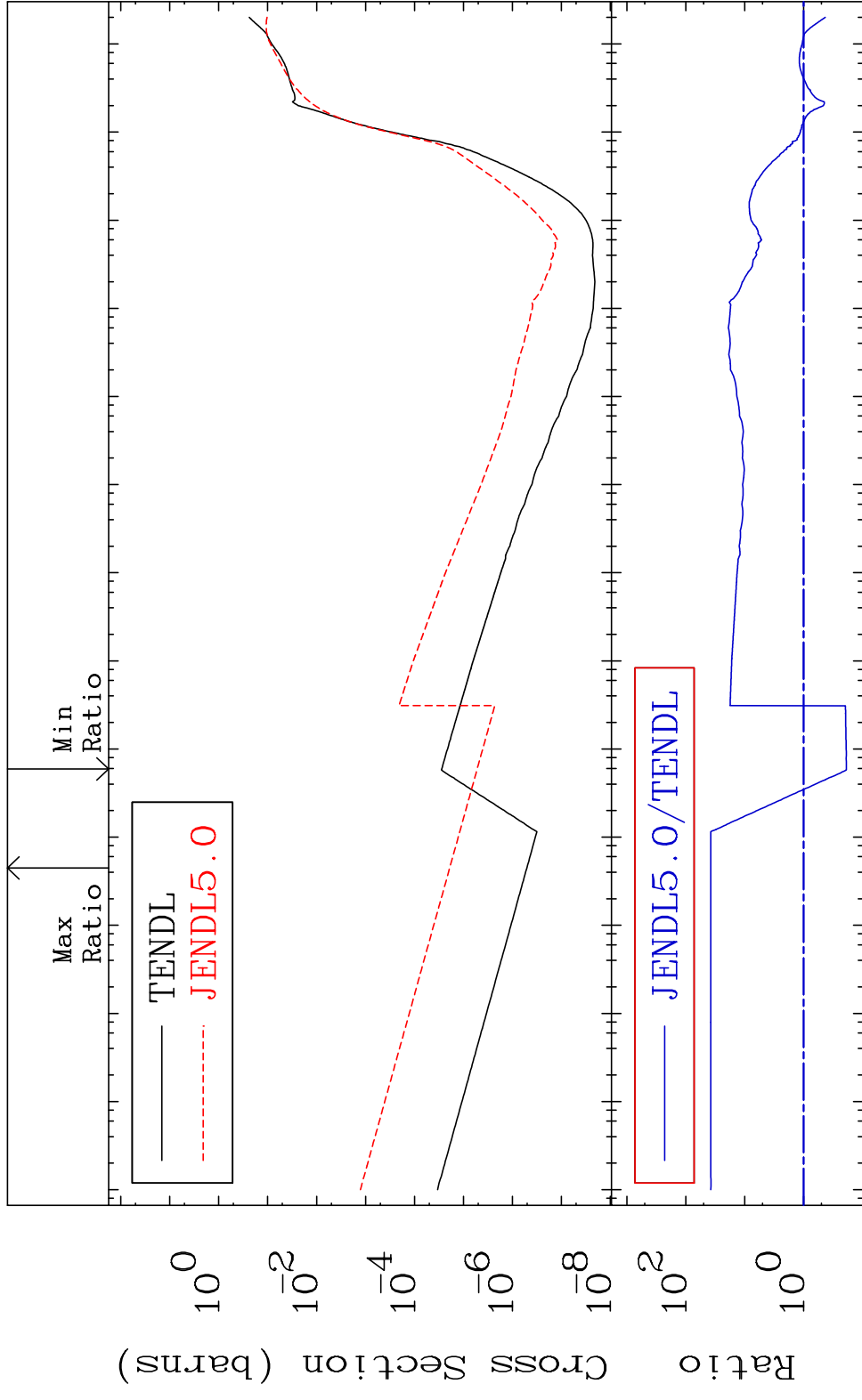
71-Lu-173

MAT 7119

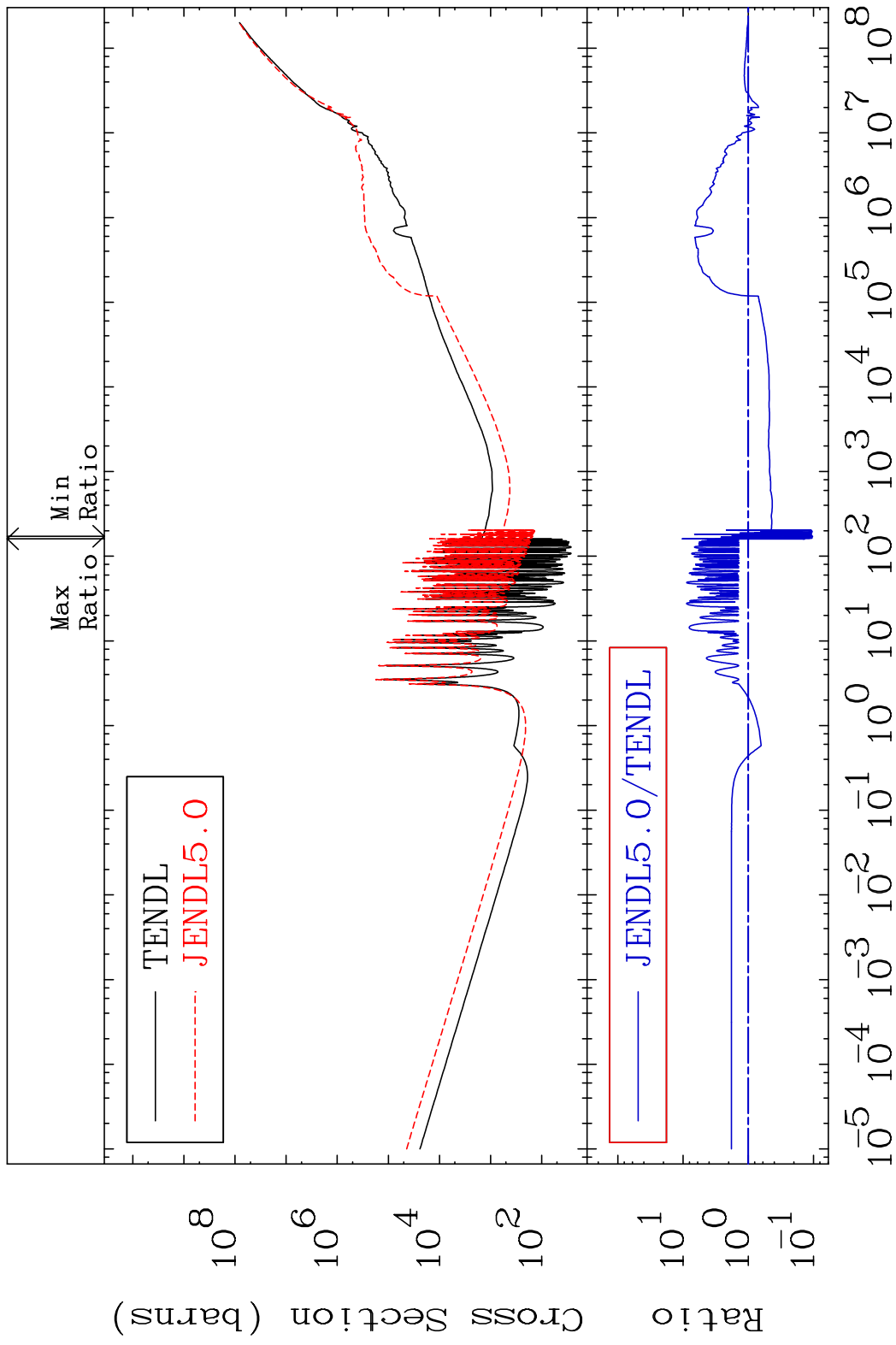
He-4 Production

71-Lu-173

Cross Section -81.08 To 3680. %



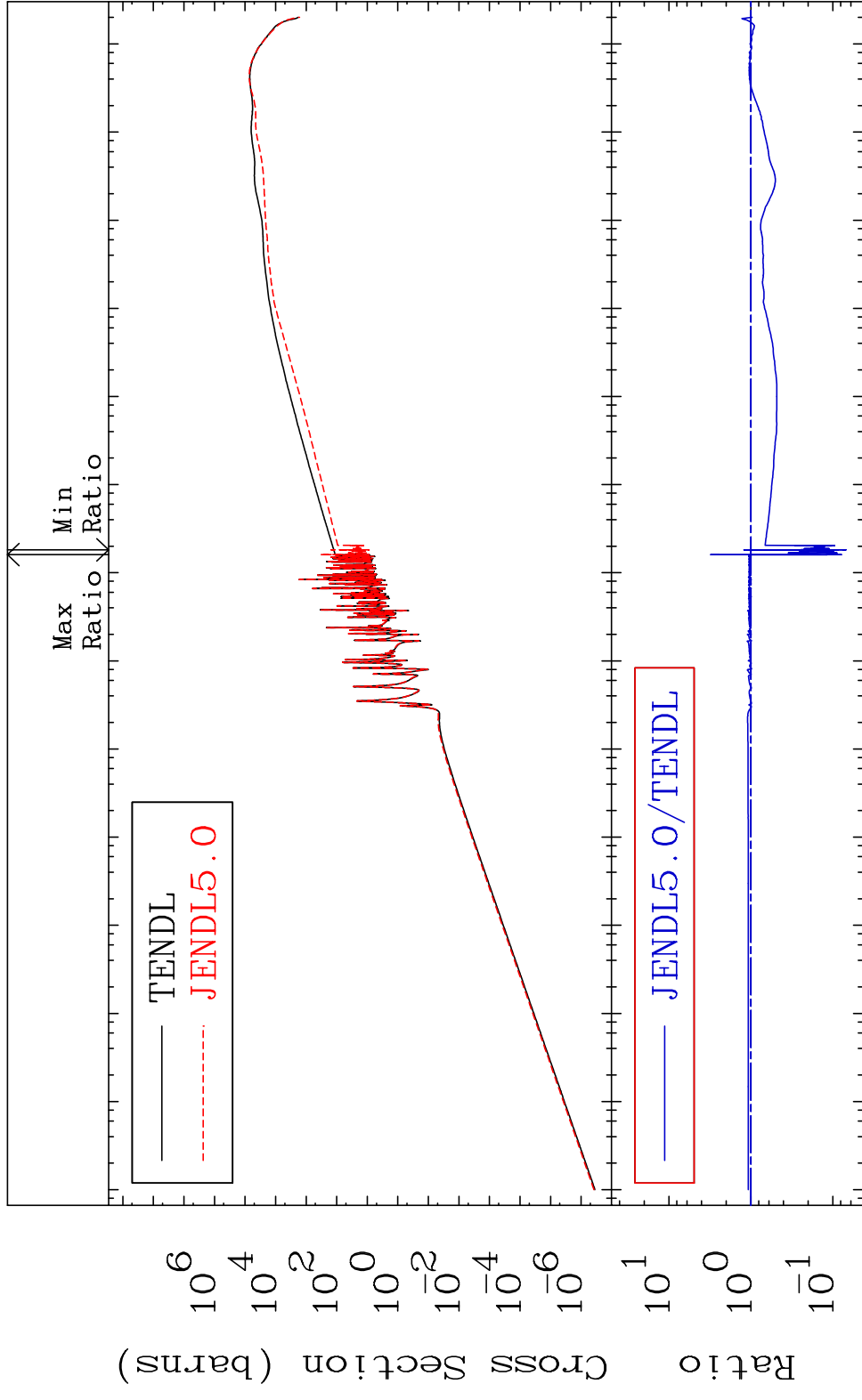
MAT 7119 Kerma total (eV-barns) 71-Lu-173  
 Cross Section -89.63 To 929.3 %



