

Program Complot  
(Version 2021-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

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

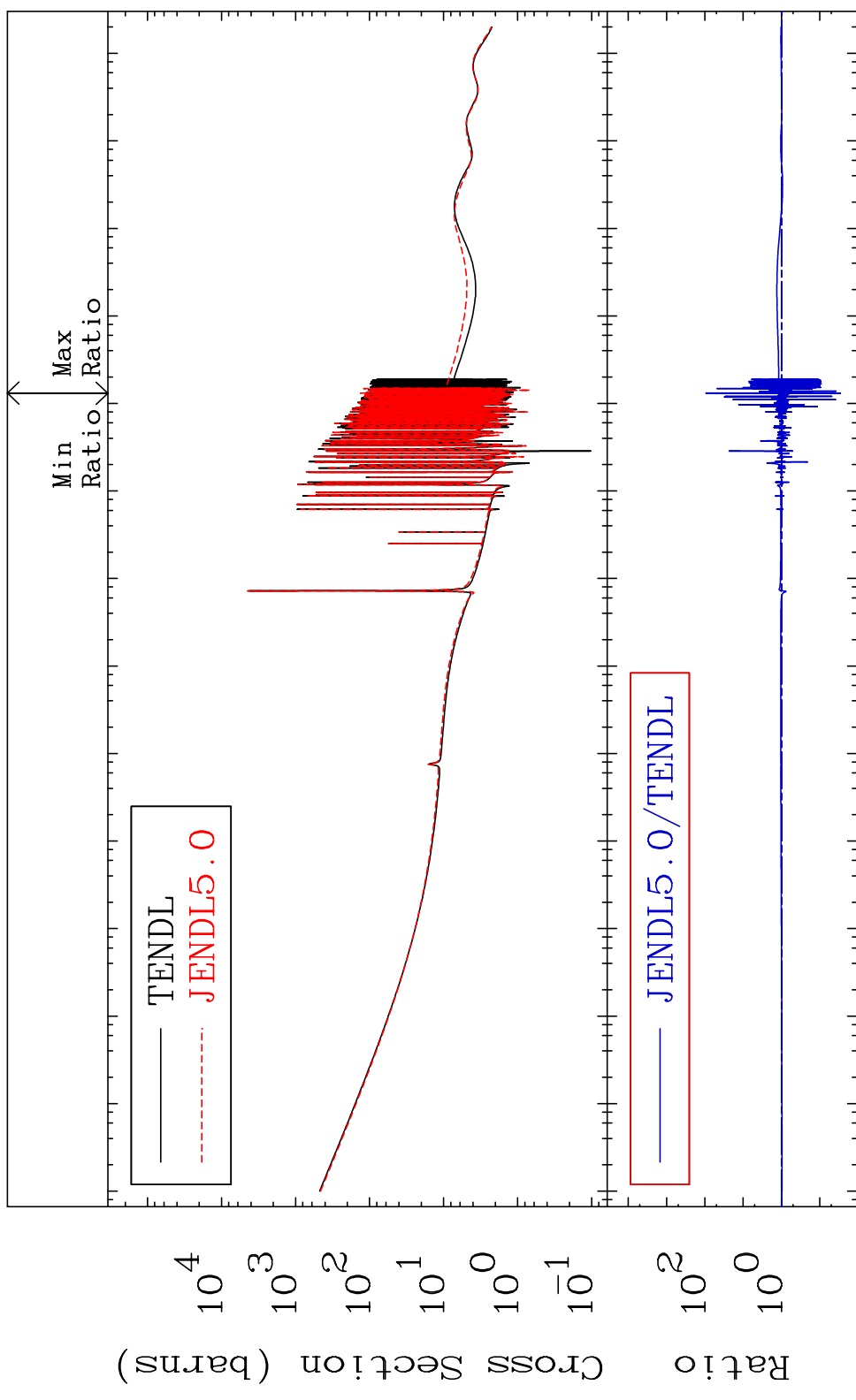
Press Mouse Button to Start

MAT 5728

Total

57-La-139

Cross Section -97.12 To 9374. %



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>

1

Incident Energy (eV)

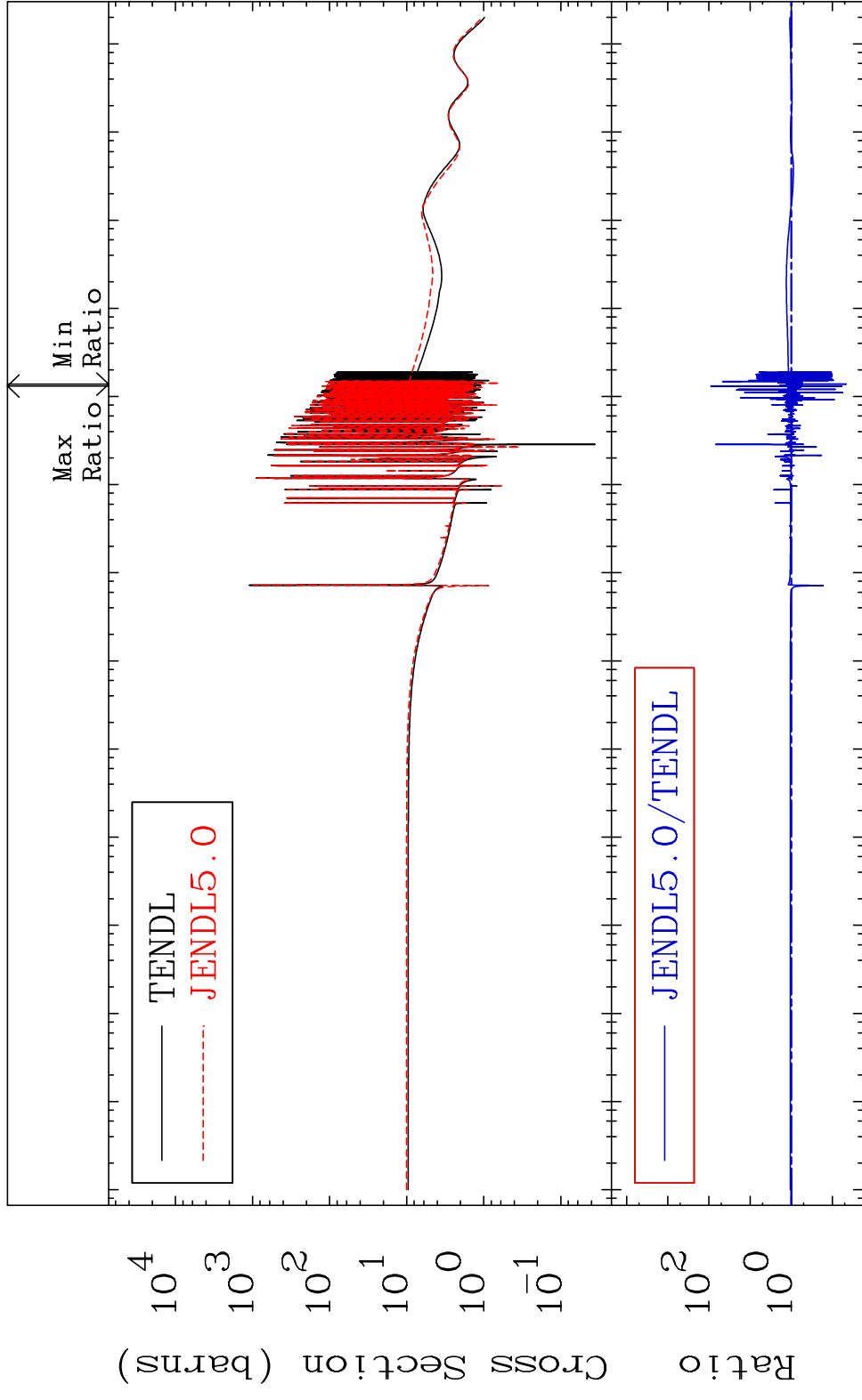
57-La-139

MAT 5728

Elastic

57-La-139

Cross Section -95.41 To 8943. %



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>

2

Incident Energy (eV)

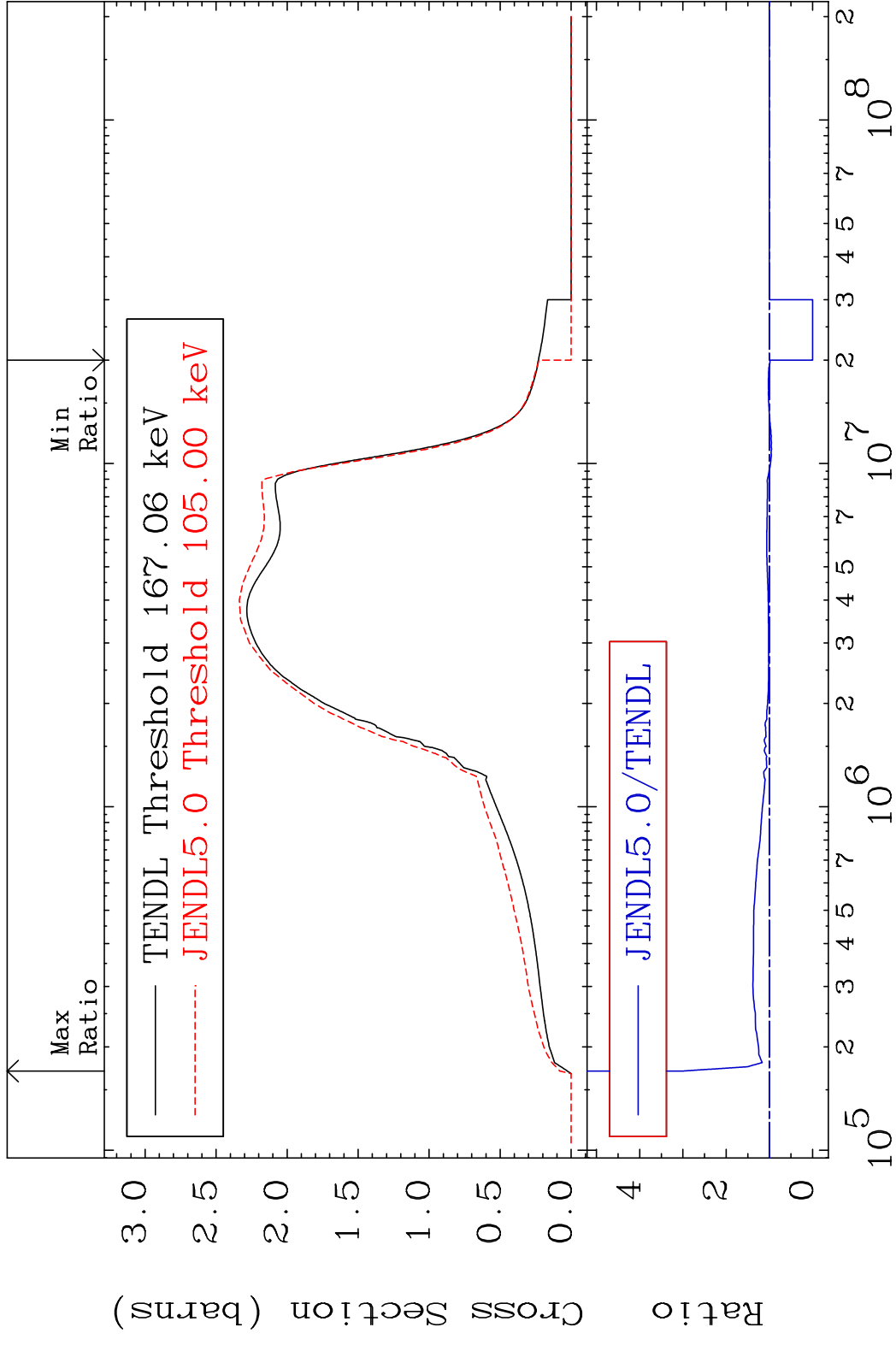
57-La-139

MAT 5728

Inelastic

57-La-139

Cross Section -100.0 To 201.3 %



3

Incident Energy (eV)