MAT 7119

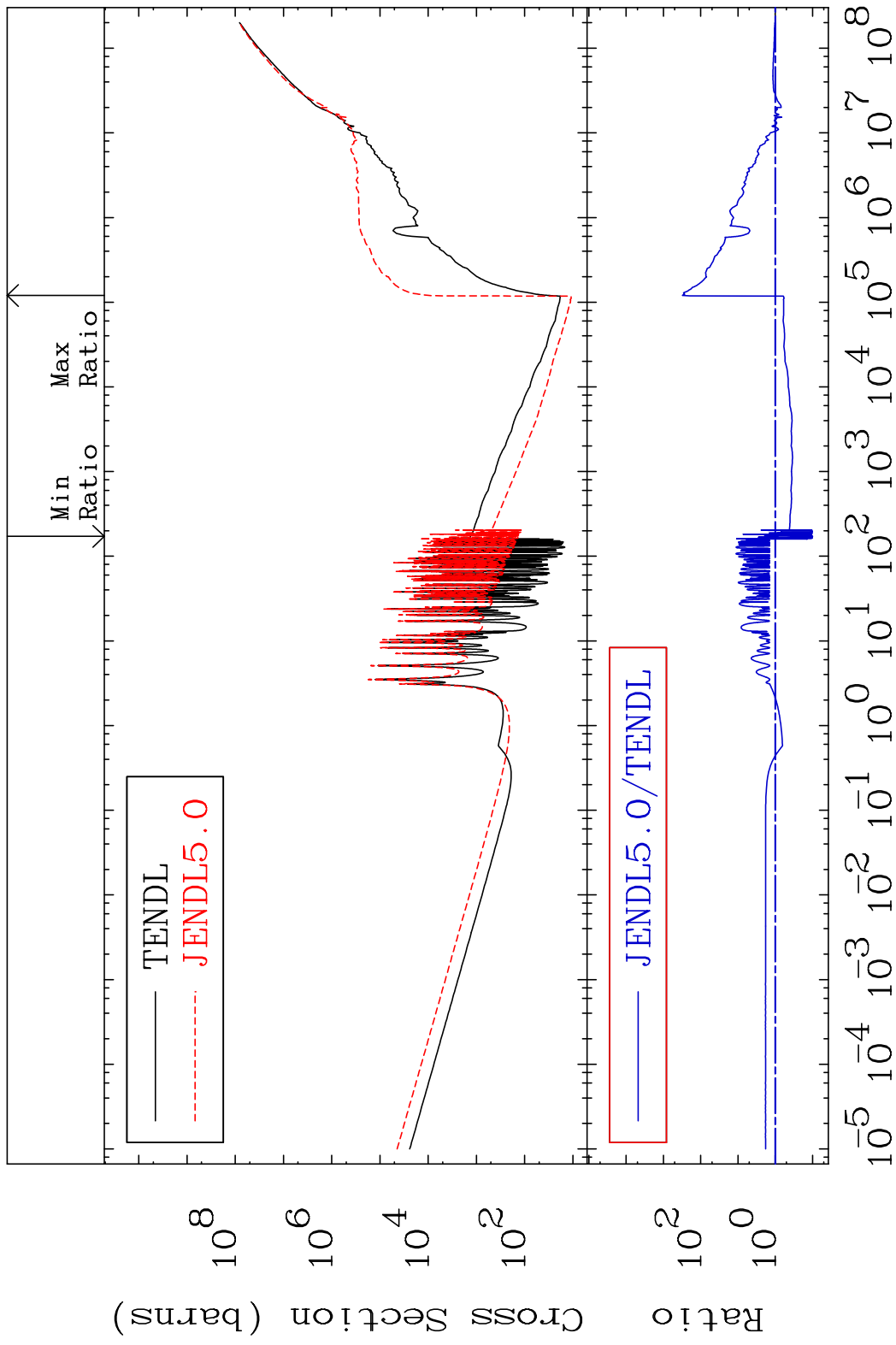
Kerma elastic  
Cross Section

71-Lu-173  
-93.17 To 209.0 %

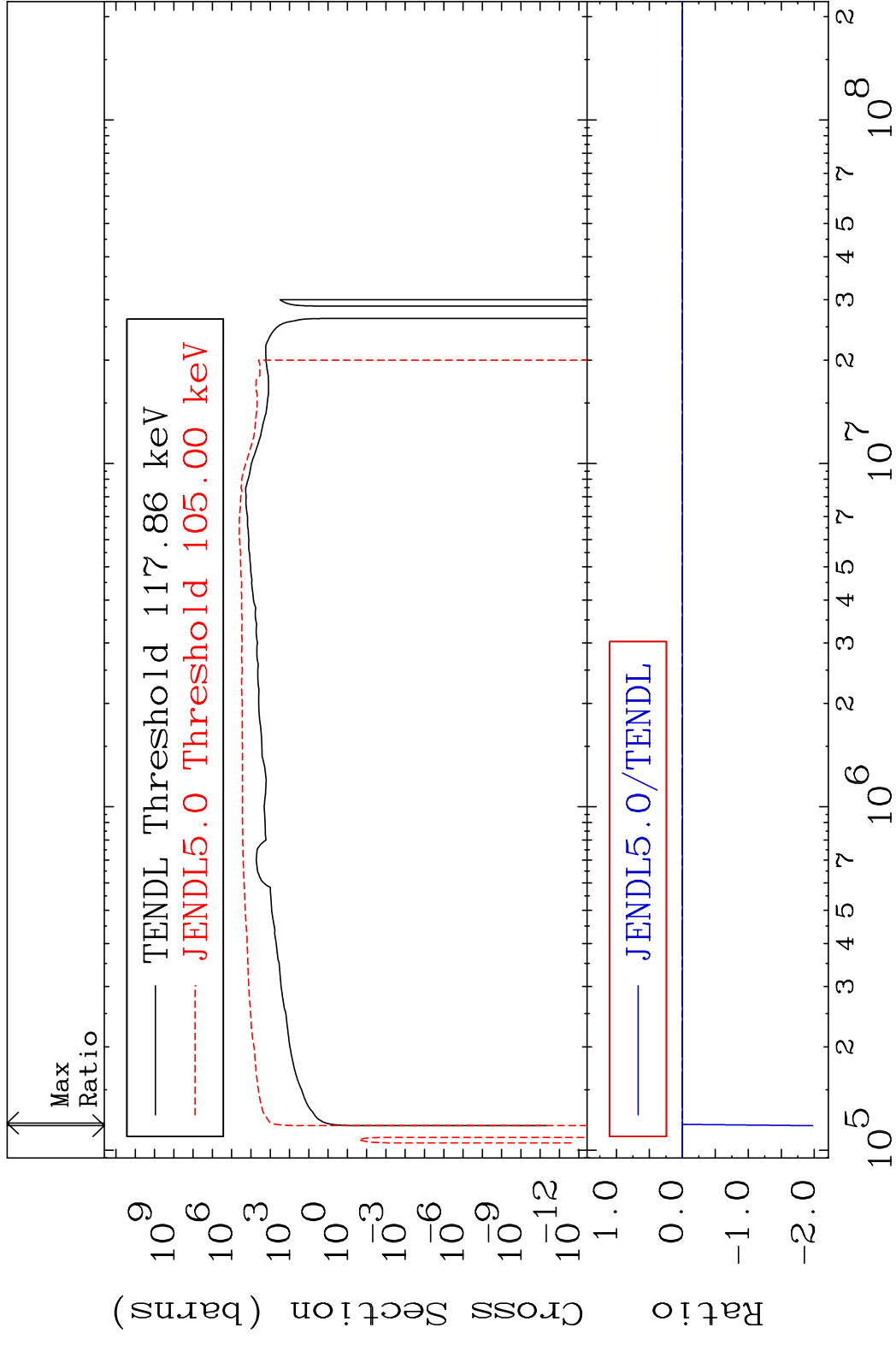


10<sup>6</sup> 10<sup>4</sup> 10<sup>2</sup> 10<sup>0</sup> 10<sup>-2</sup> 10<sup>-4</sup> 10<sup>-6</sup> 10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

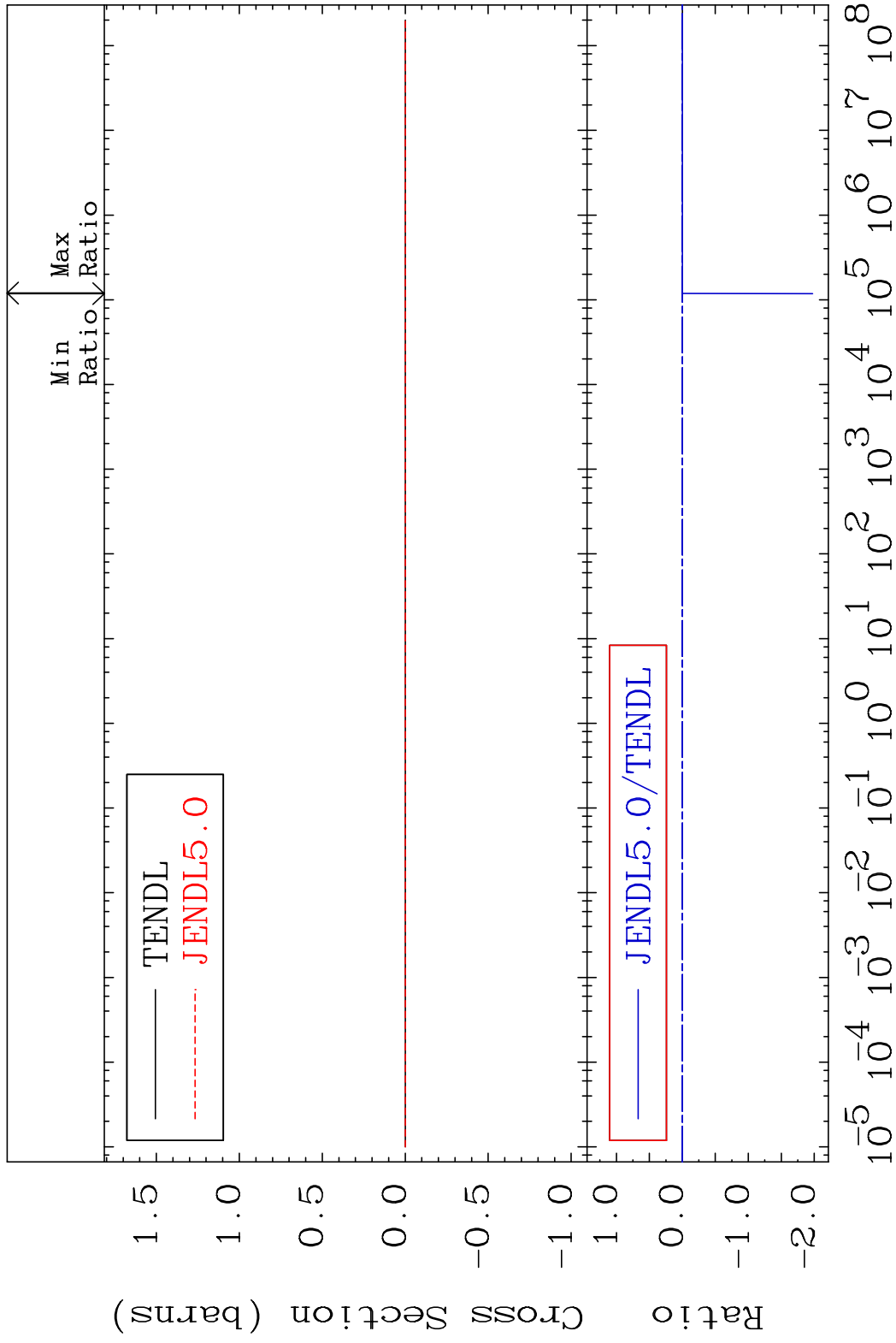
MAT 7119 Kerma non-elastic (all but mt2) 71-Lu-173  
 Cross Section -90.01 To 9999. %



MAT 7119 Kerma inelastic (mt51-91) 71-Lu-173  
 Cross Section -9999. To 9999. %



MAT 7119 Kerma fission (mt18 or mt19-20-21-38) 71-Lu-173  
 Cross Section -9999. To 9999. %



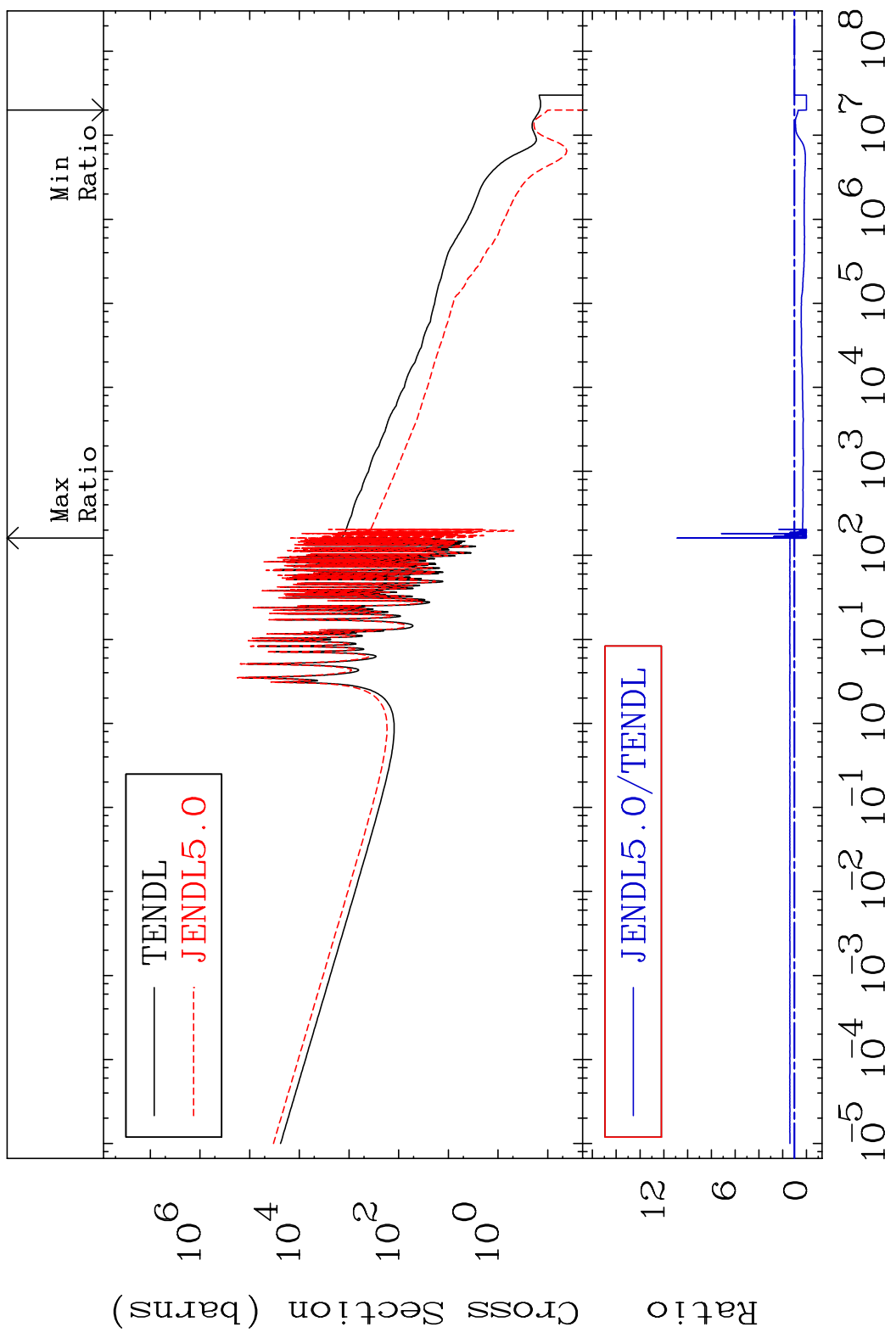


MAT 7119

Kerma capture (mt102)

71-Lu-173

Cross Section -100.0 To 987.1 %



48

Incident Energy (eV)

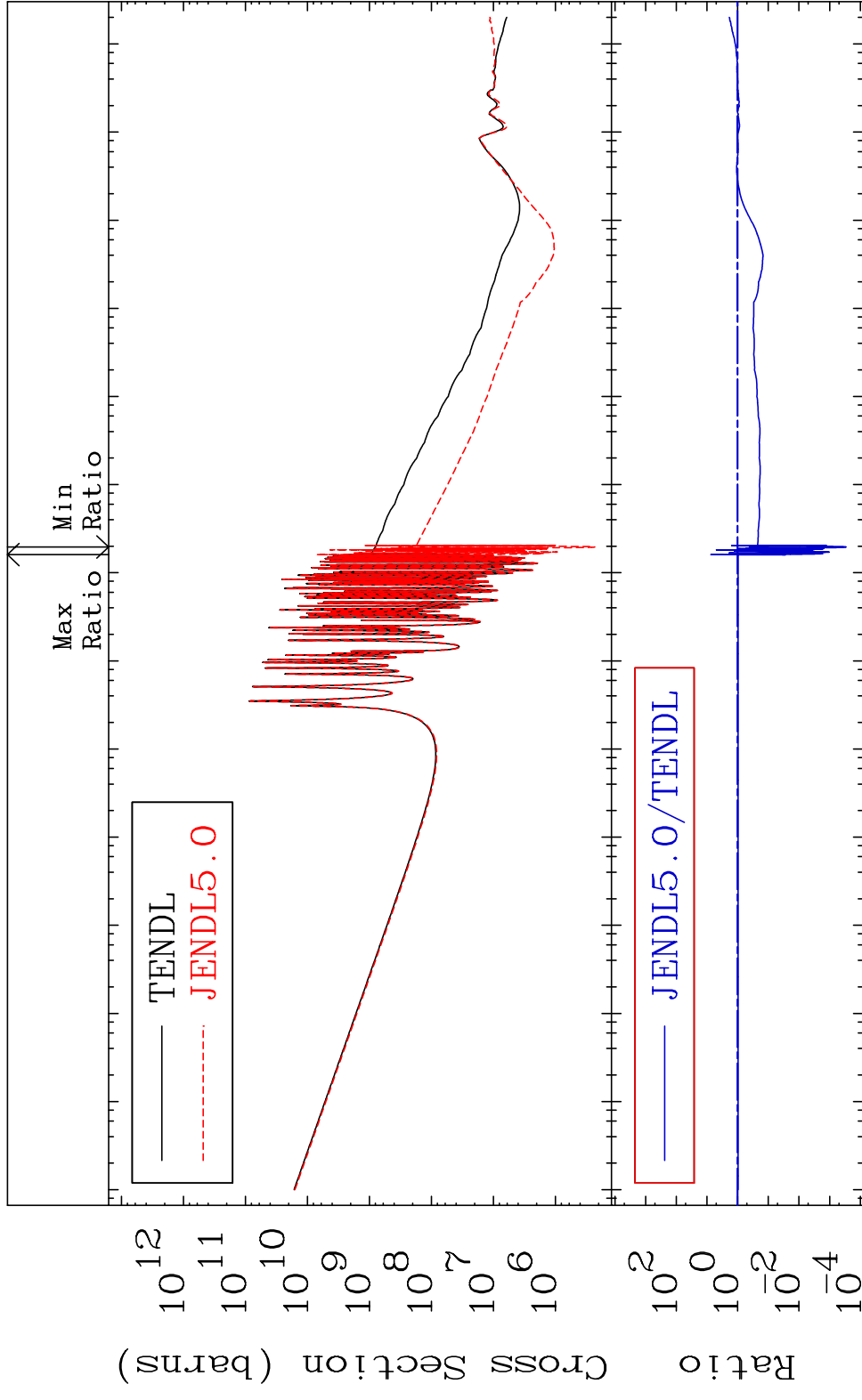
71-Lu-173

MAT 7119

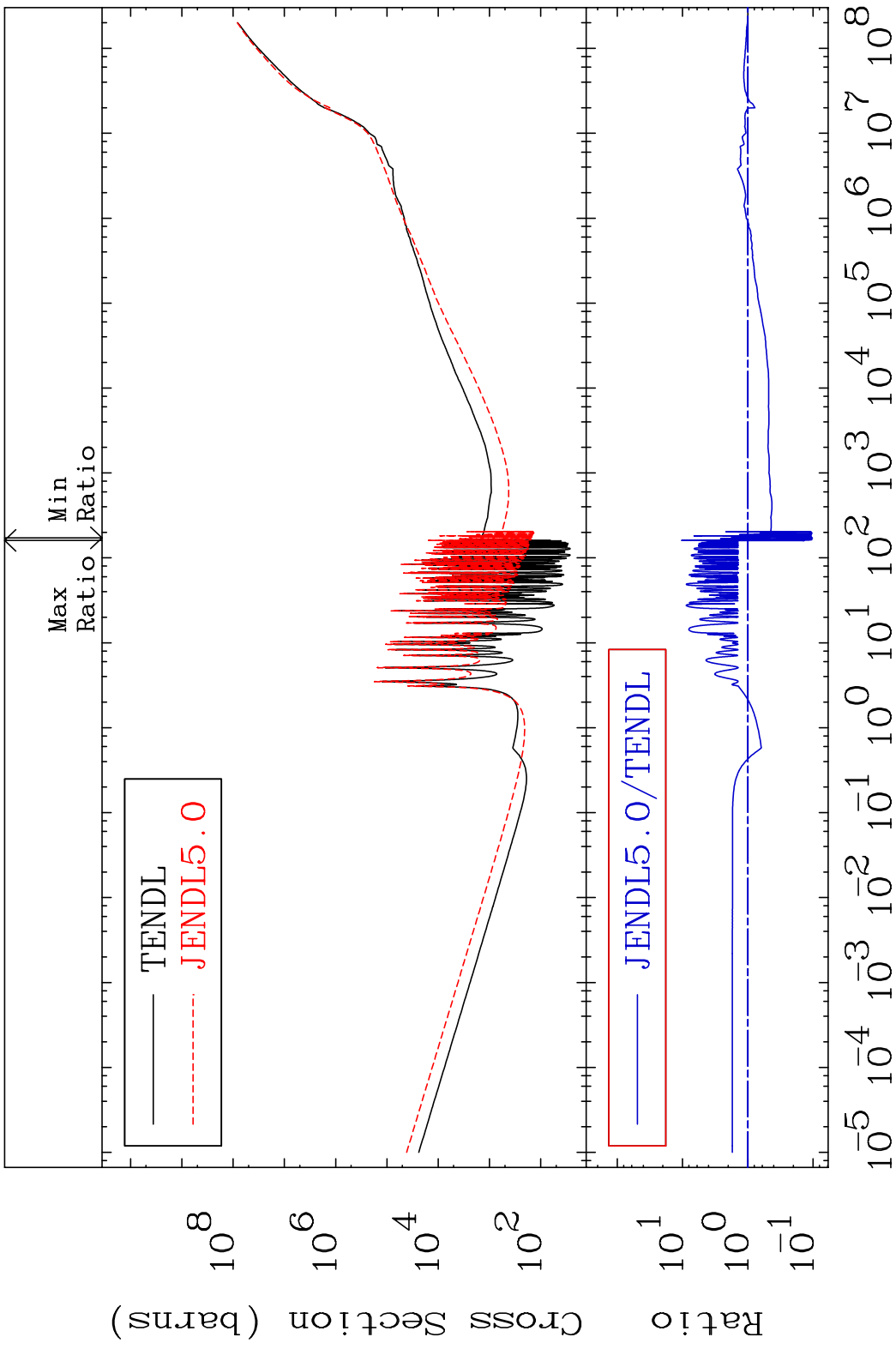
Total photon (eV-barns)

71-Lu-173

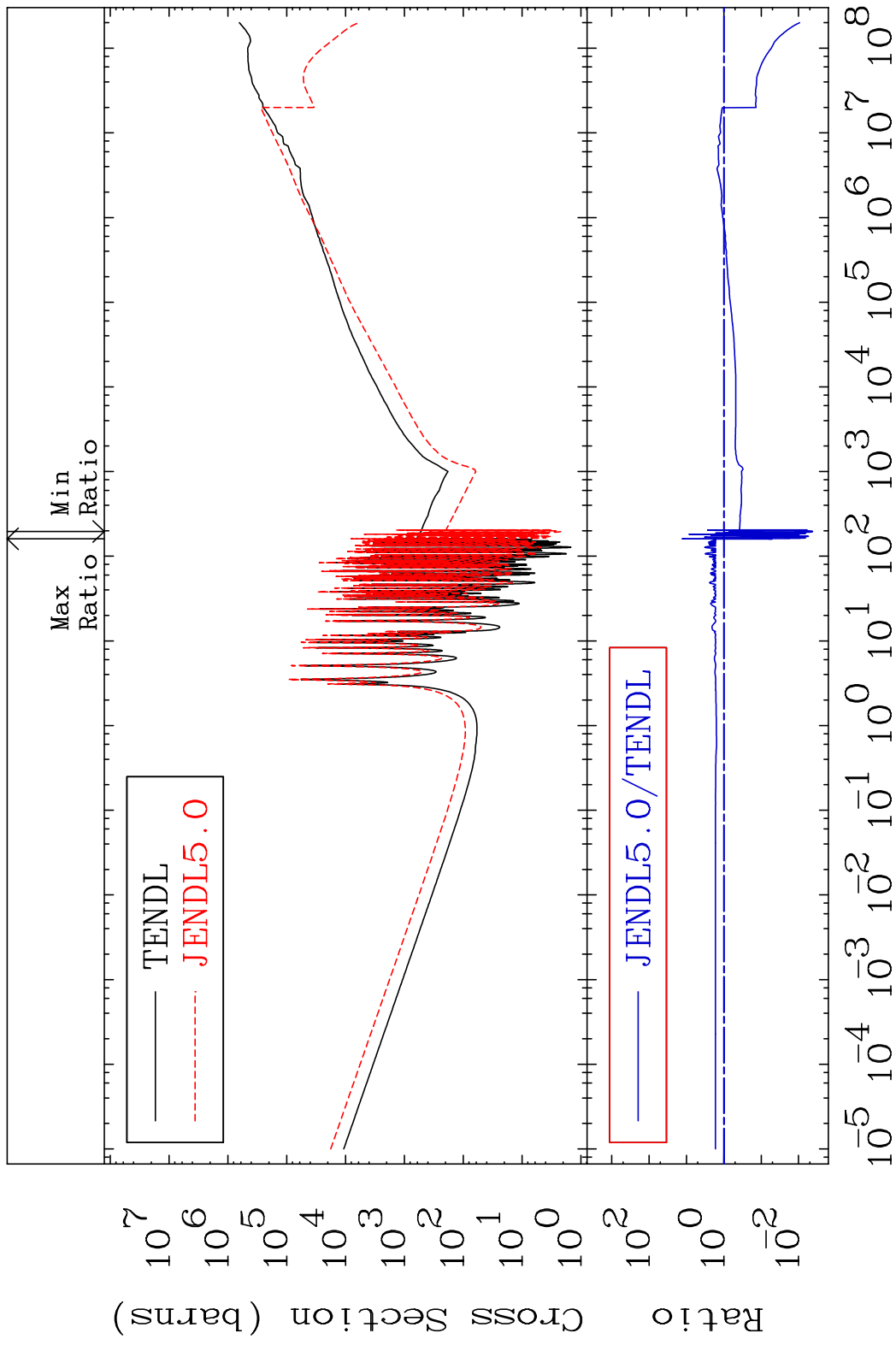
Cross Section -99.97 To 654.9 %



MAT 71119 Total kinematic kerma (high limit) 71-Lu-173  
Cross Section -89.71 To 929.2 %



MAT 7119 Dpa total (eV-barns) 71-Lu-173  
 Cross Section -99.58 To 1189. %

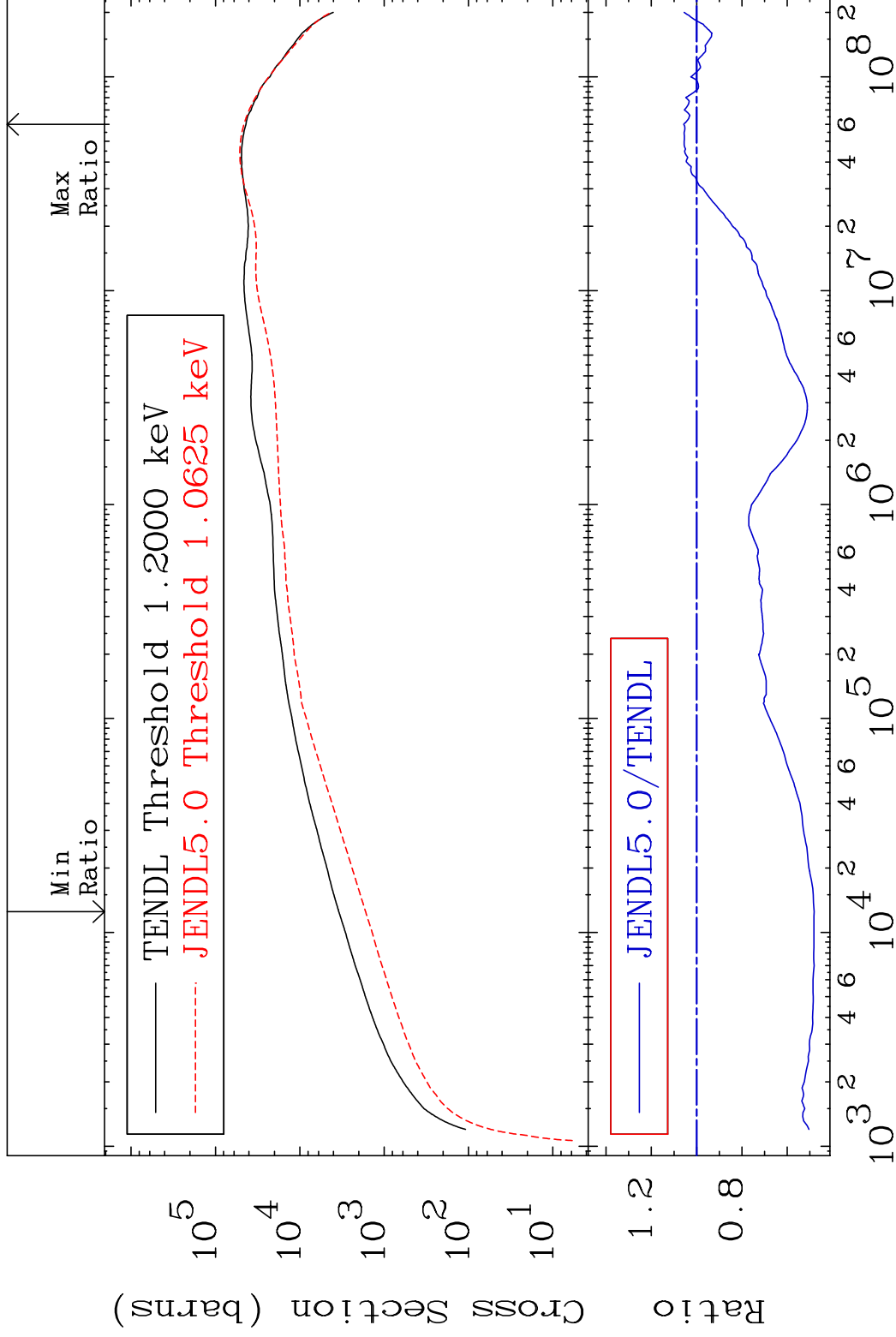


MAT 7119

Dpa elastic (mt2)