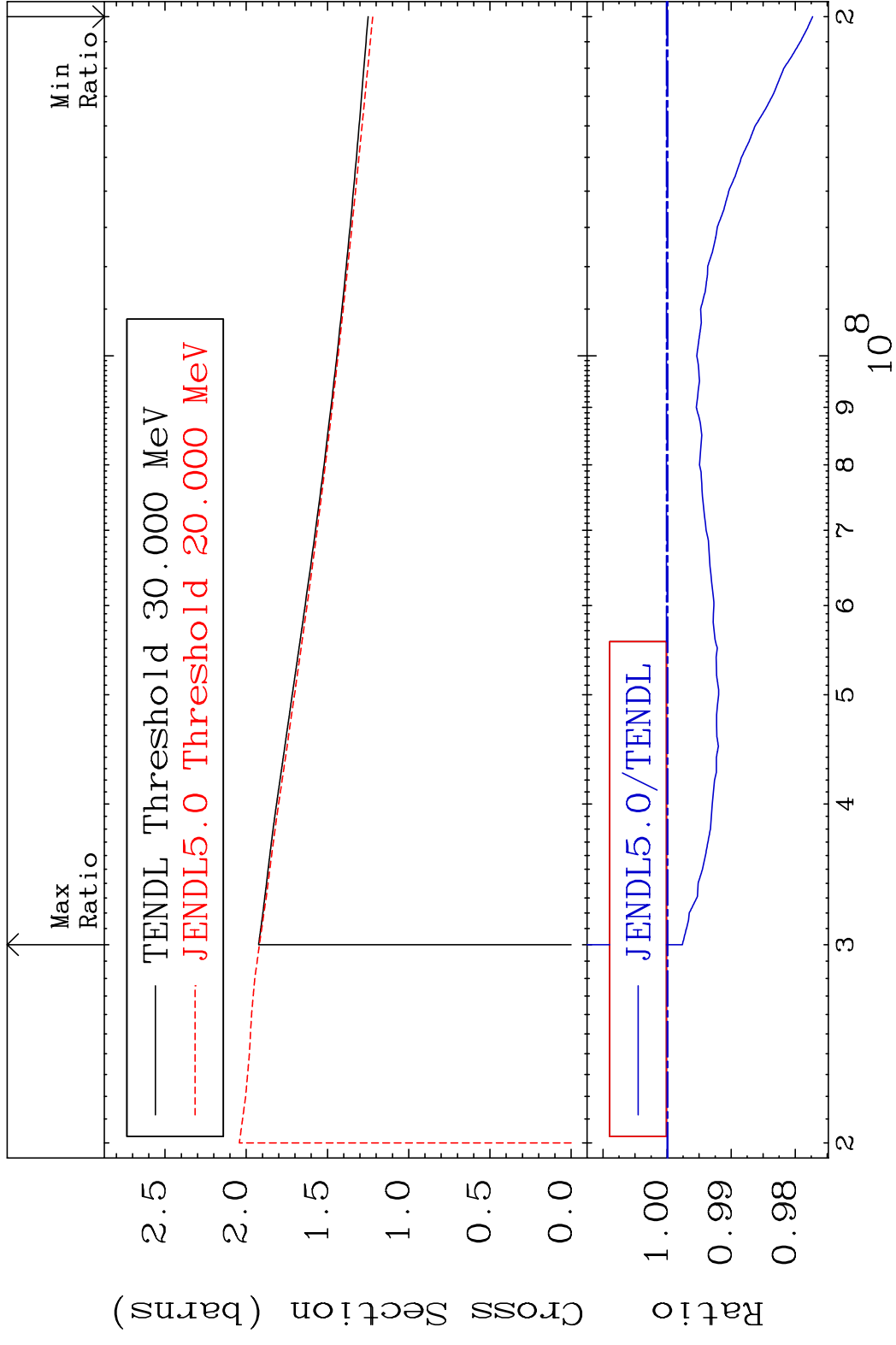
57-La-139

MAT 5728

(n, remainder)

57-La-139

Cross Section -2.271 To -0.238%



4

Incident Energy (eV)

57-La-139

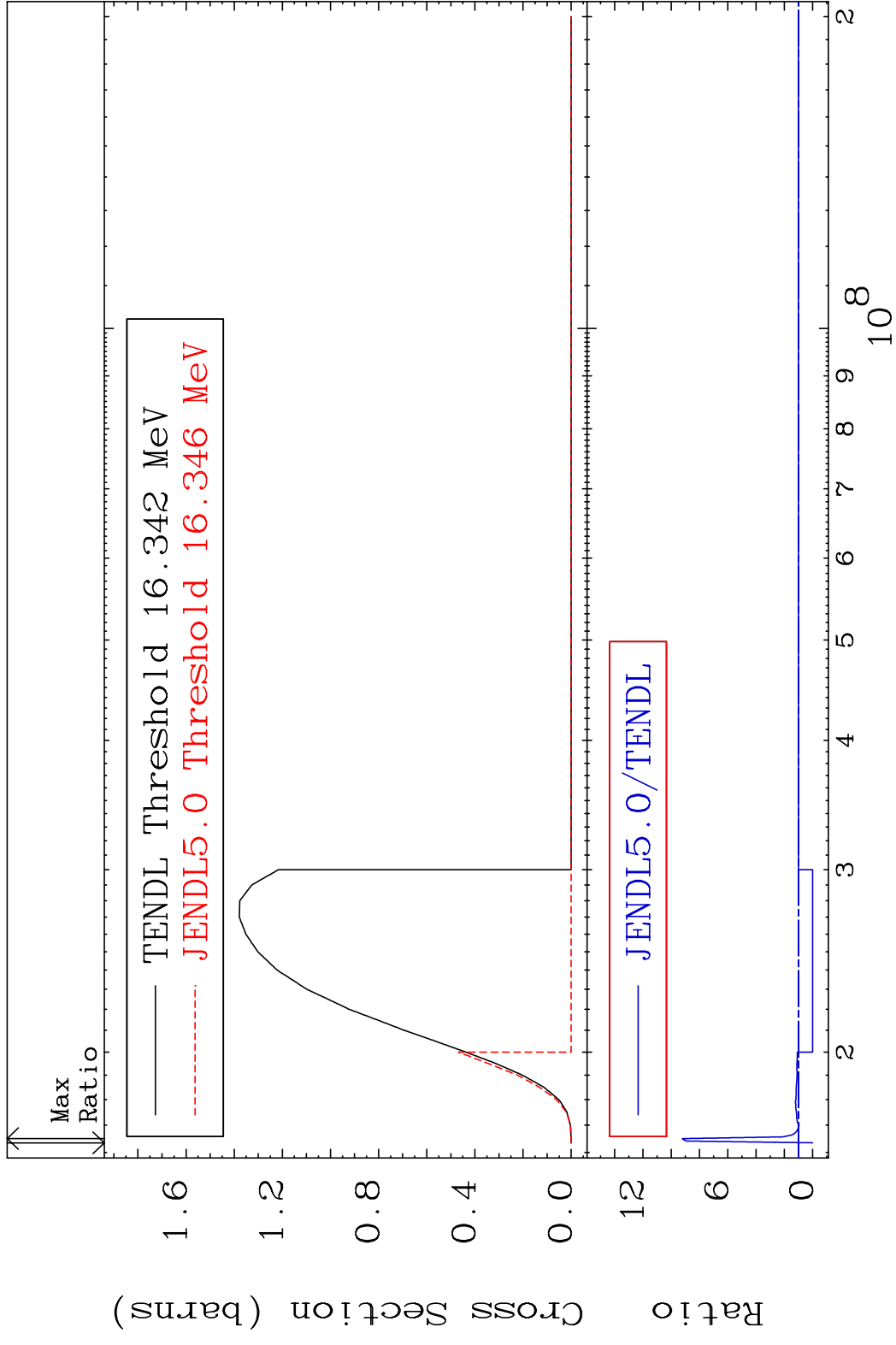


MAT 5728

(n,3n)