71-Lu-173

Cross Section -51.89 To 5.731 %

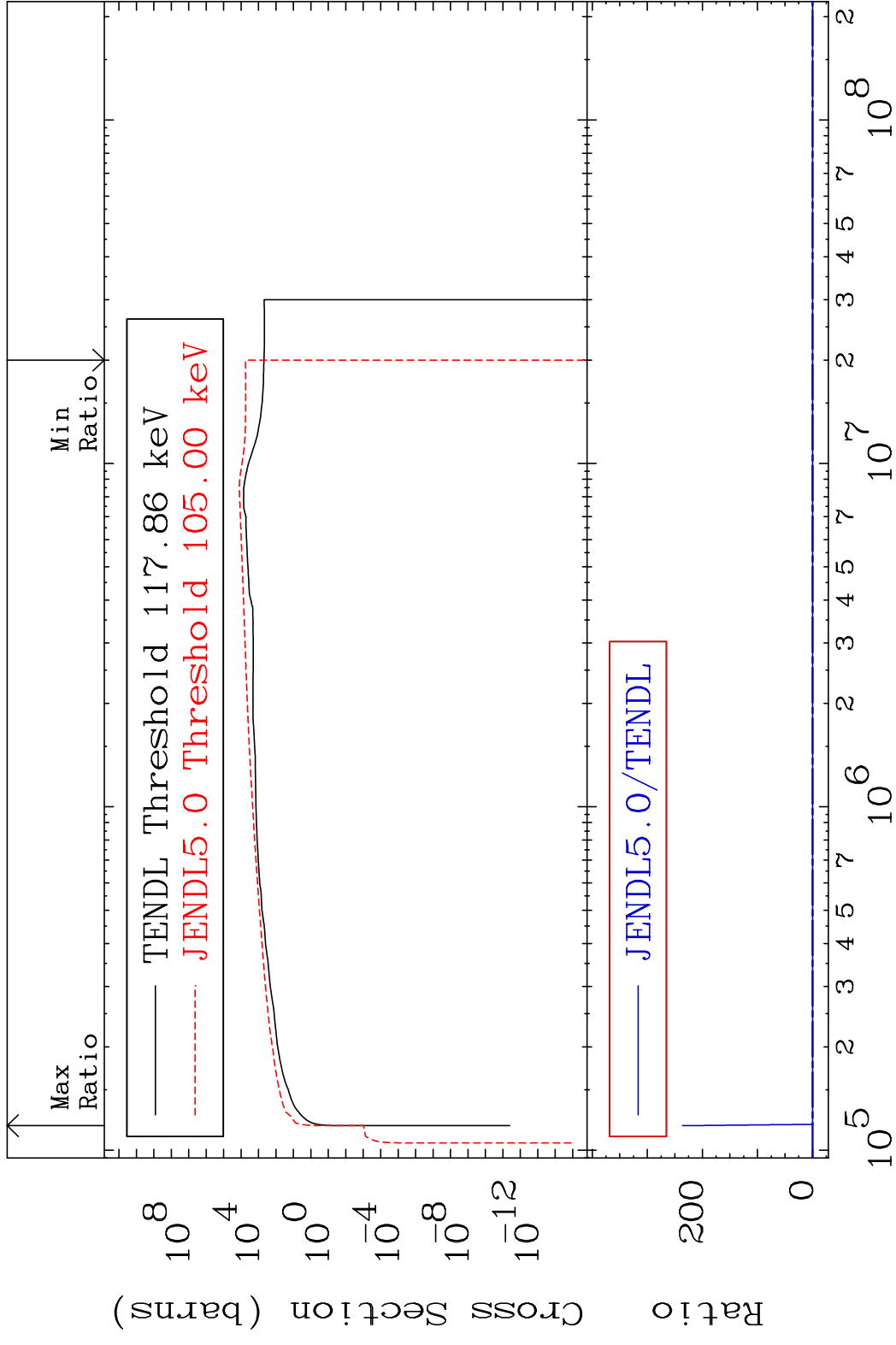


52

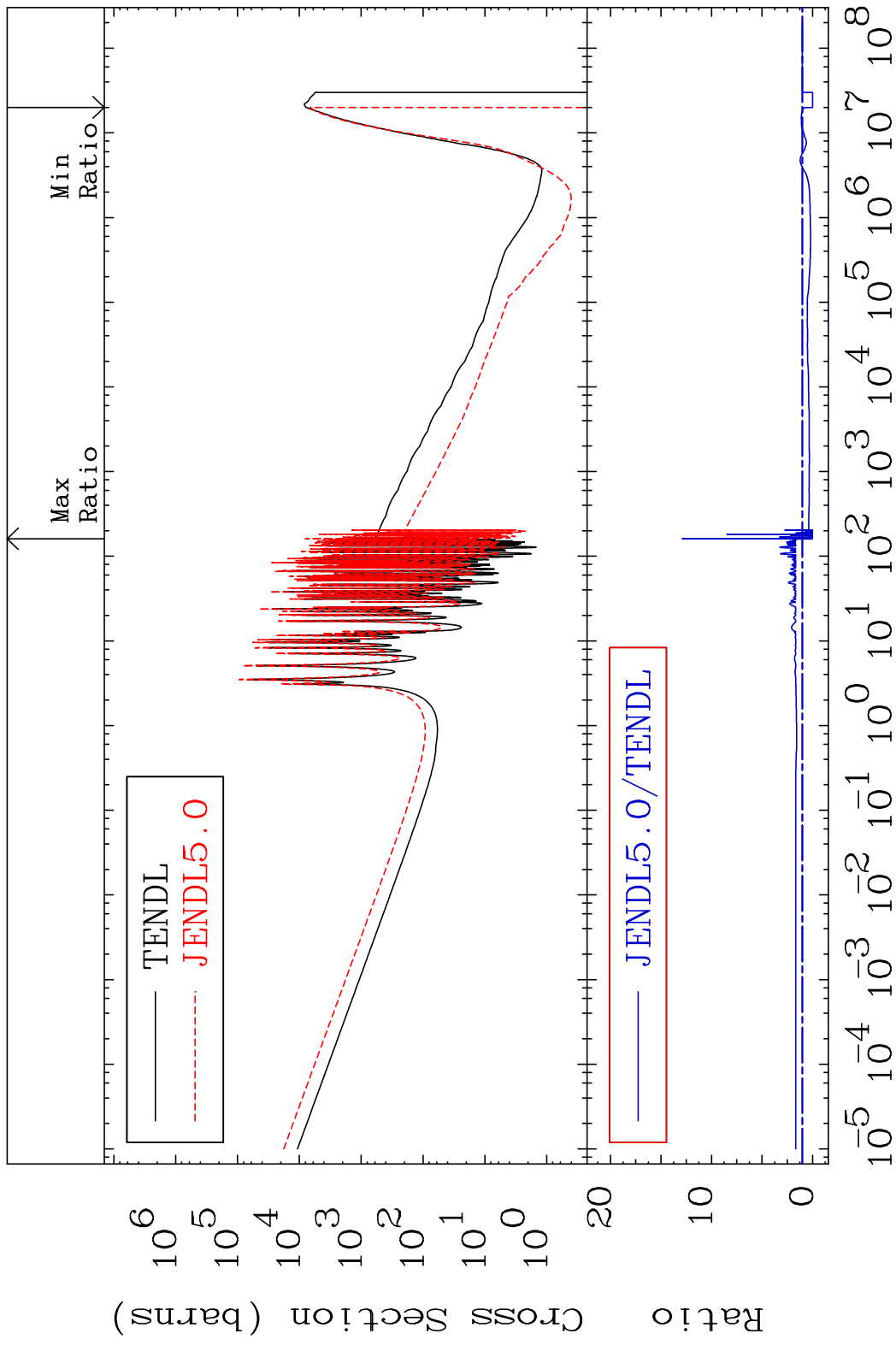
Incident Energy (eV)

71-Lu-173

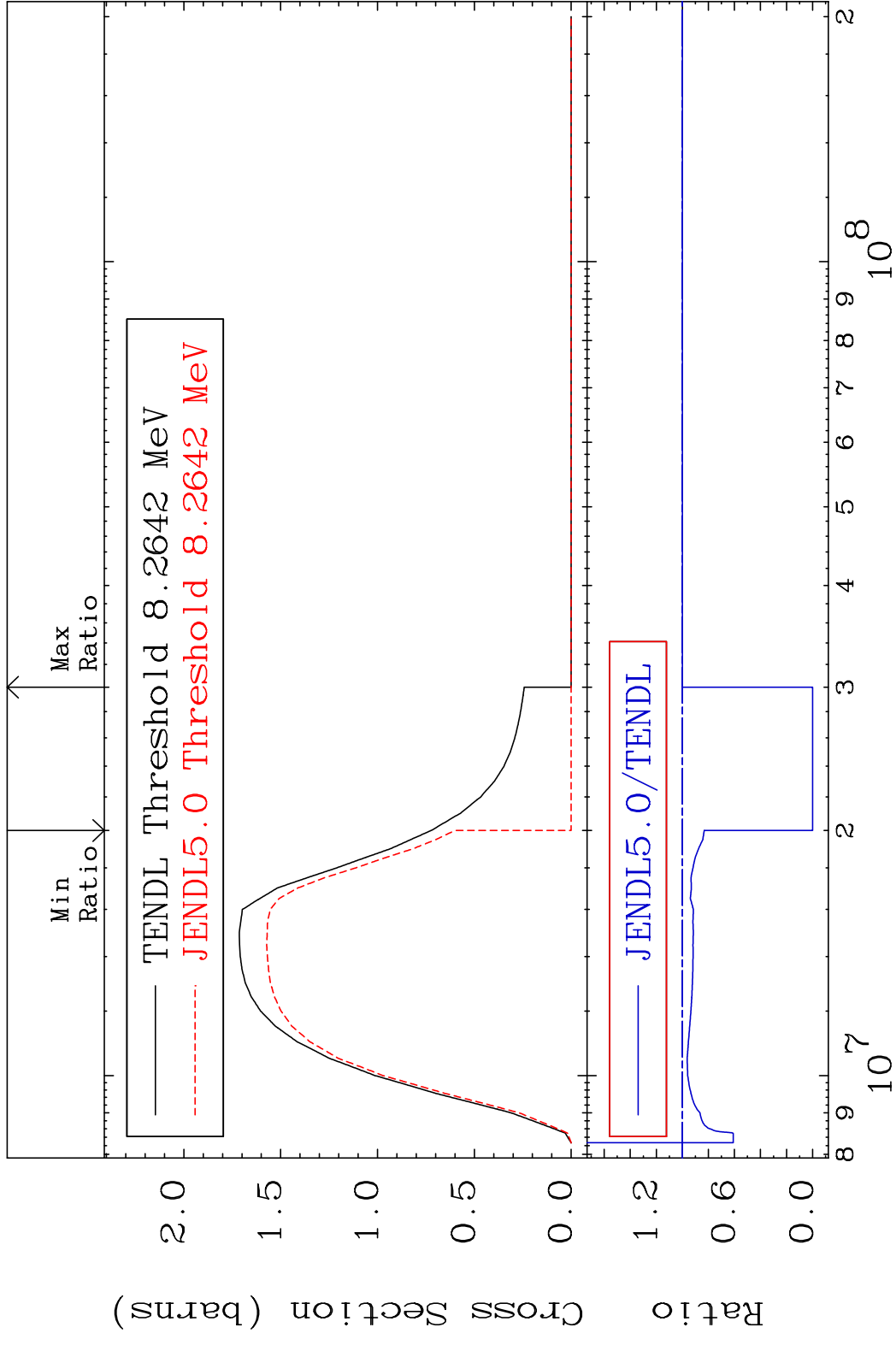
MAT 7119 Dpa inelastic (mt51-91) 71-Lu-173  
 Cross Section -100.0 To 9999. %



MAT 7119 Dpa disappearance (mt102 -120) 71-Lu-173  
 Cross Section -100.0 To 1189. %

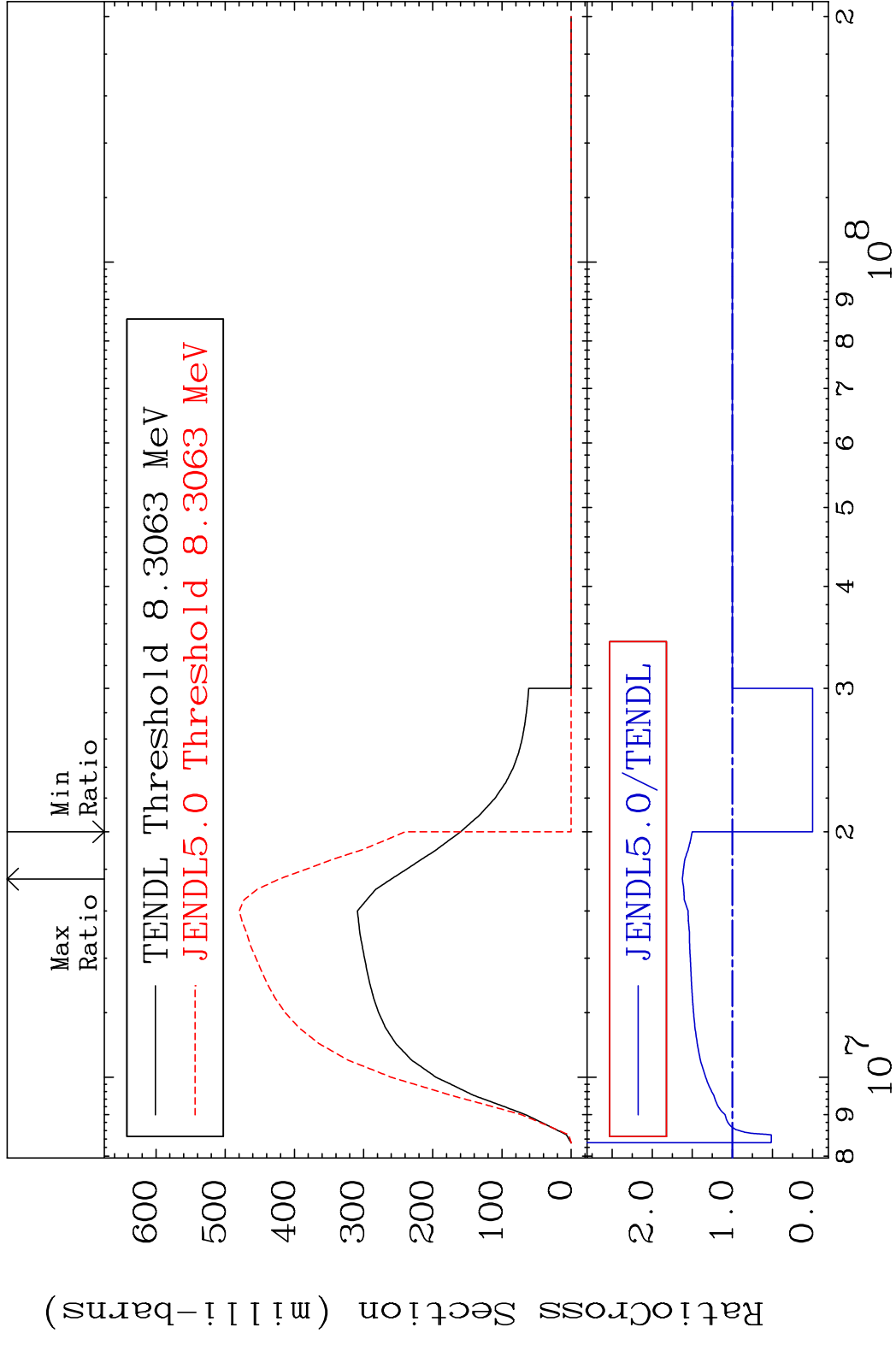


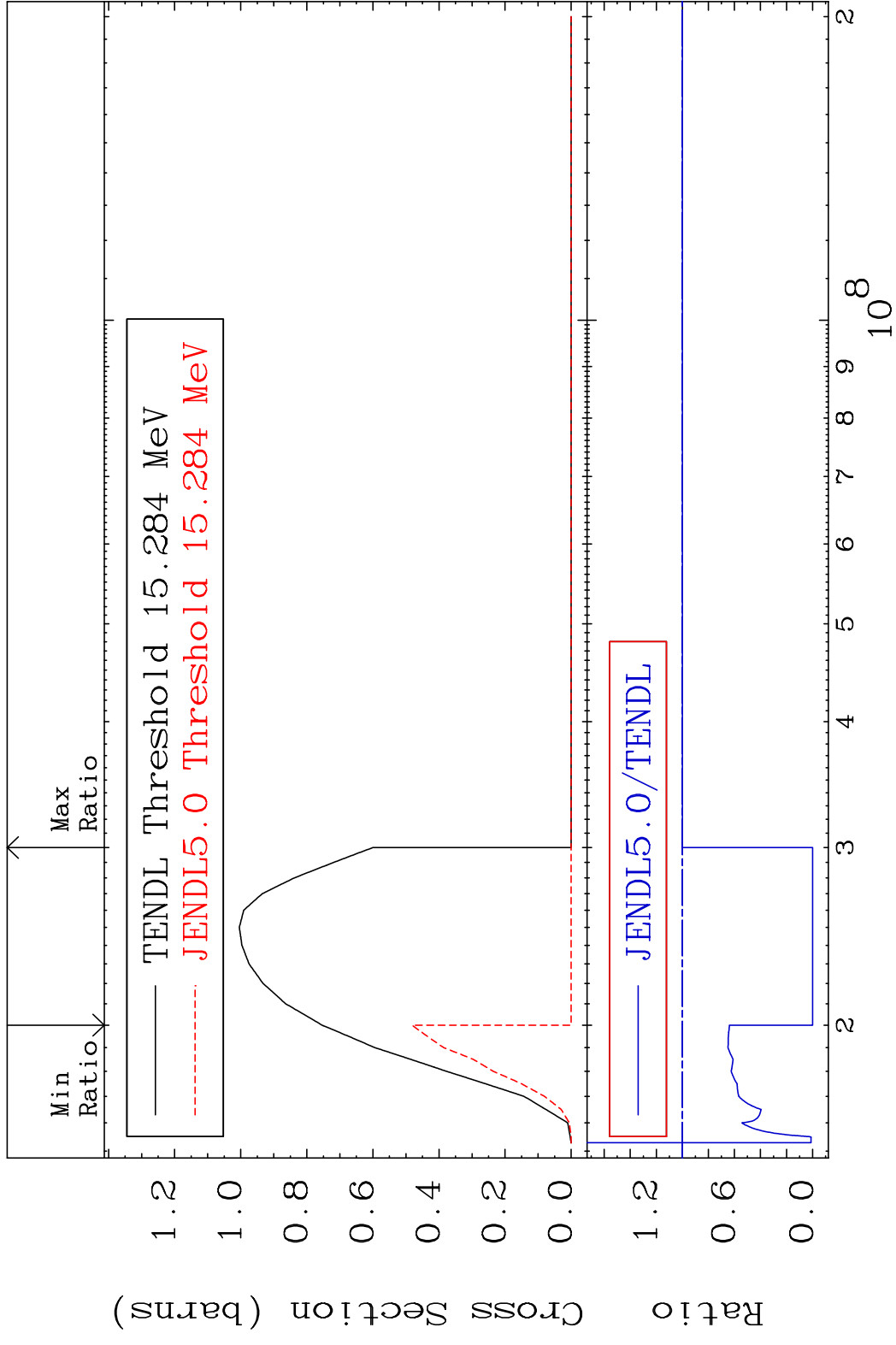
MAT 7119 (n,2n):71-Lu-172g 71-Lu-173  
 Radionuclide Production Cross Section 180.01 dth 0.000 %



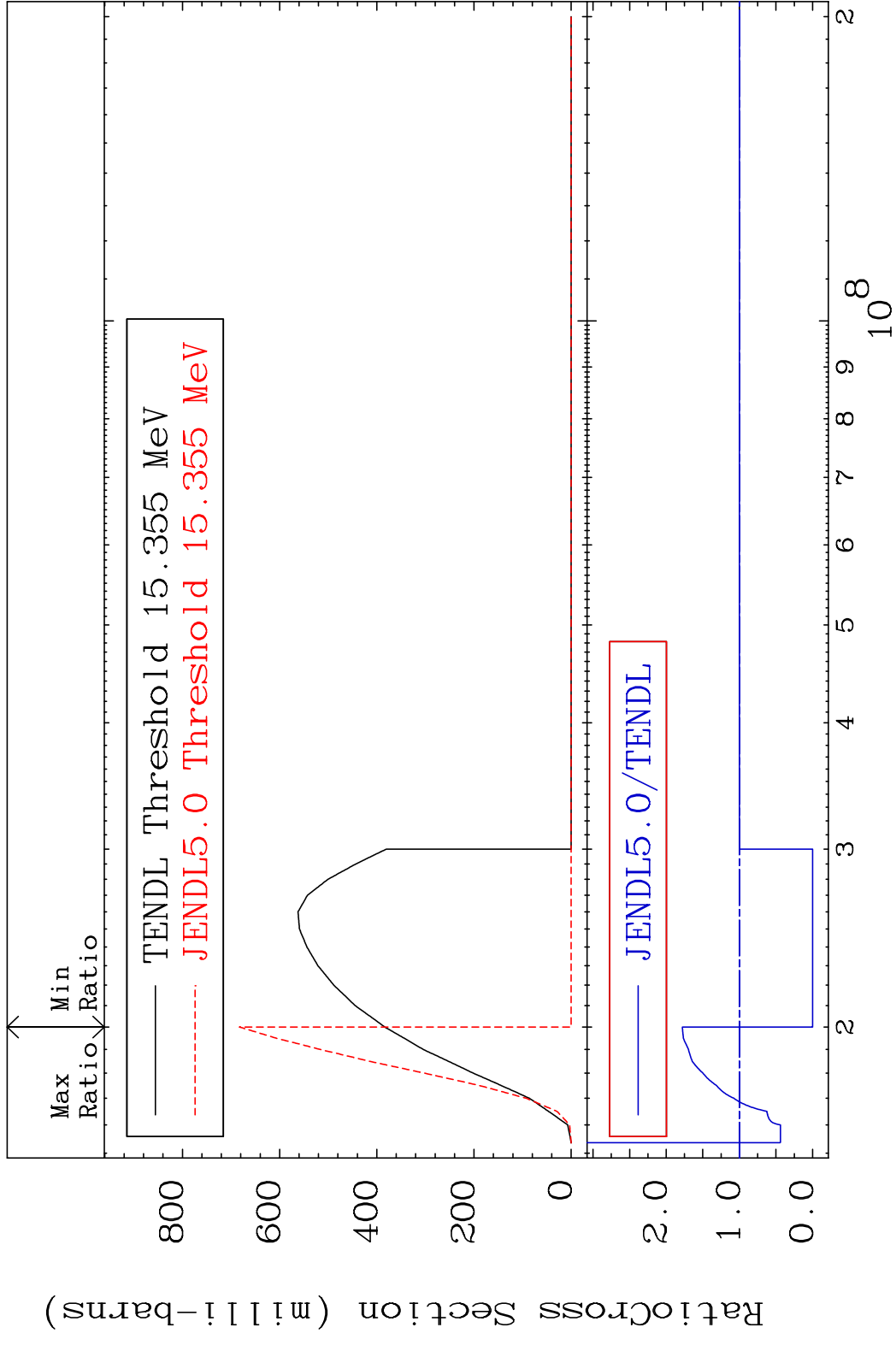


MAT 7119 (n,2n):71-Lu-172m1 71-Lu-173  
 Radionuclide Production Cross Section 62.40 %

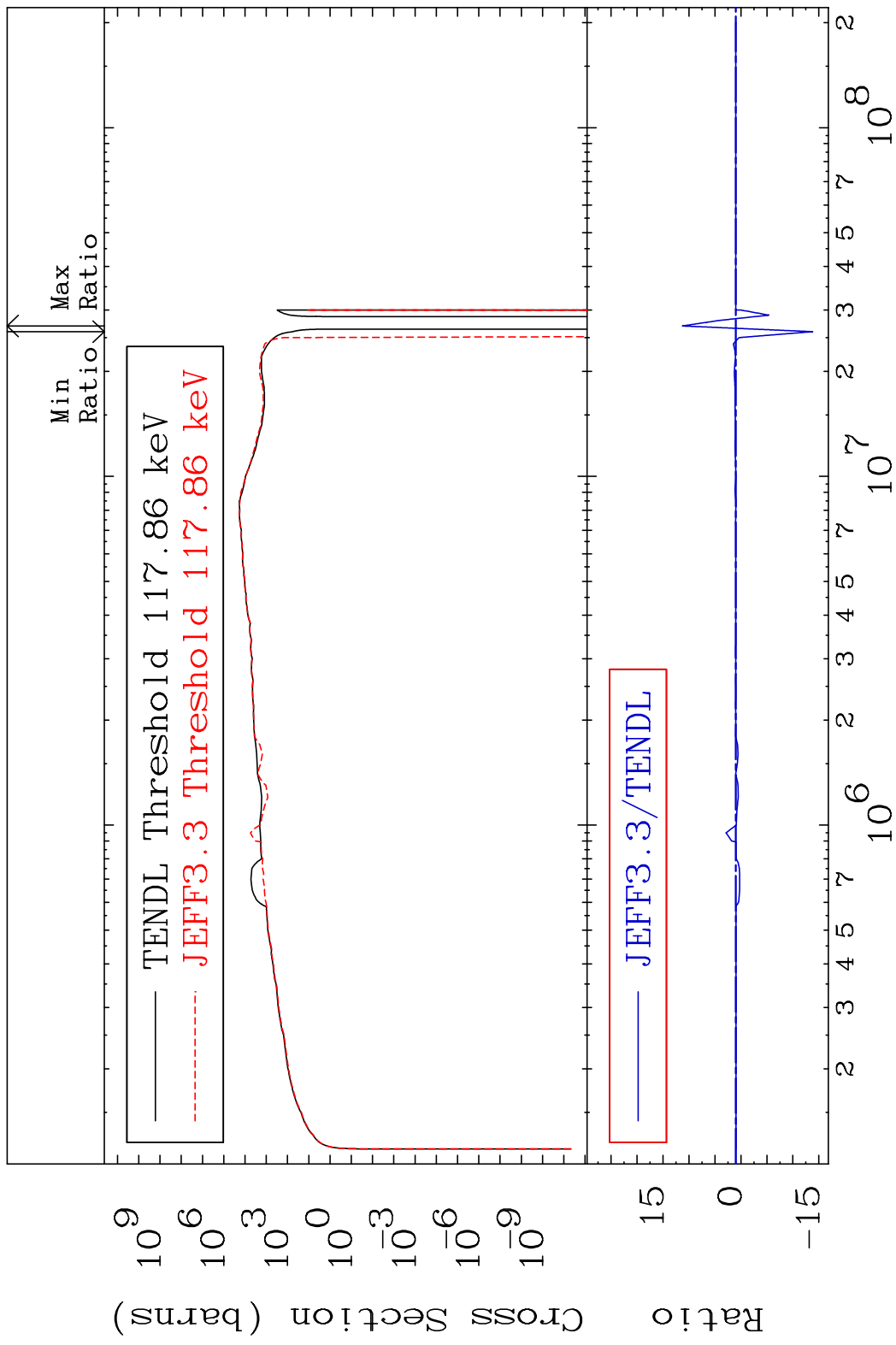




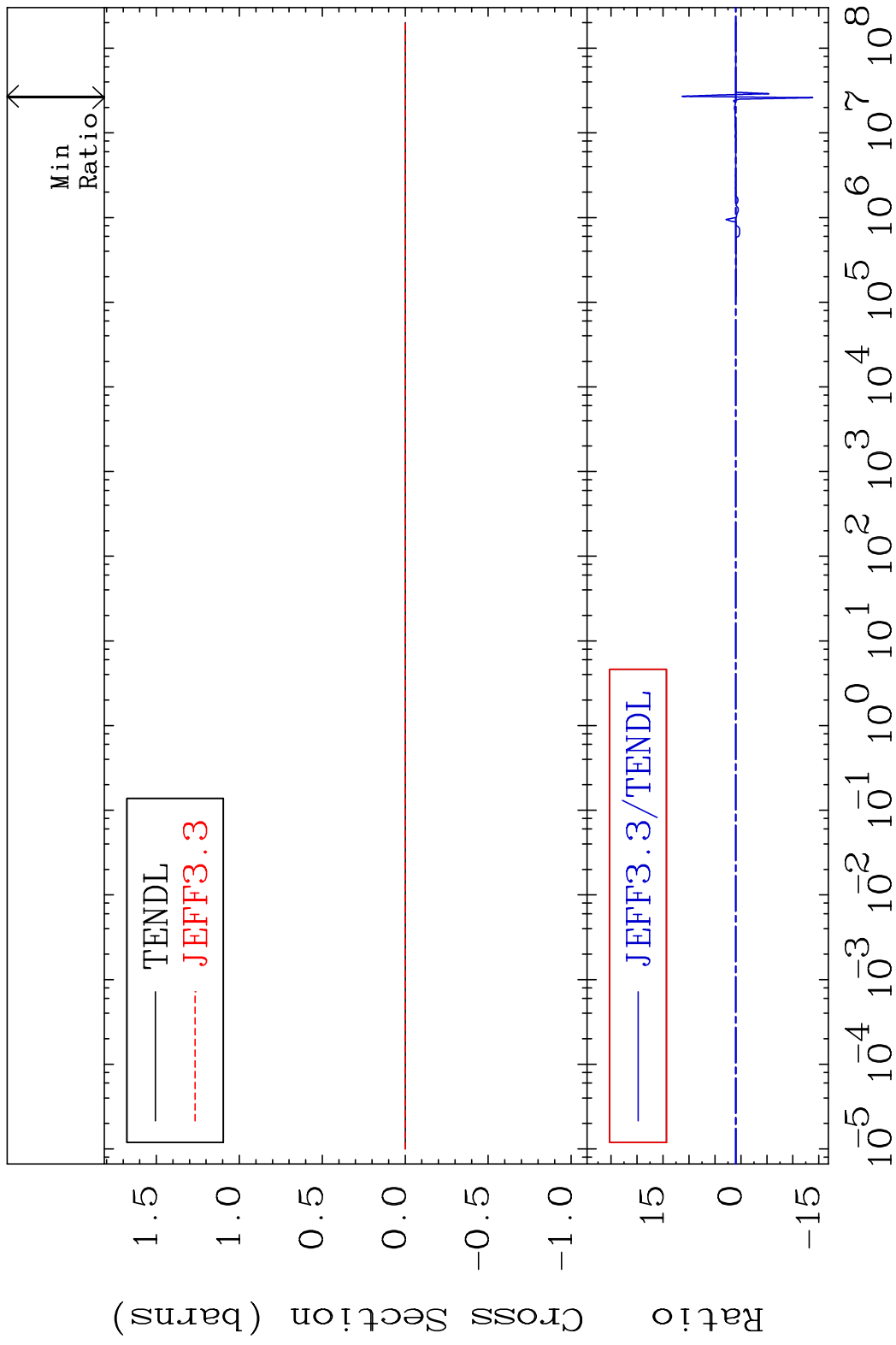
MAT 71119 (n, 3n): 71-Lu-171m1 71-Lu-173  
 Radionuclide Production Cross Section 180.0 mb 77.92 %