57-La-139

Cross Section -100.0 To 821.3 %

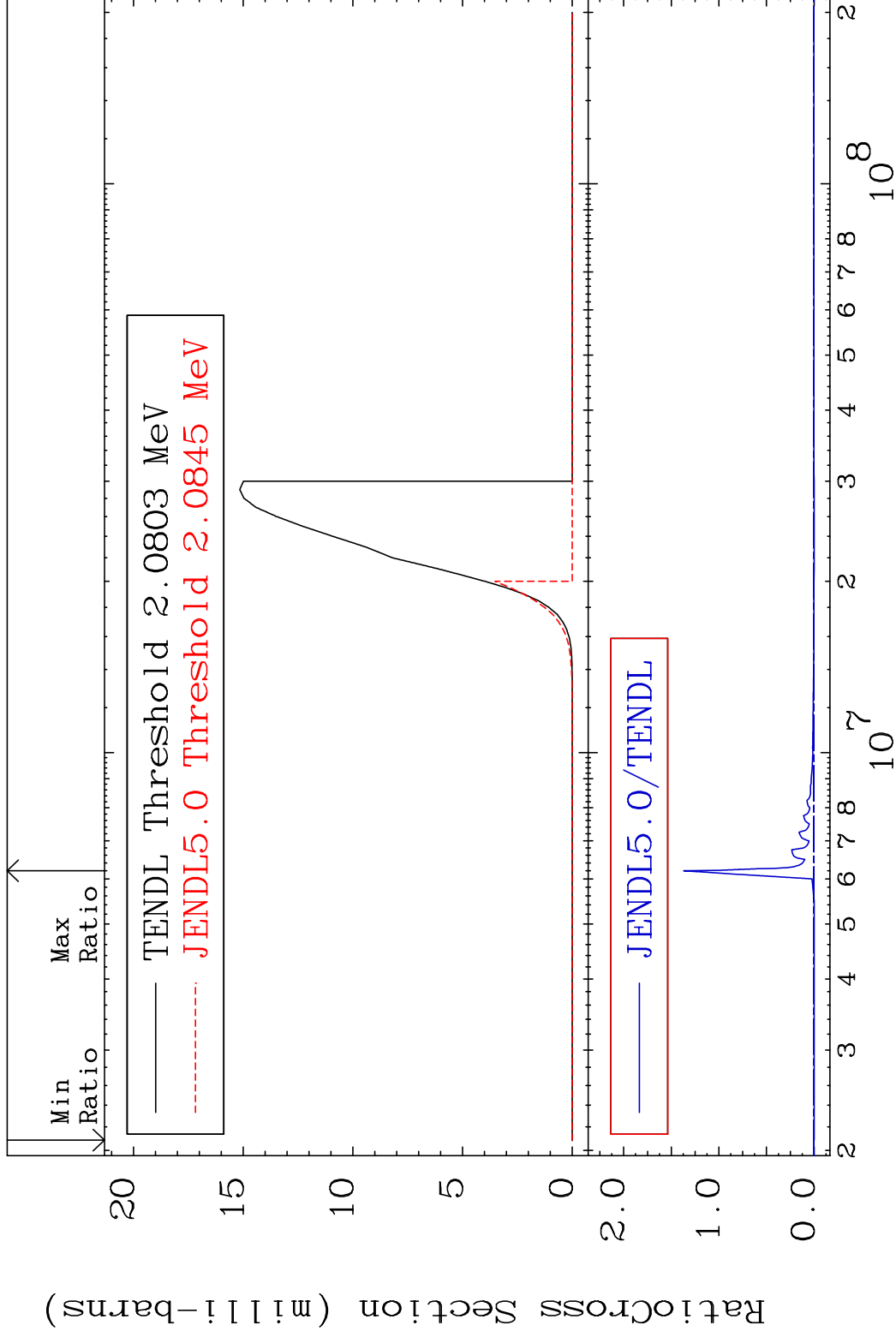


MAT 5728

(n, n')  $\alpha$

57-La-139

Cross Section -100.0 To 9999. %



7

Incident Energy (eV)

57-La-139

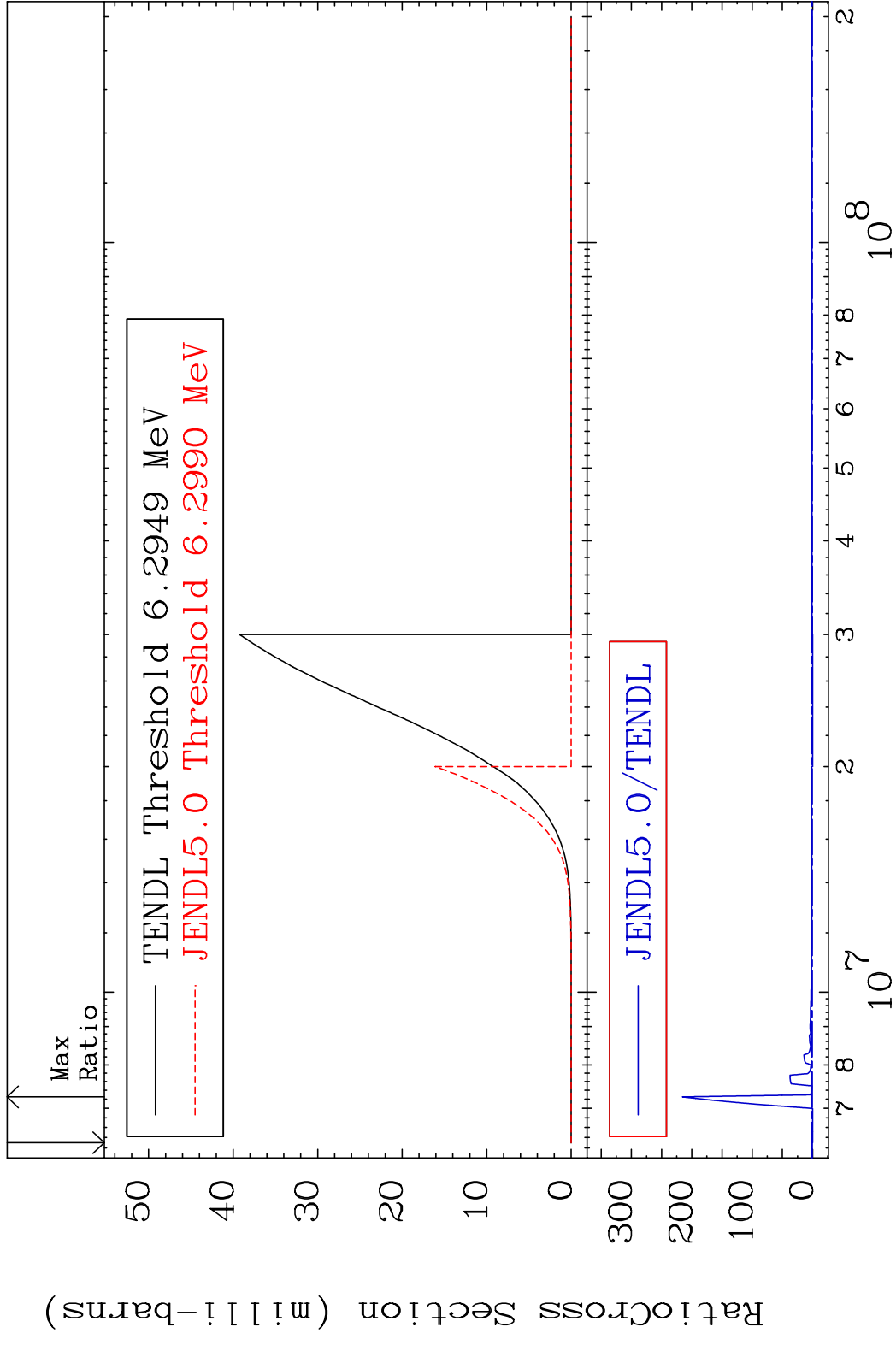


MAT 5728

(n, n') p

57-La-139

Cross Section -100.0 To 9999. %

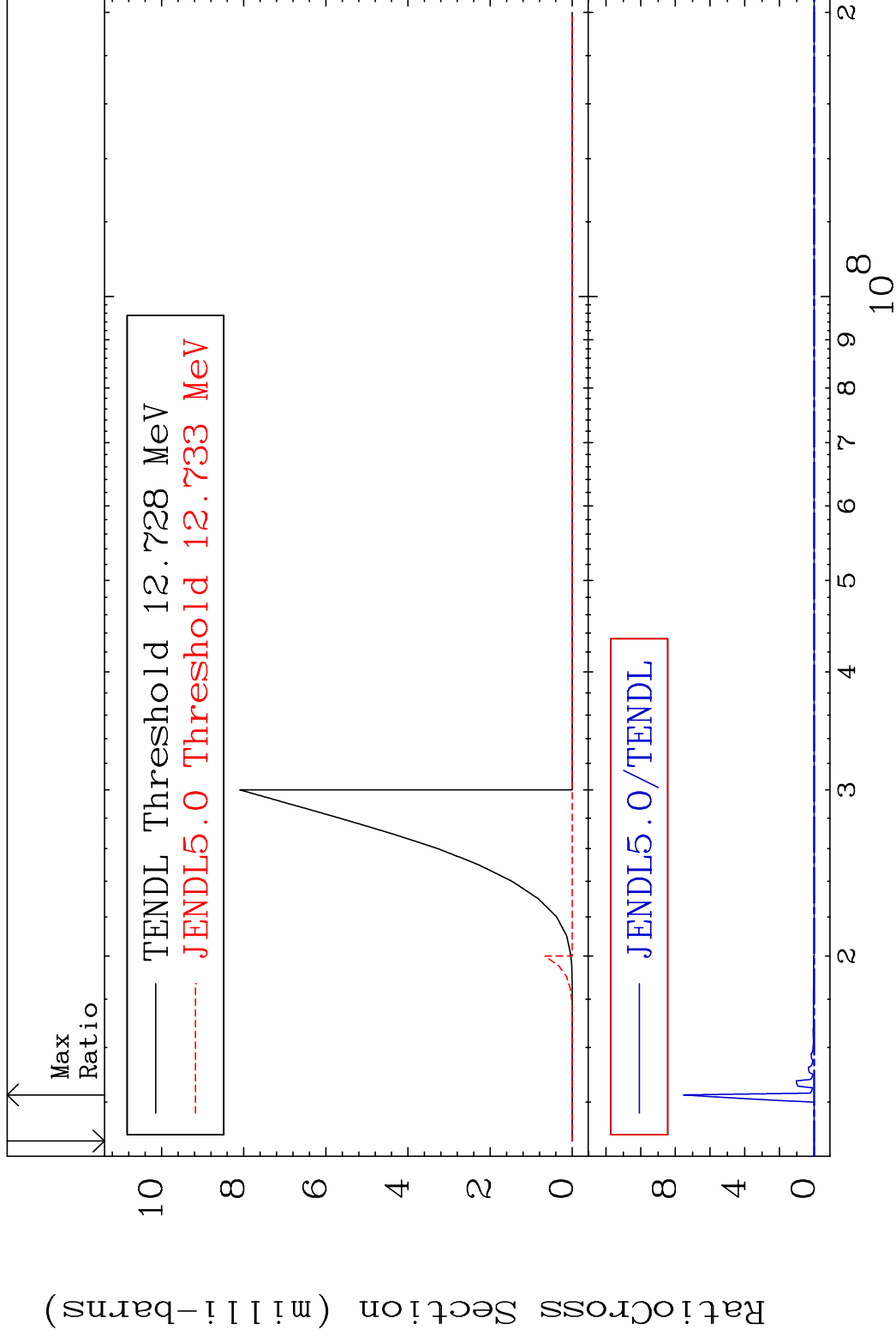


MAT 5728

(n, n') d

57-La-139

Cross Section -100.0 To 9999. %

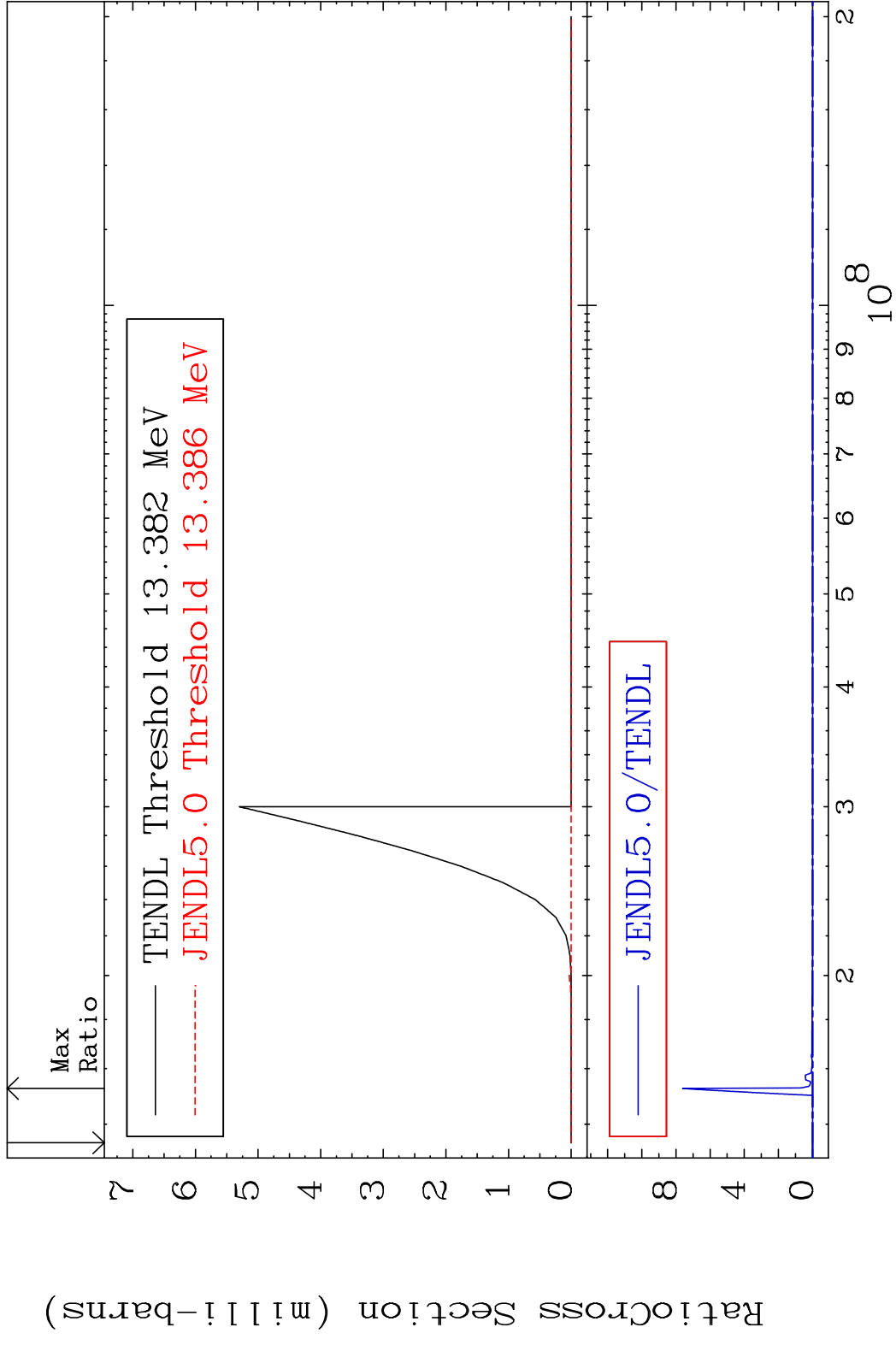


9

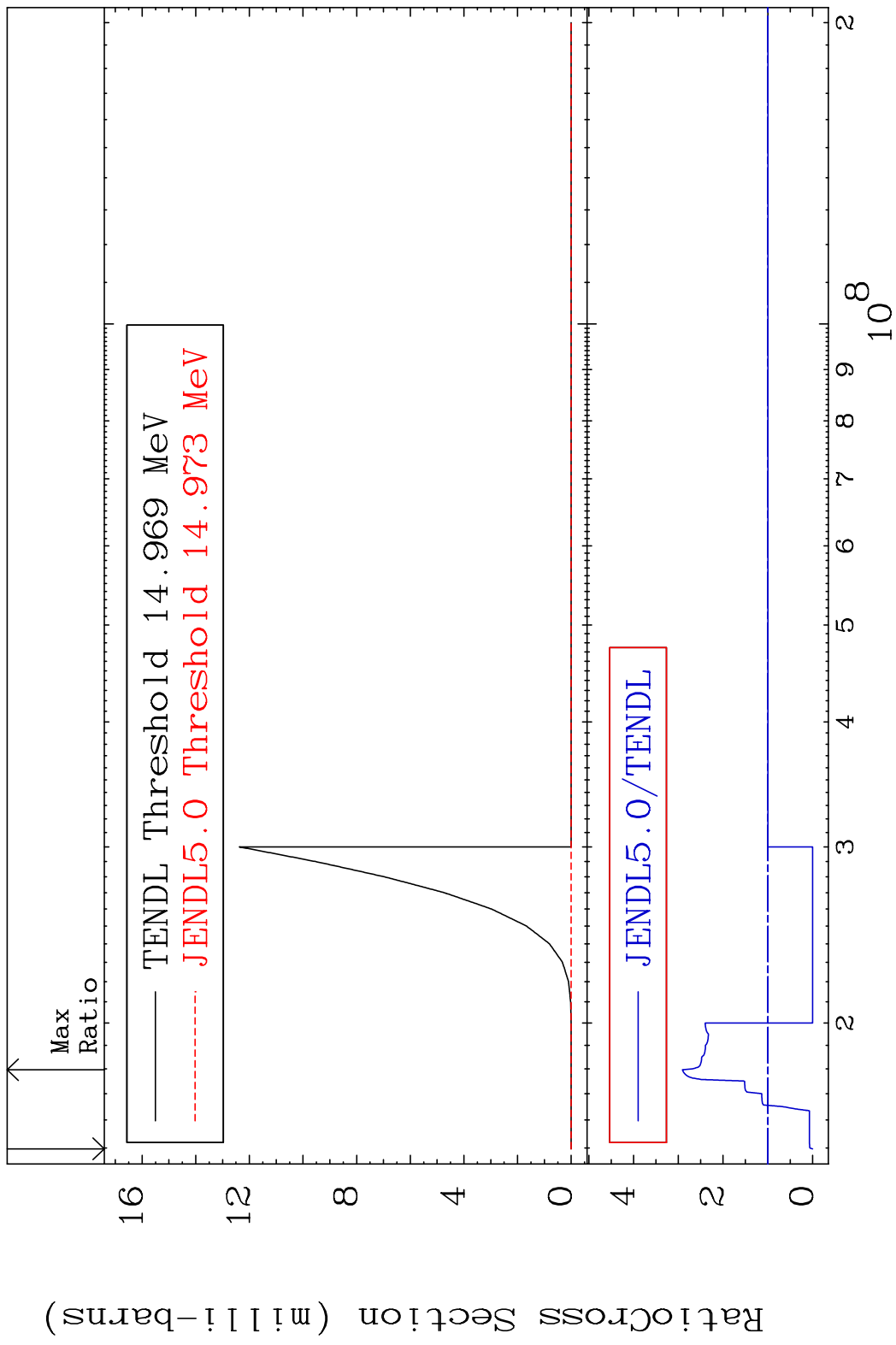
Incident Energy (eV)

57-La-139

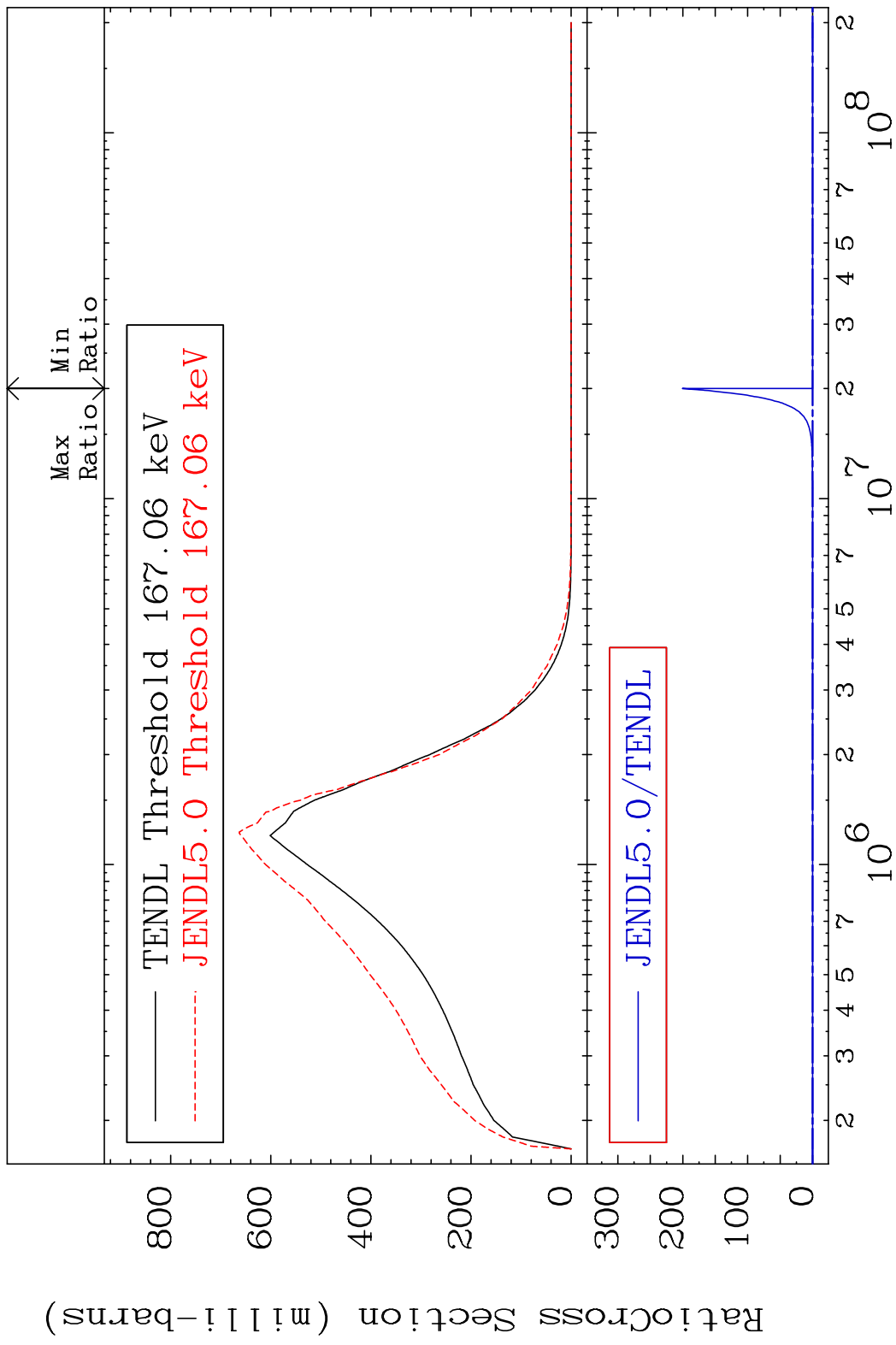
MAT 5728 (n, n') t 57-La-139  
 Cross Section -100.0 To 9999. %