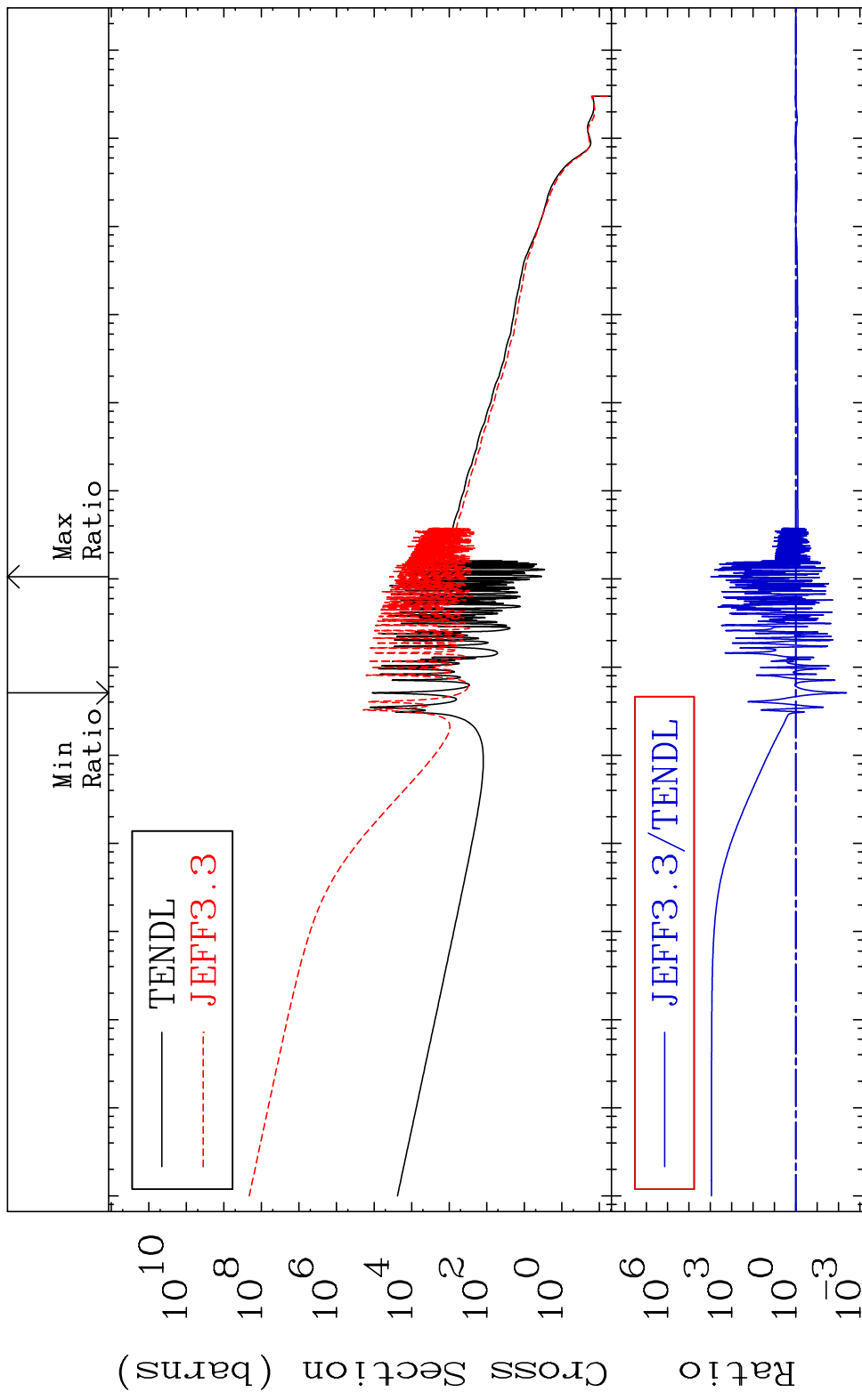
MAT 7119 Kerma inelastic (mt51-91) 71-Lu-173  
 Cross Section -1479. To 1027. %



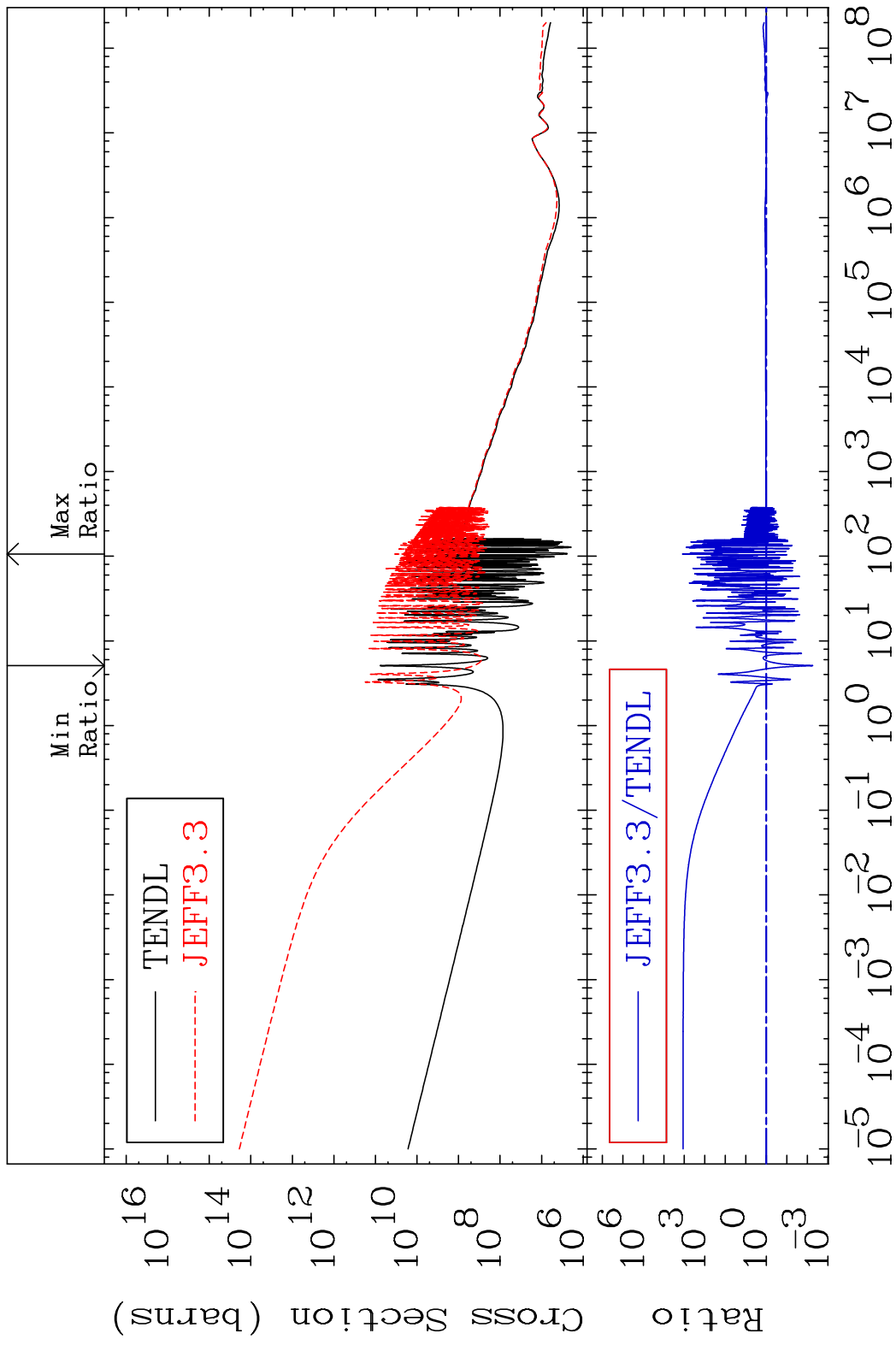
MAT 7119 Kerma fission (mt18 or mt19-20-21-38) 71-Lu-173  
 Cross Section -1479. To 1027. %



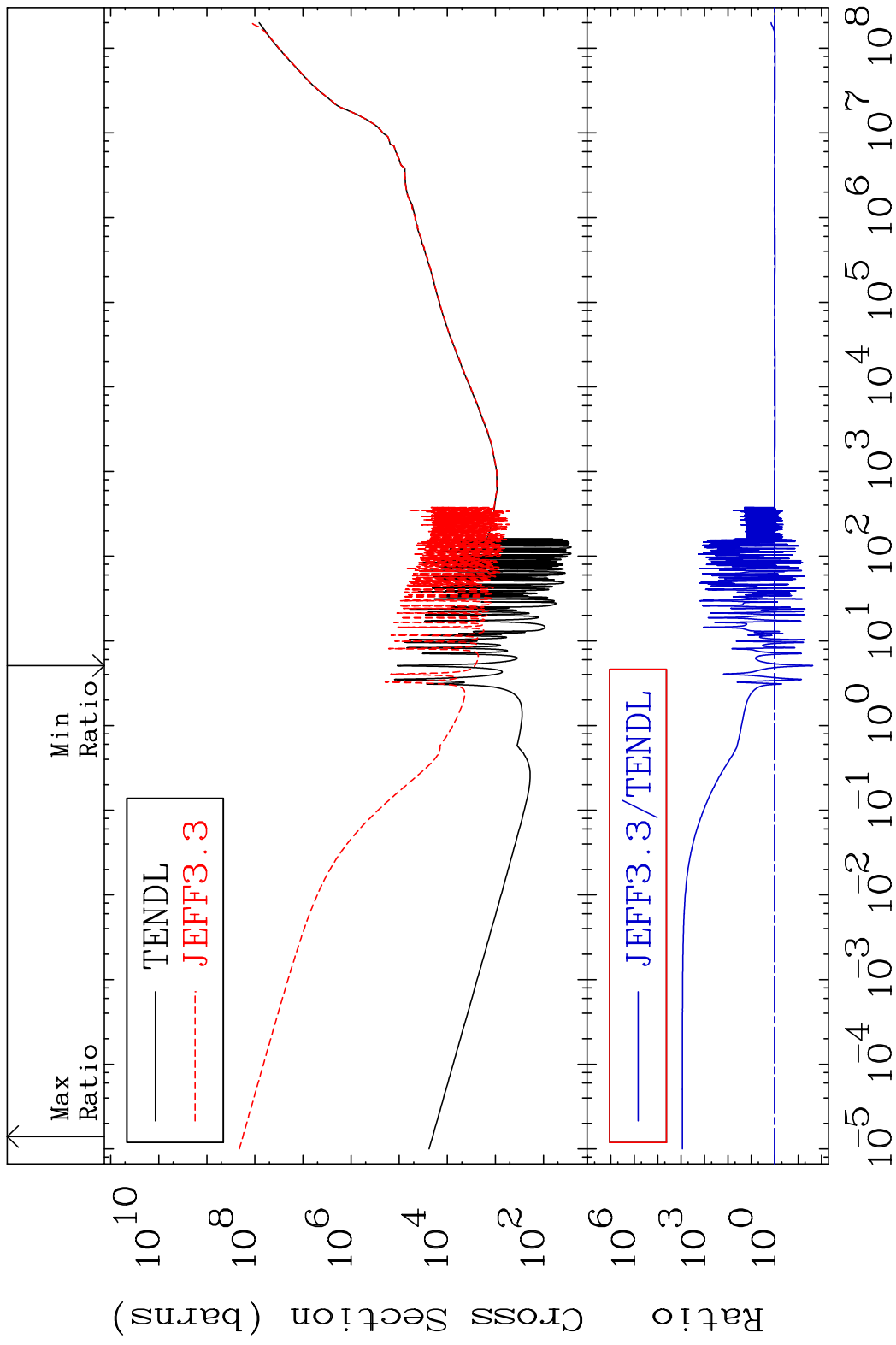
MAT 7119 Kerma capture (mt102) 71-Lu-173  
 Cross Section -99.57 To 9999. %



MAT 7119 Total photon (eV-barns) 71-Lu-173  
 Cross Section -99.44 To 9999. %

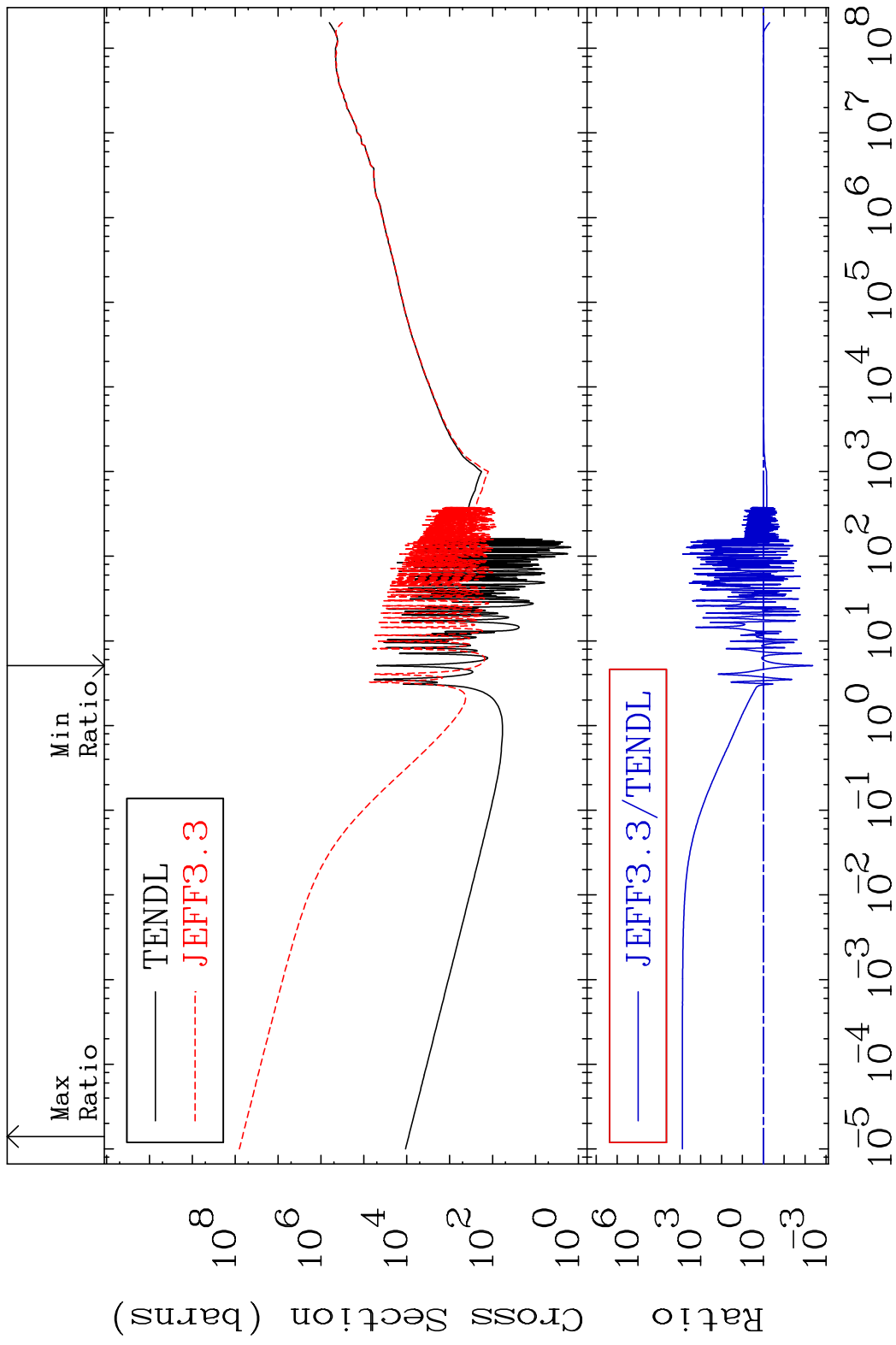


MAT 71119 Total kinematic kerma (high limit) 71-Lu-173  
 Cross Section -97.58 To 9999. %