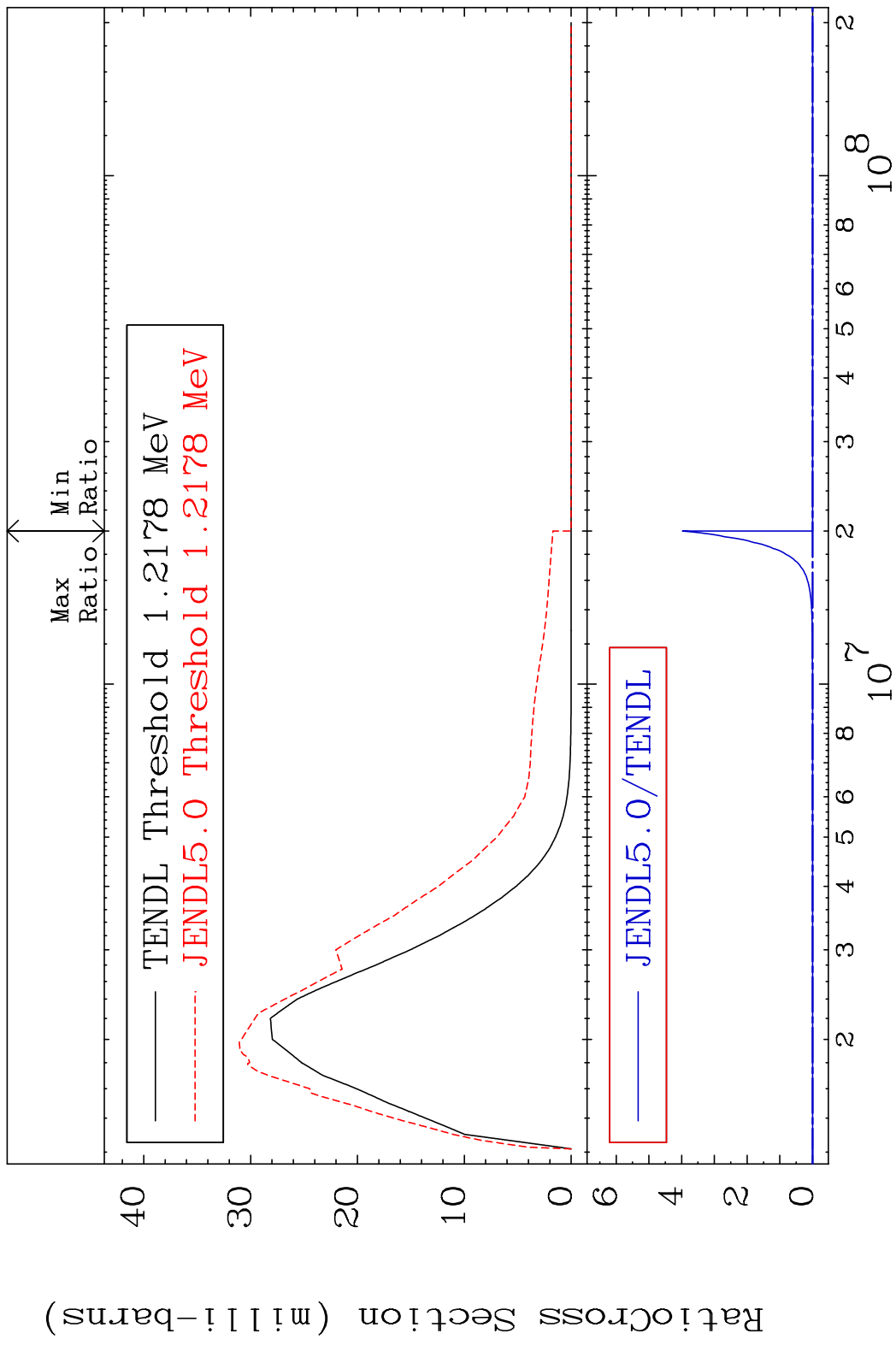
MAT 5728 (n,2n) p 57-La-139  
 Cross Section -100.0 To 191.0 %



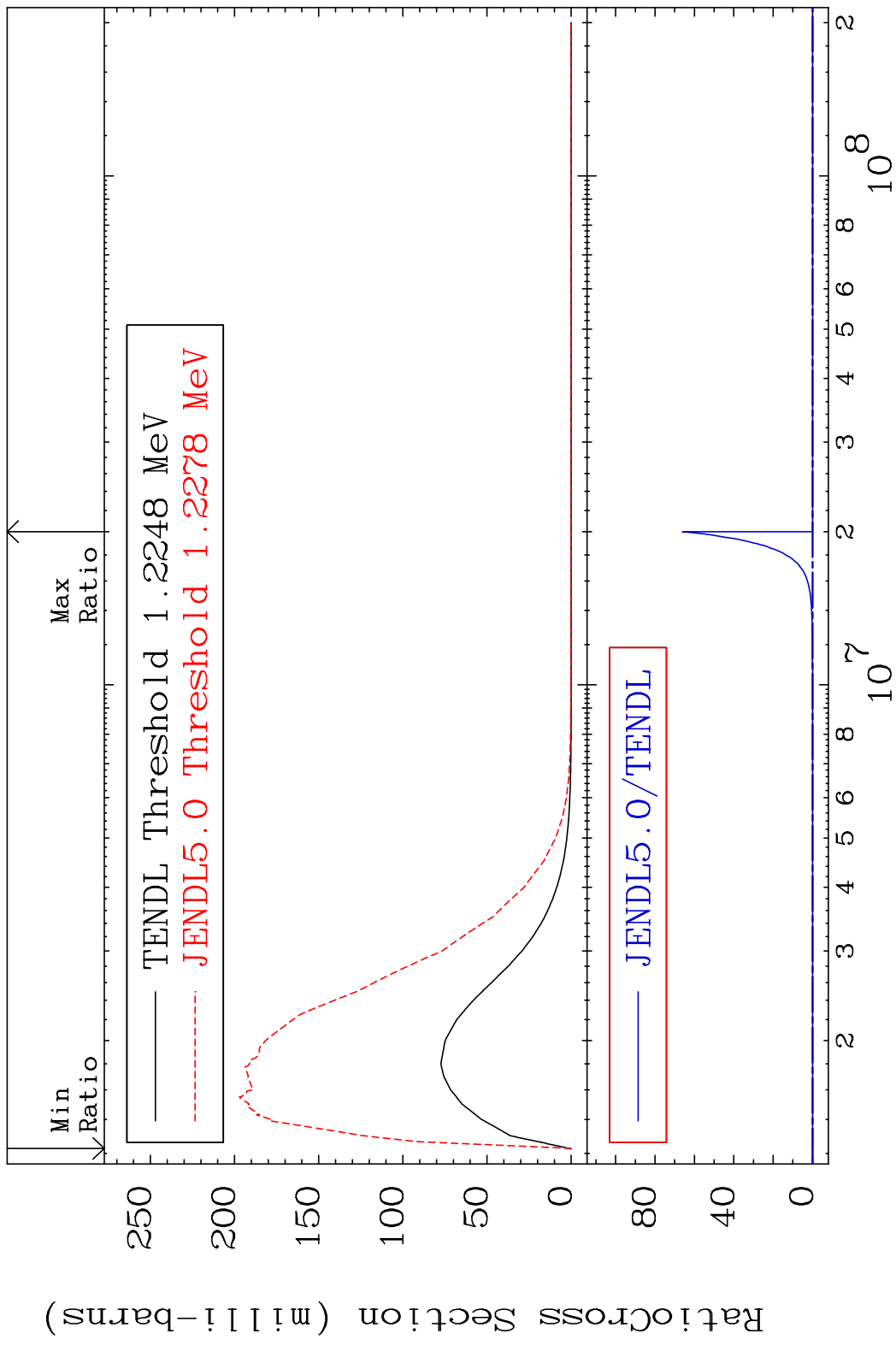
MAT 5728 MT= 51 (n,n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



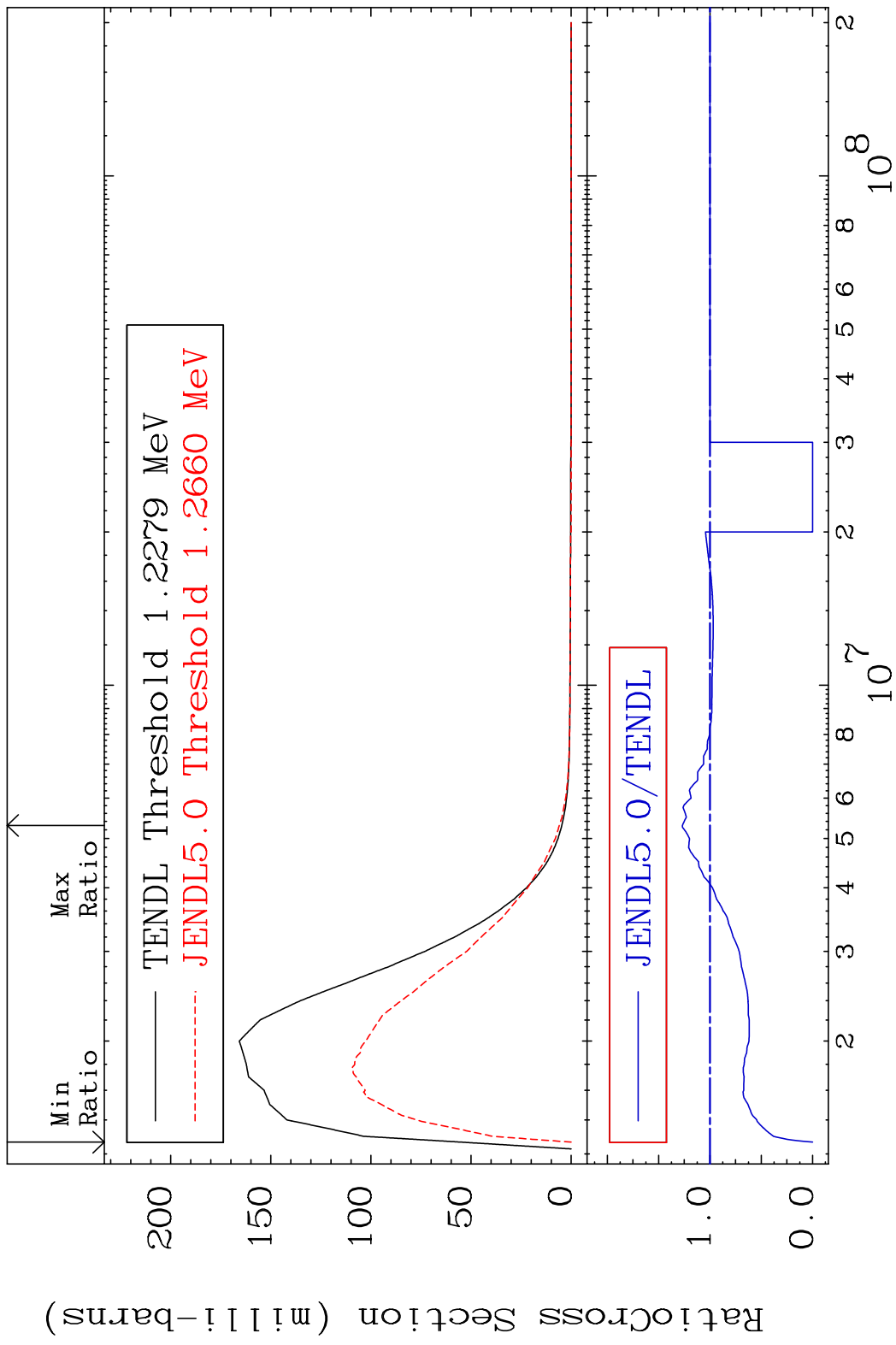
MAT 5728 MT= 52 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



MAT 5728 MT= 53 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %

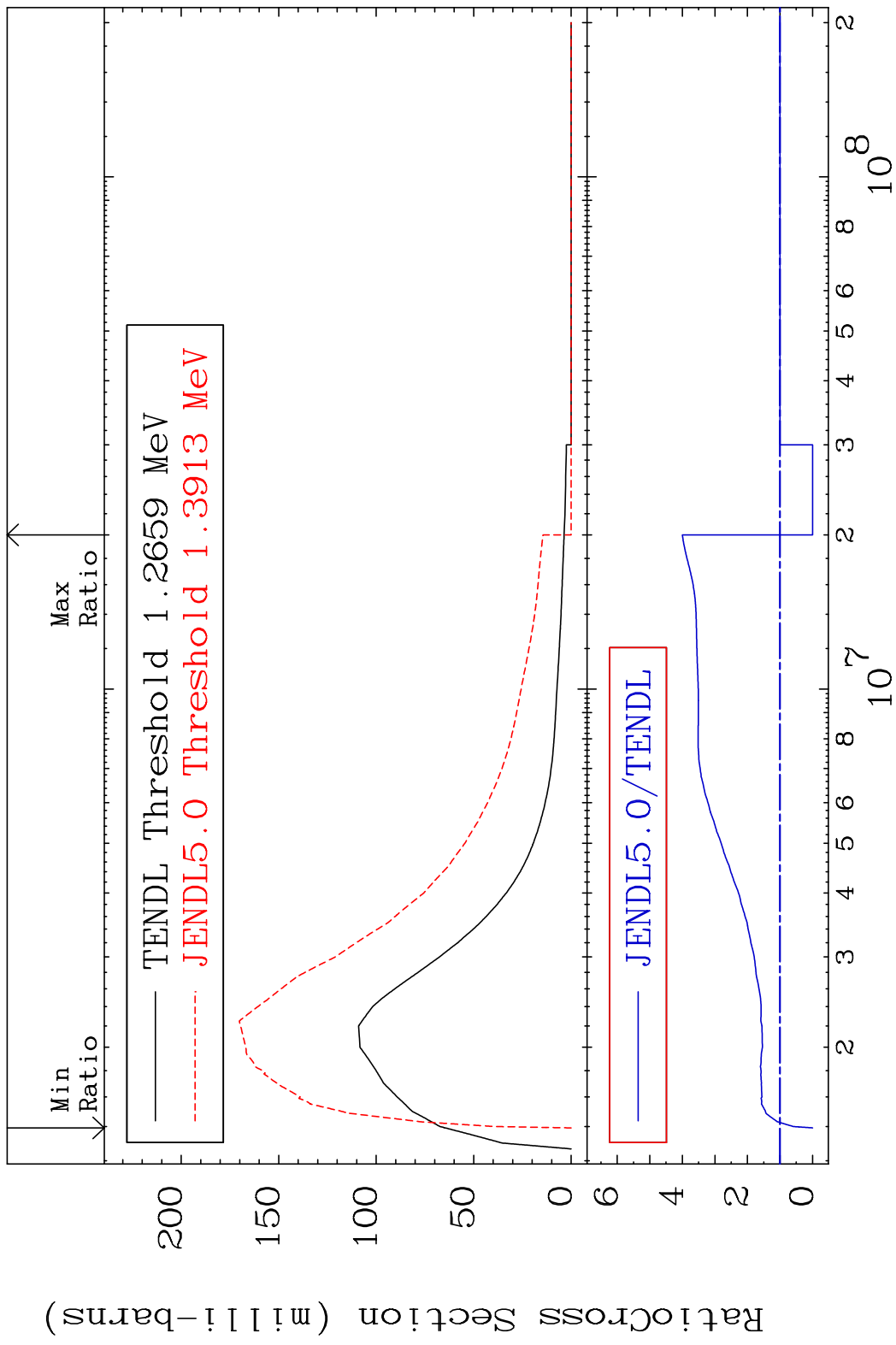


MAT 5728 MT= 54 (n,n') Level 57-La-139  
 Cross Section -100.0 To 26.89 %

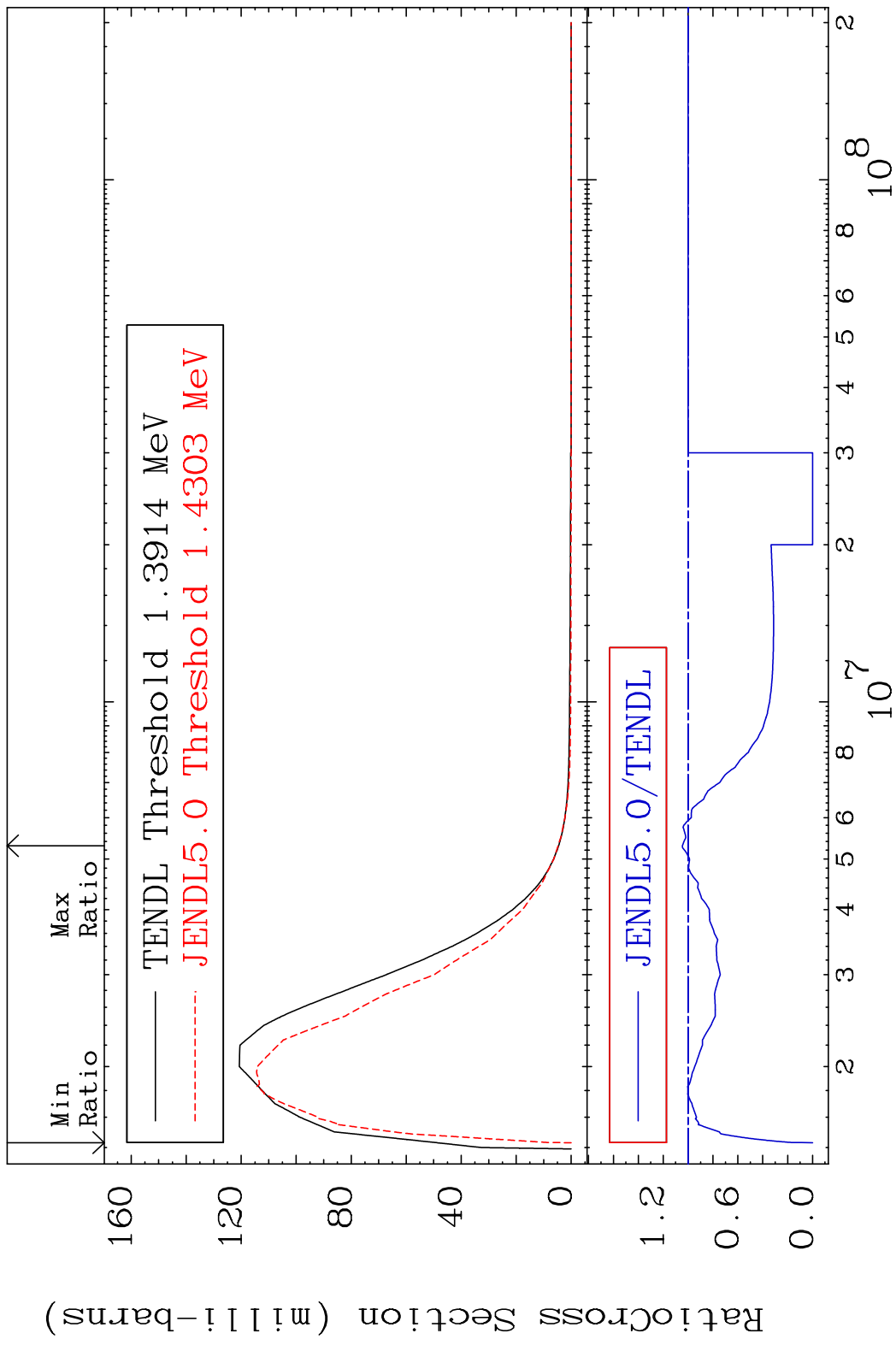




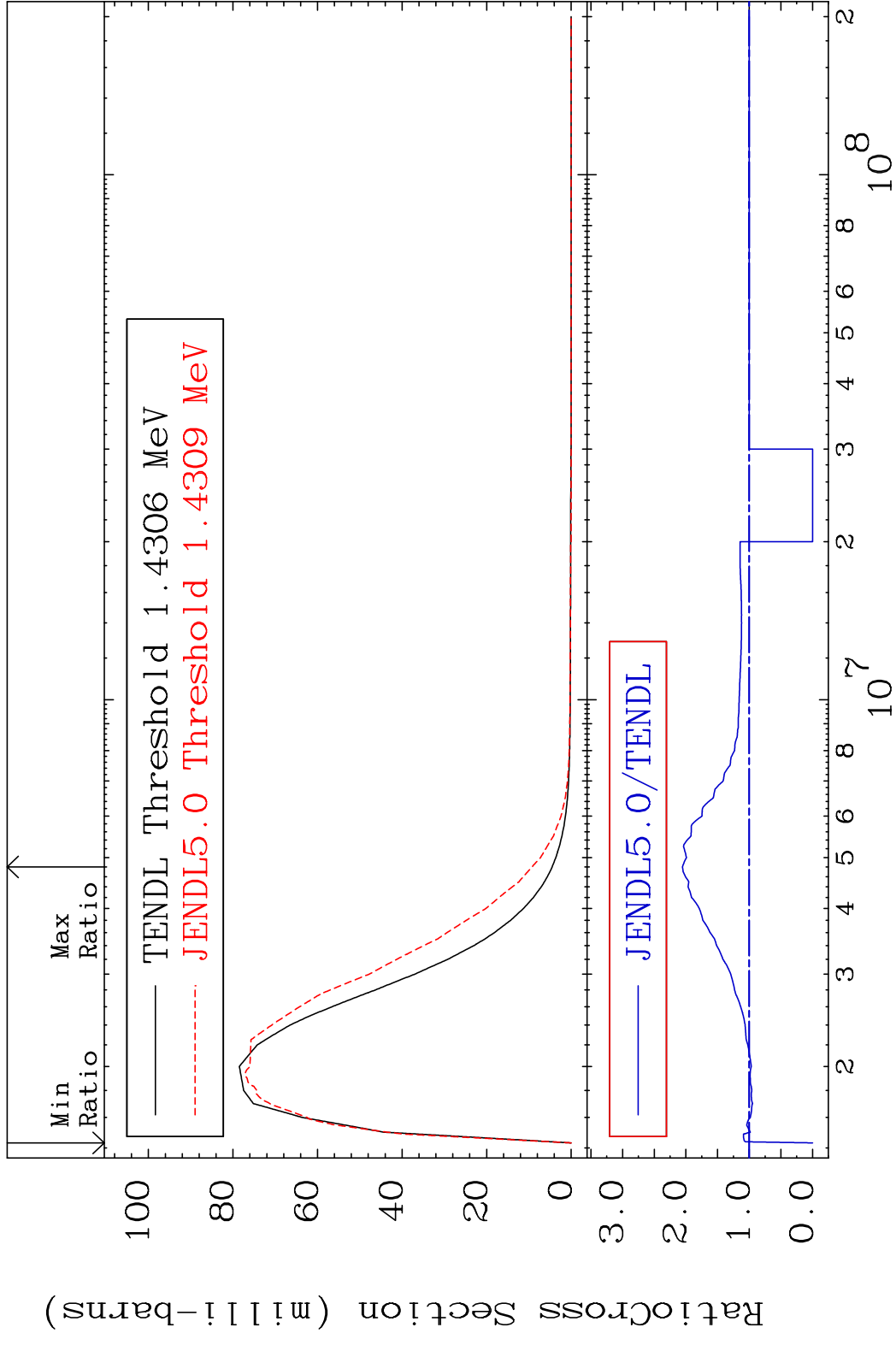
MAT 5728 MT= 55 (n, n') Level 57-La-139  
 Cross Section -100.0 To 299.9 %