MAT 7119 Dpa total (eV-barns) 71-Lu-173  
 Cross Section -99.56 To 9999. %

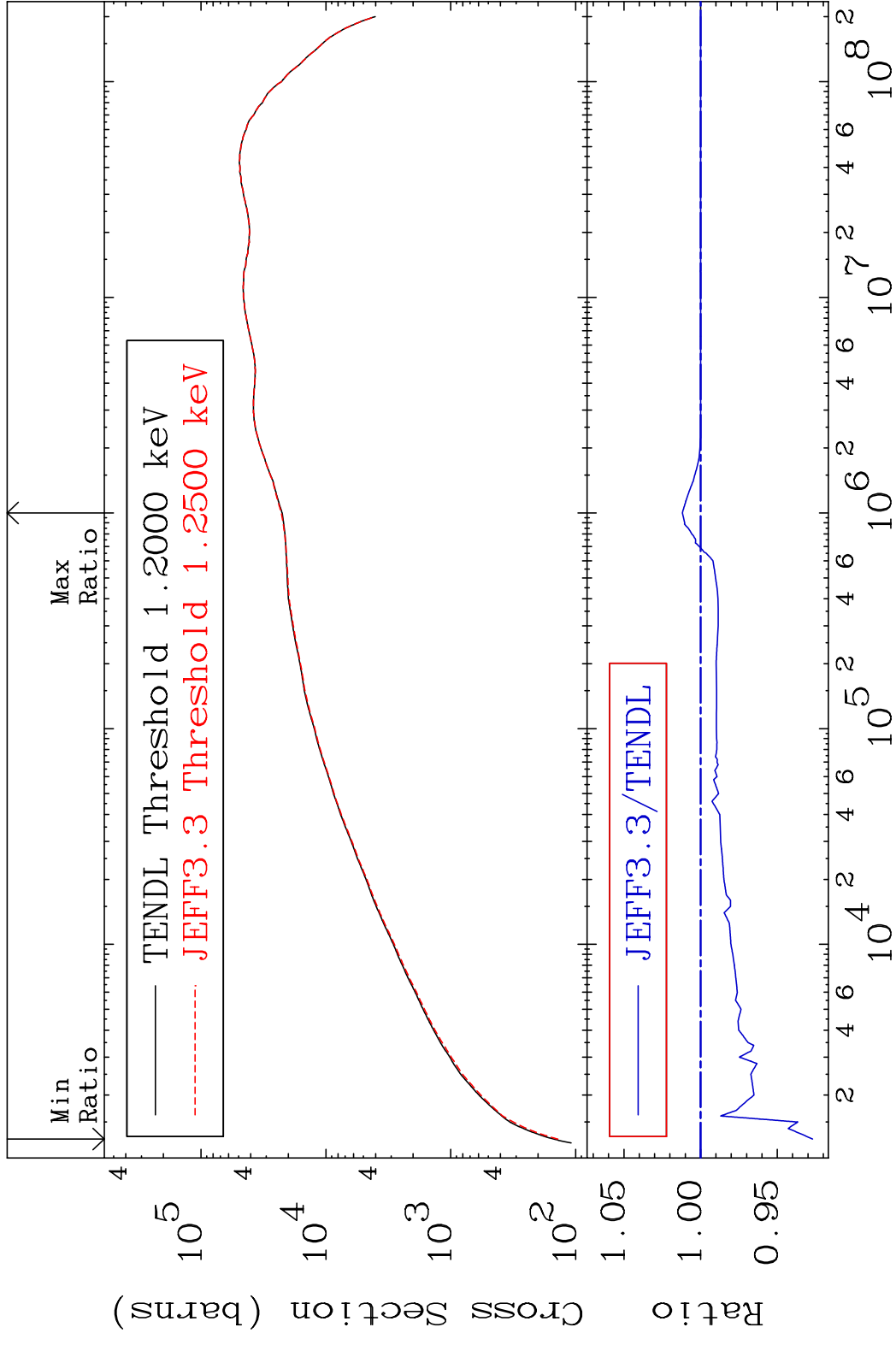


MAT 7119

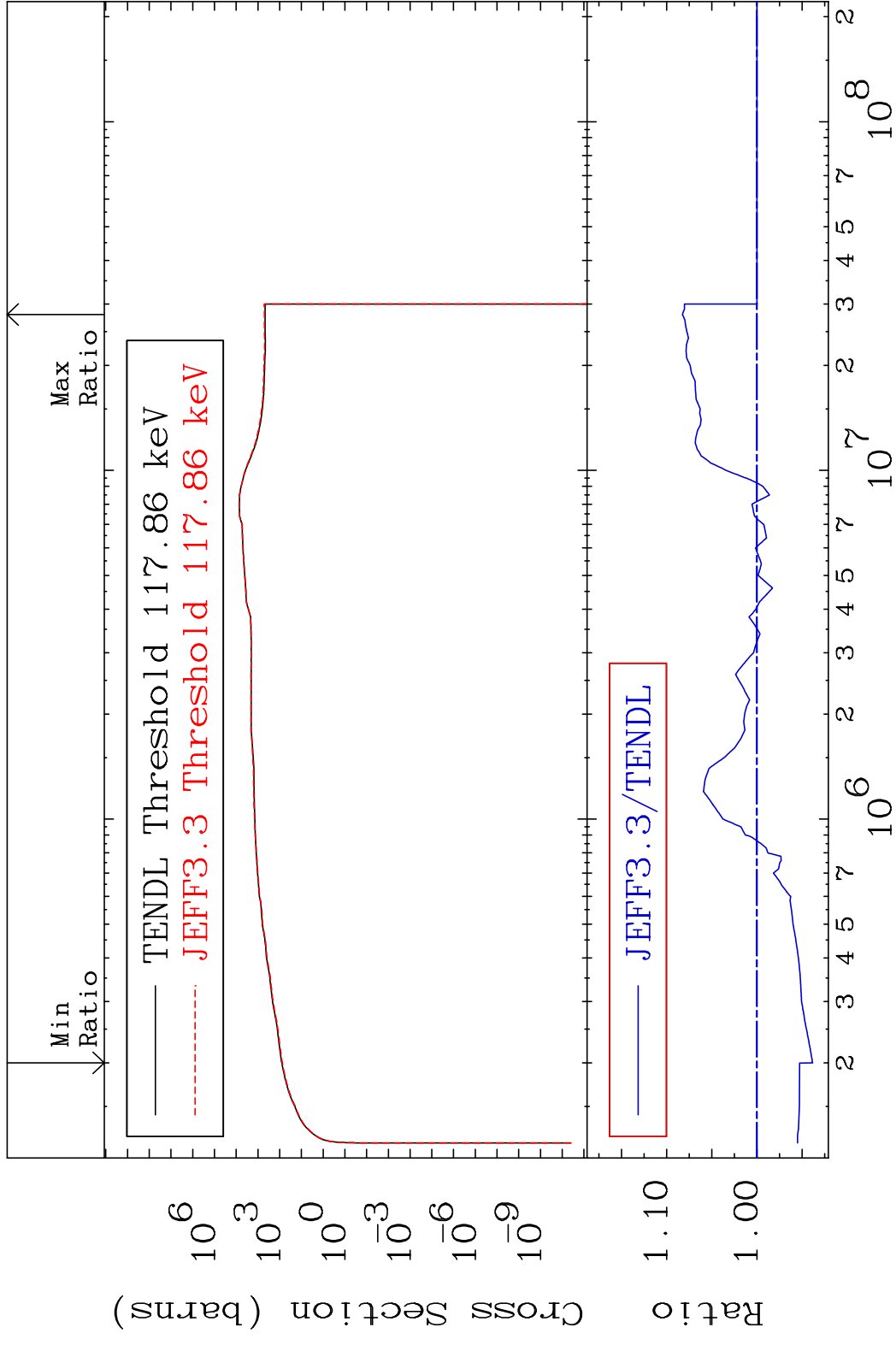
Dpa elastic (mt2)

71-Lu-173

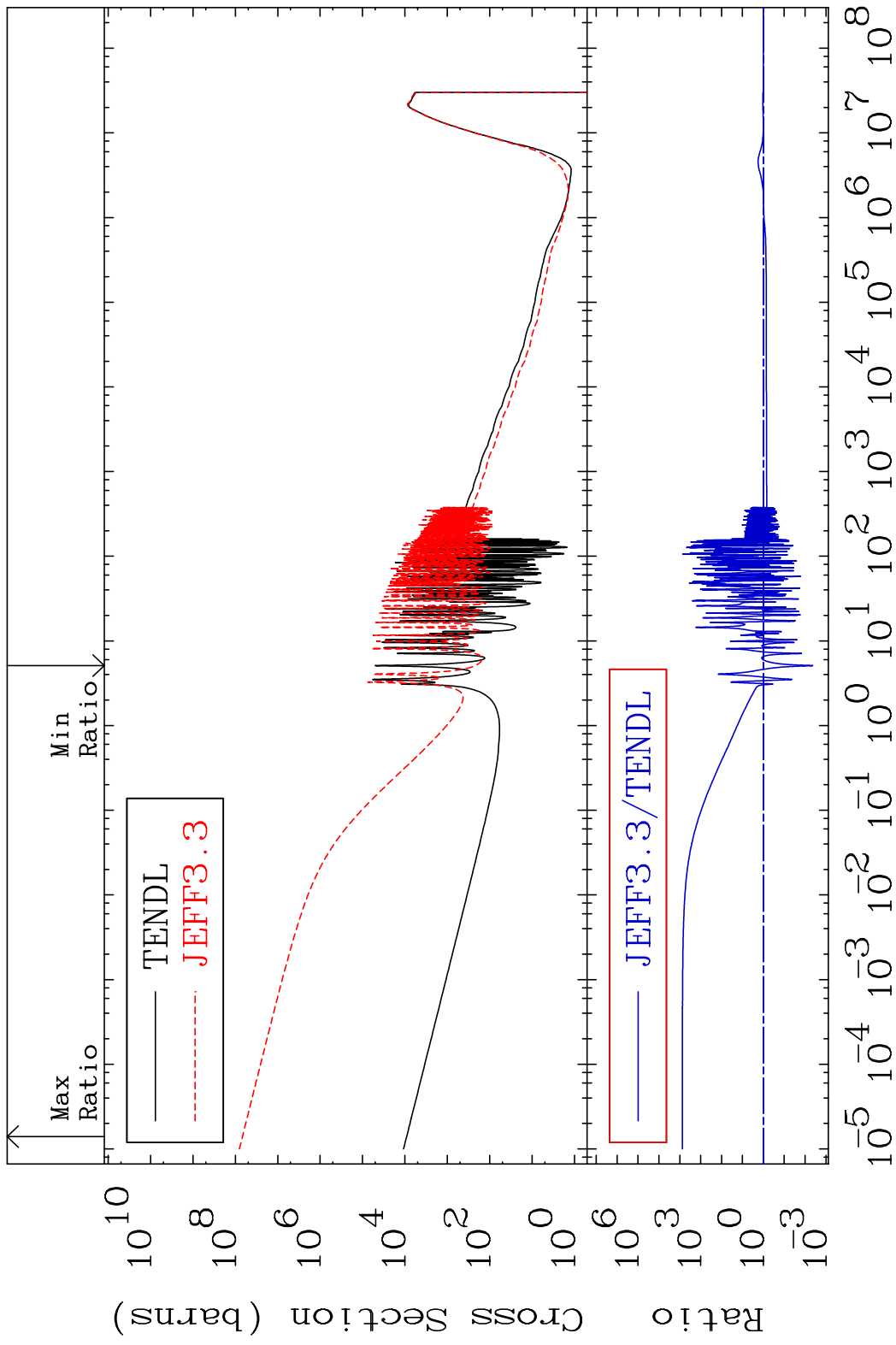
Cross Section -7.298 To 1.191 %



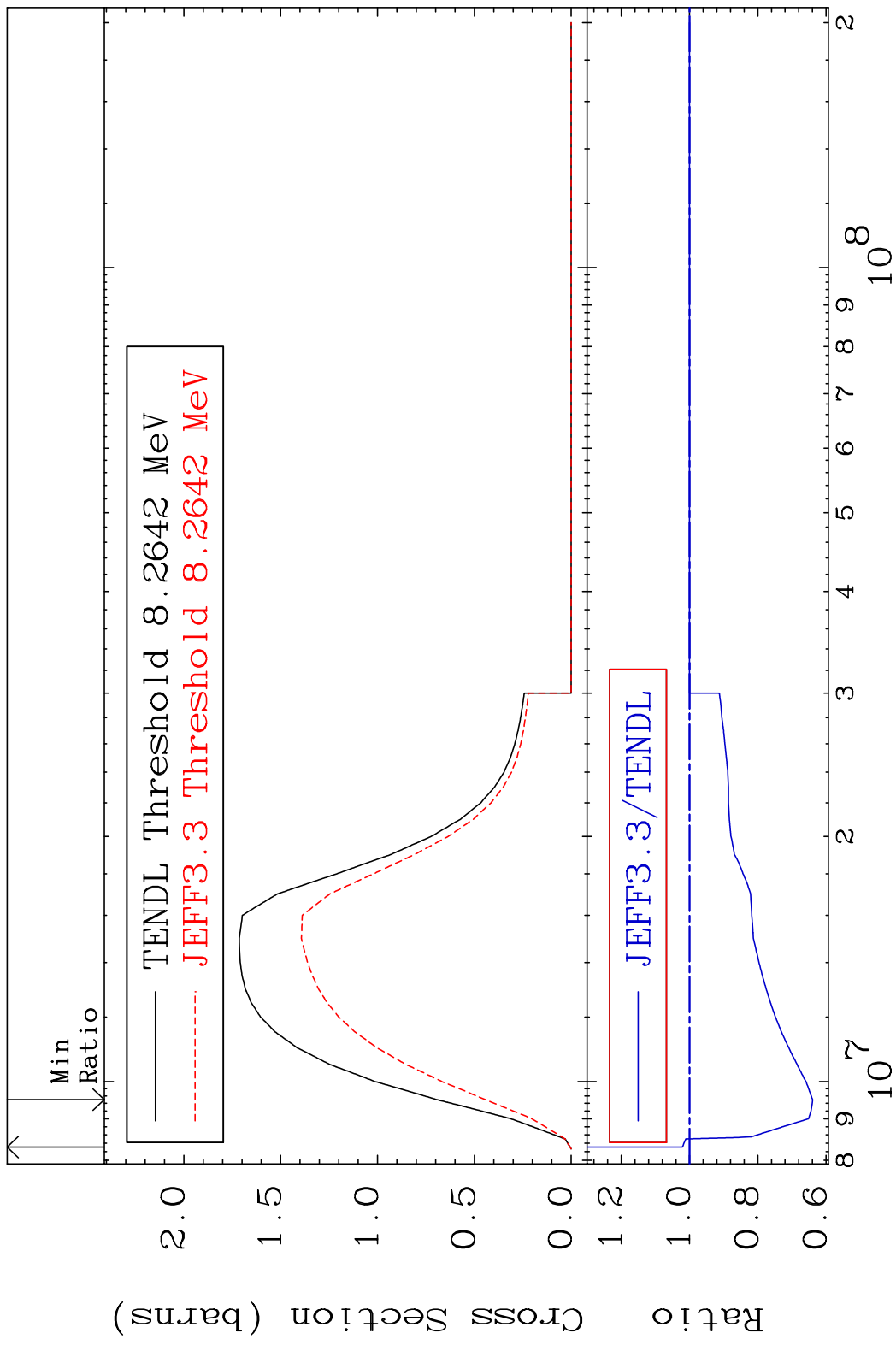
MAT 7119 Dpa inelastic (mt51-91) 71-Lu-173  
 Cross Section -6.161 To 8.254 %