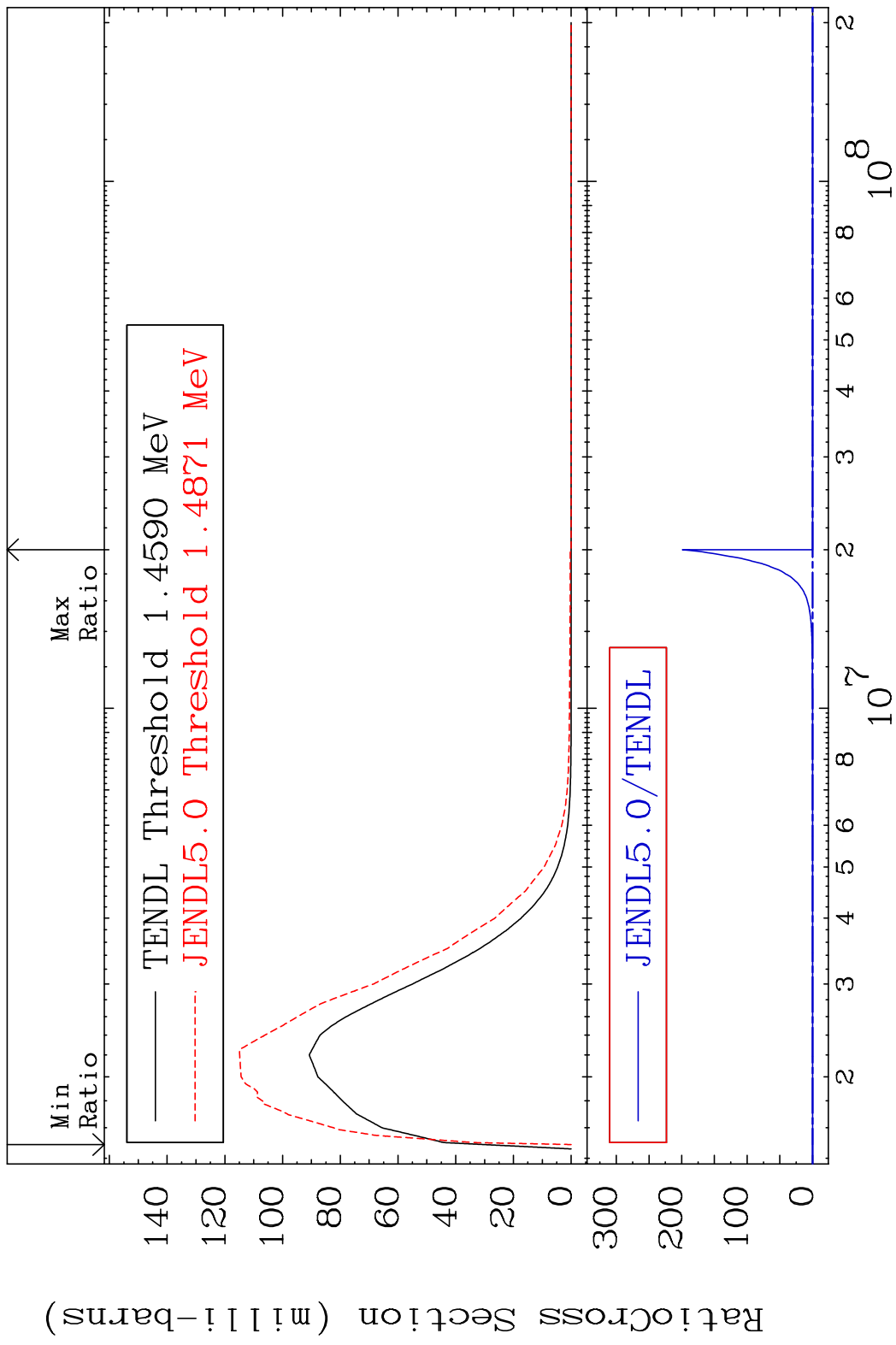
MAT 5728 MT= 56 (n,n') Level 57-La-139  
 Cross Section -100.0 To 4.621 %



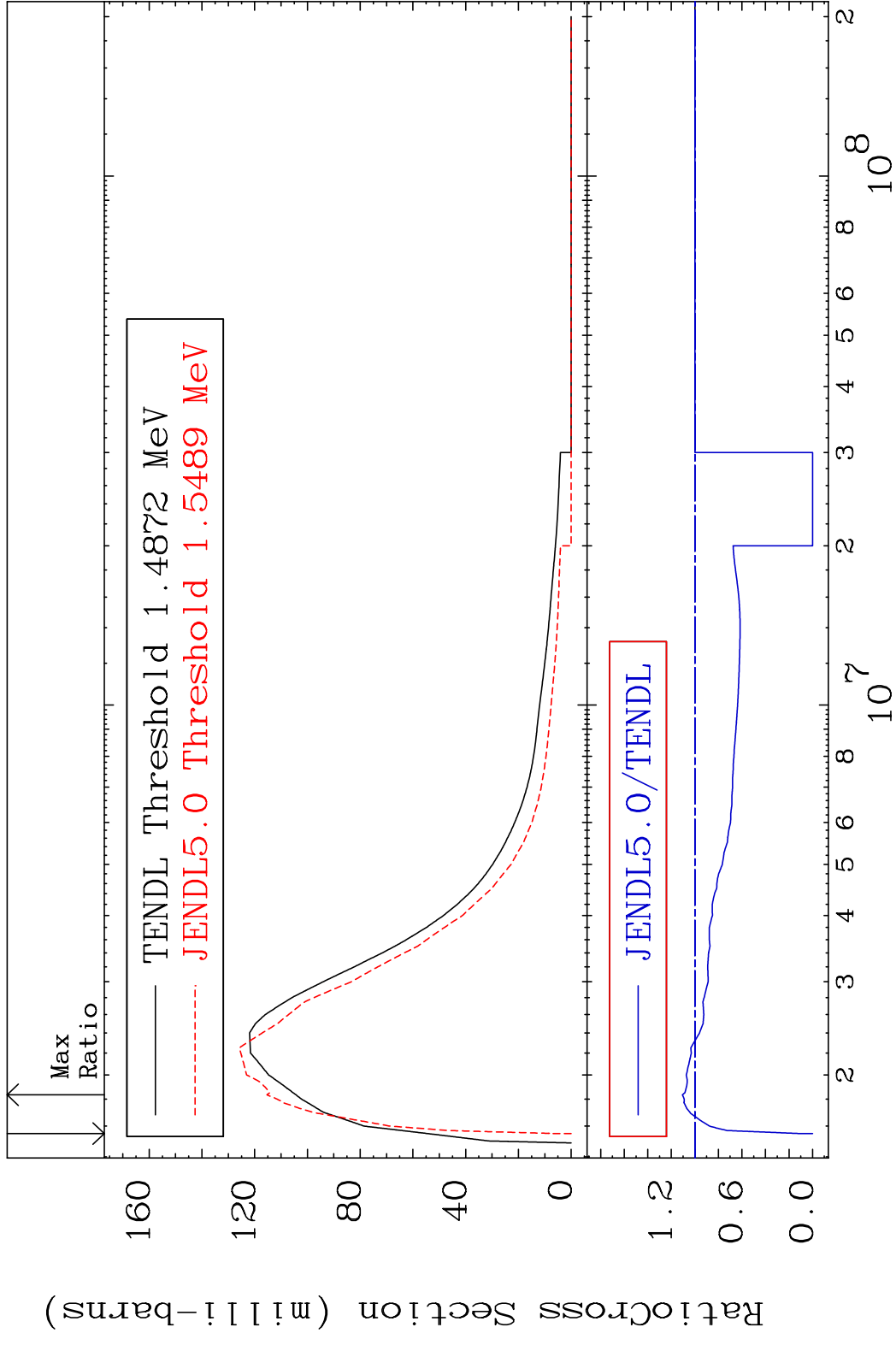
MAT 5728 MT= 57 (n,n') Level 57-La-139  
 Cross Section -100.0 To 105.6 %