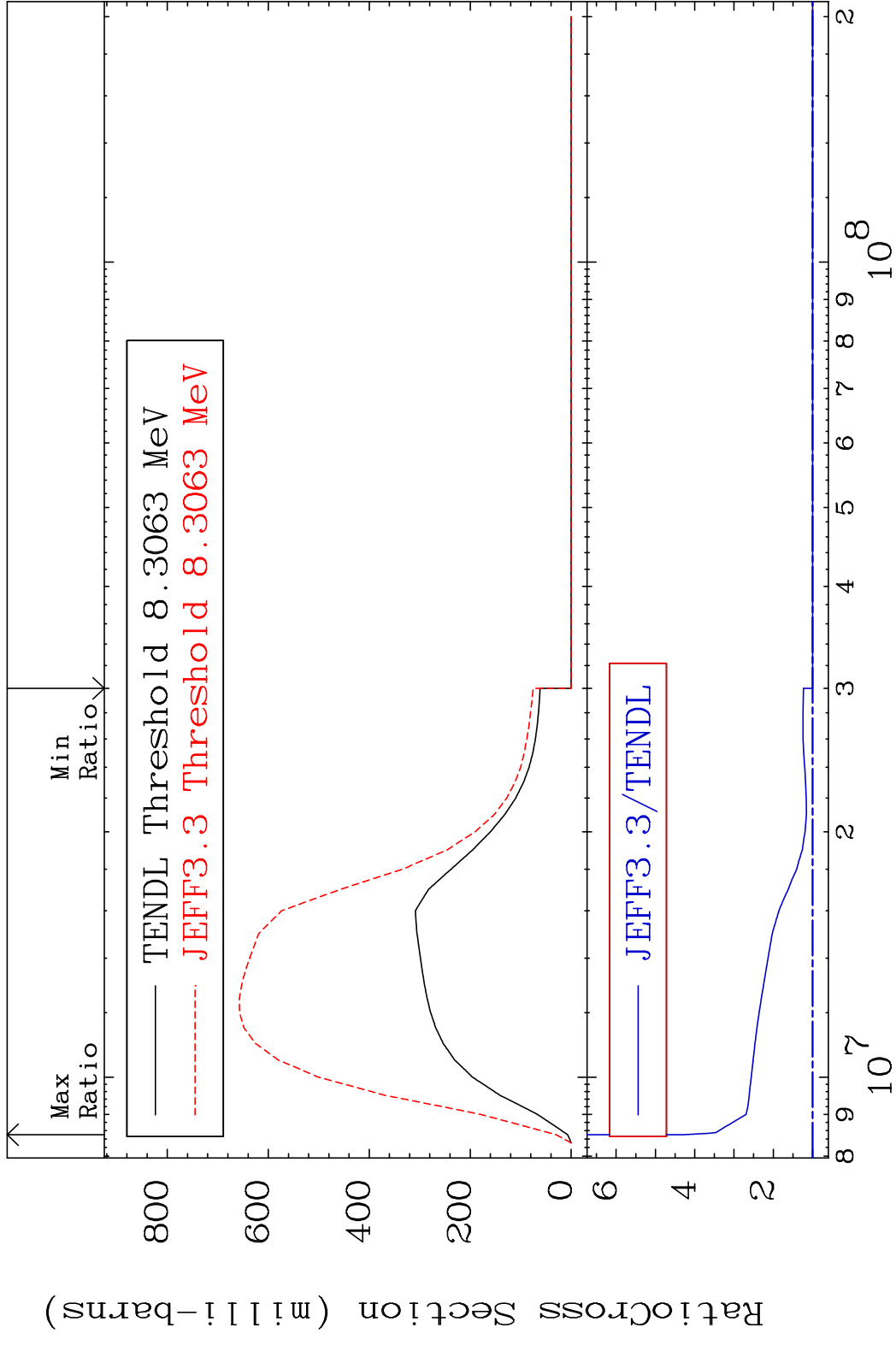
MAT 7119 Dpa disappearance (mt102 -120) 71-Lu-173  
 Cross Section -99.56 To 9999. %



MAT 7119 (n,2n):71-Lu-172g 71-Lu-173  
 Radionuclide Production Cross Section 36.05 dpo 2.109 %

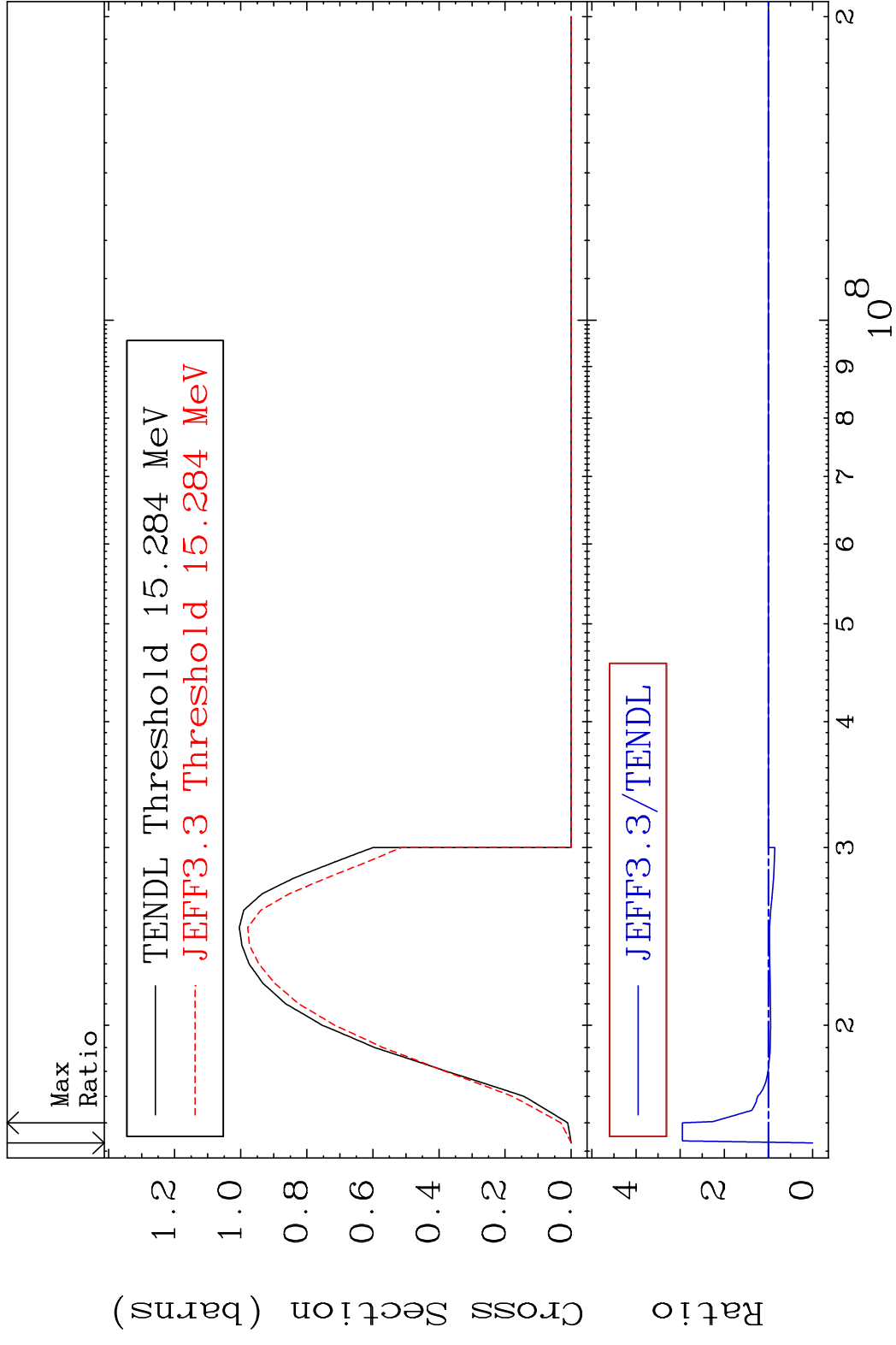


MAT 7119 (n,2n):71-Lu-172m1 71-Lu-173  
 Radionuclide Production Cross Section 331.4 %

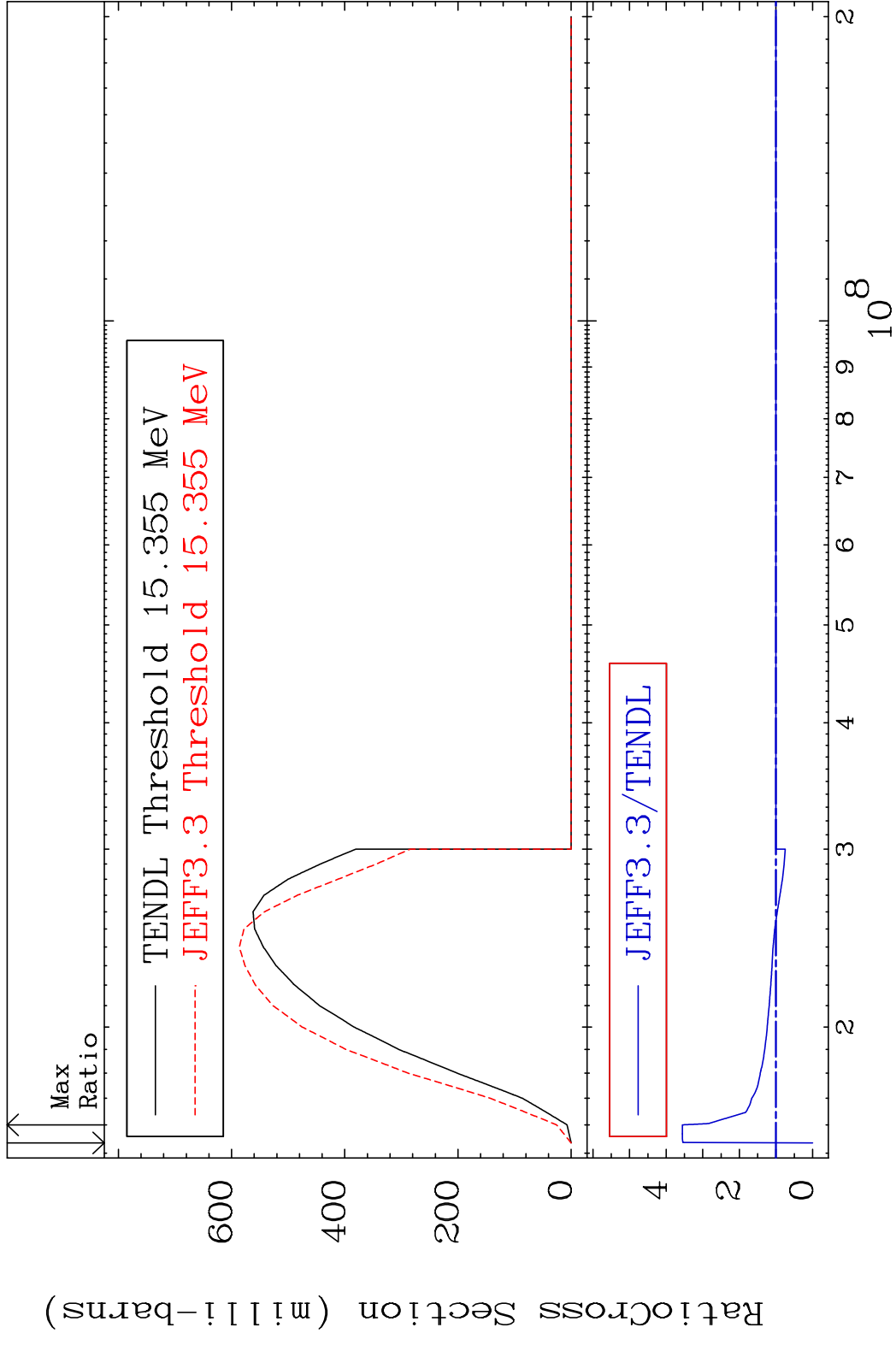


69 Incident Energy (eV) 71-Lu-173

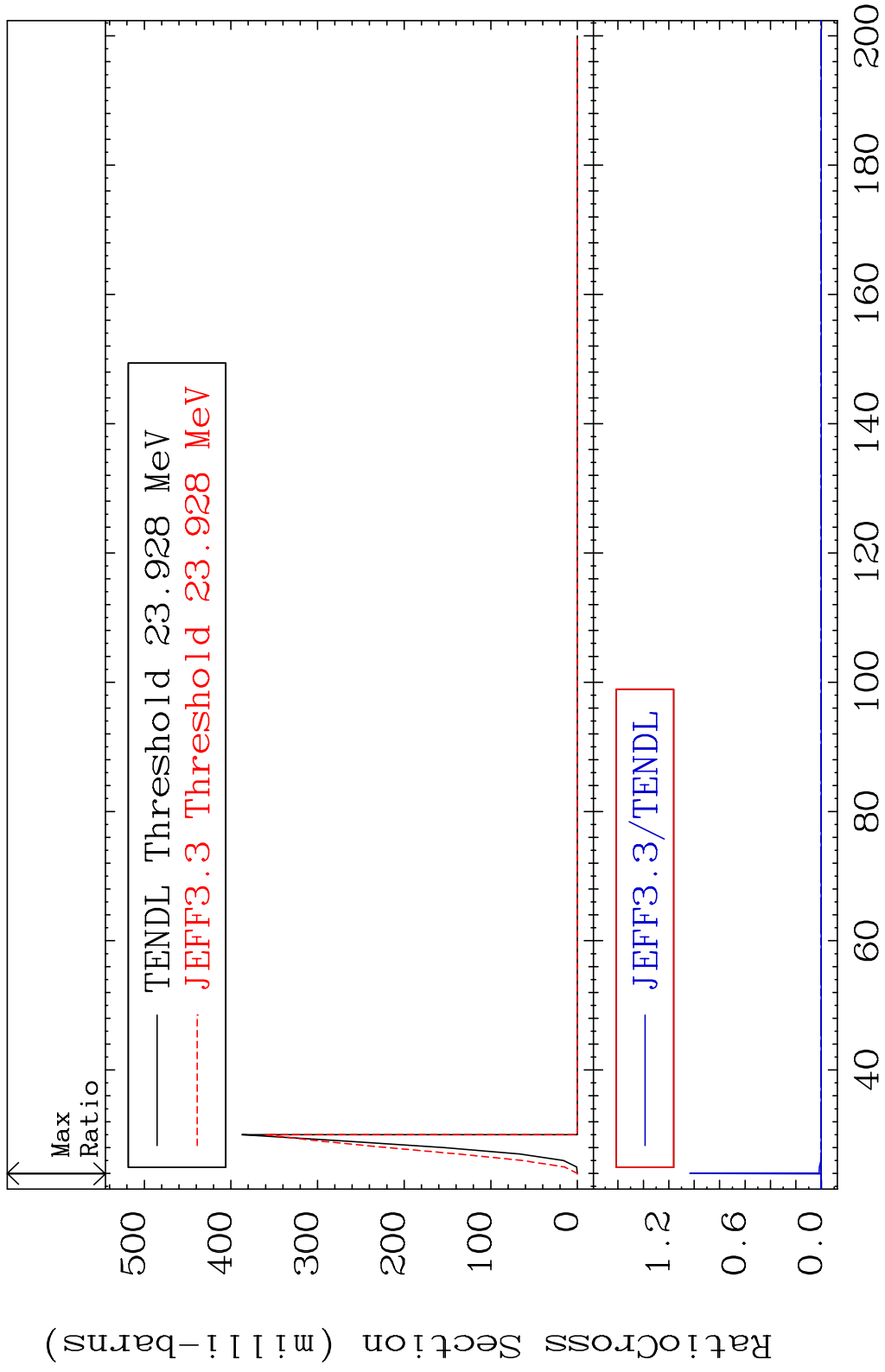
MAT 7119 (n,3n):71-Lu-171g 71-Lu-173  
 Radionuclide Production Cross Section 195.0 %



MAT 7119 (n, 3n): 71-Lu-171m1 71-Lu-173  
 Radionuclide Production Cross Section to 255.7 %







MAT 7119 (n, 4n): 71-Lu-170m2 71-Lu-173  
 Radionuclide Production Cross Section 1562. %