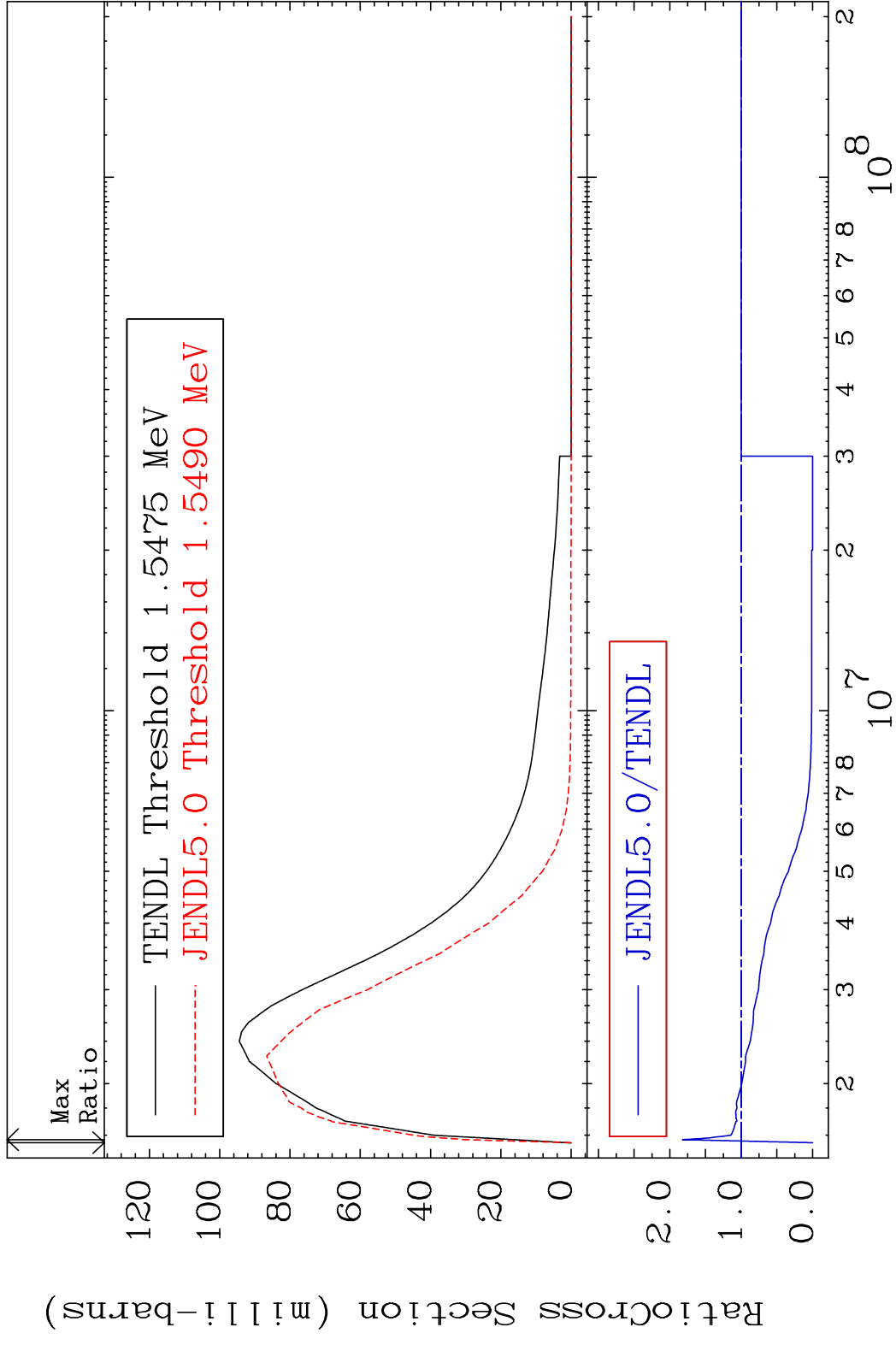
MAT 5728 MT= 58 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



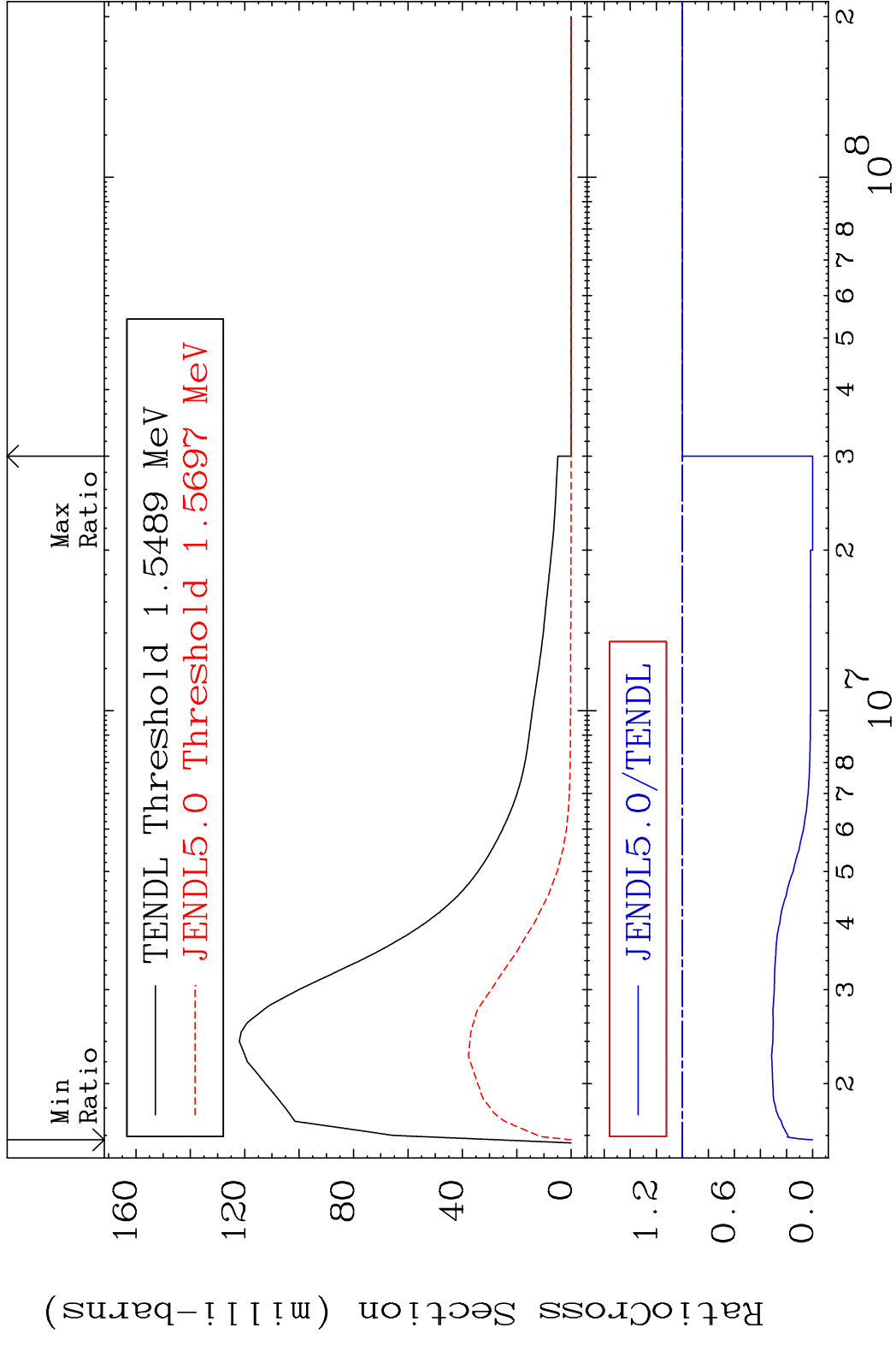
MAT 5728 MT= 59 (n,n') Level 57-La-139  
 Cross Section -100.0 To 10.61 %



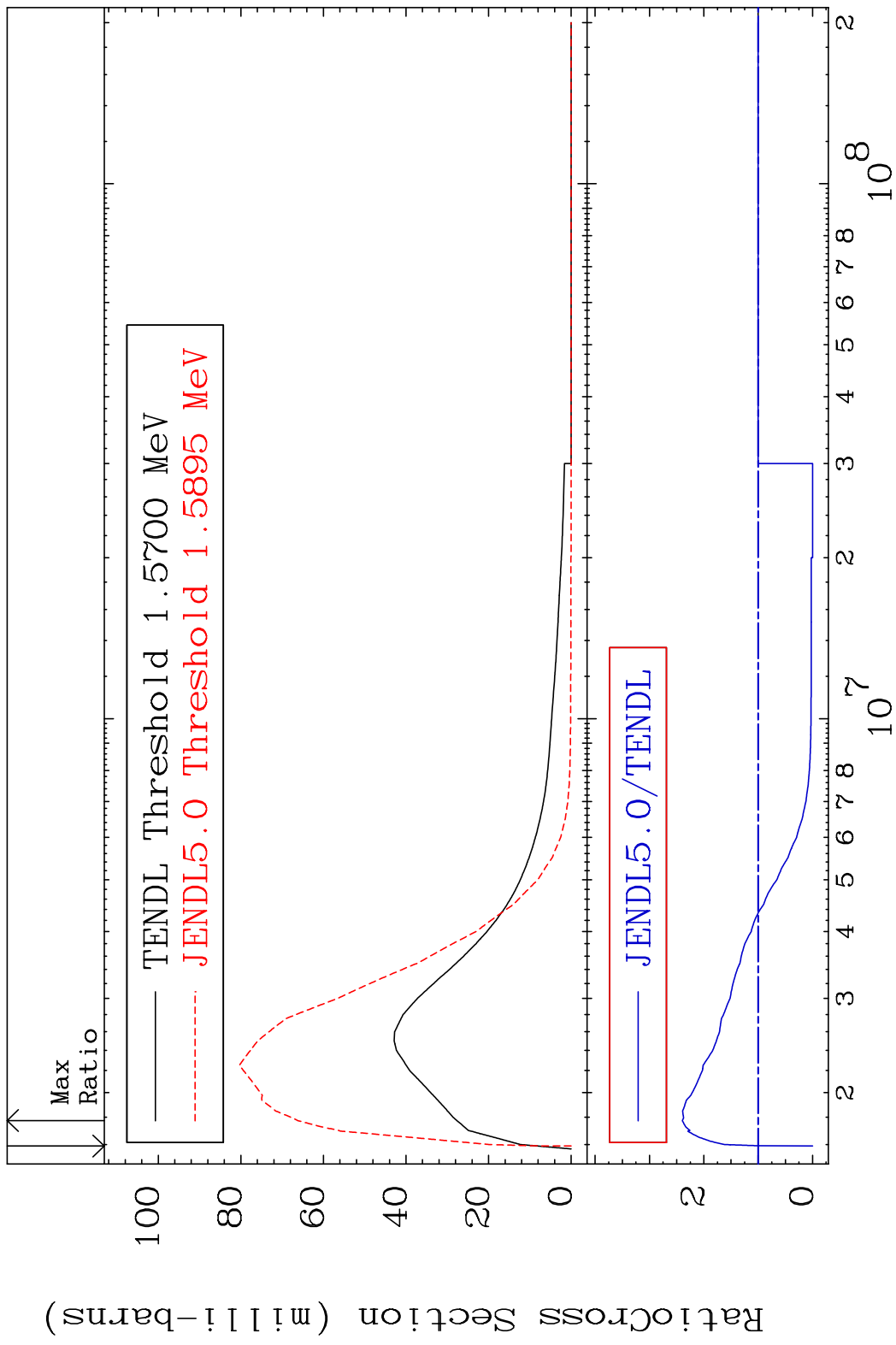
MAT 5728 MT= 60 (n,n') Level 57-La-139  
 Cross Section -100.0 To 82.45 %



MAT 5728 MT= 61 (n, n') Level 57-La-139  
 Cross Section -100.0 To 0.000 %

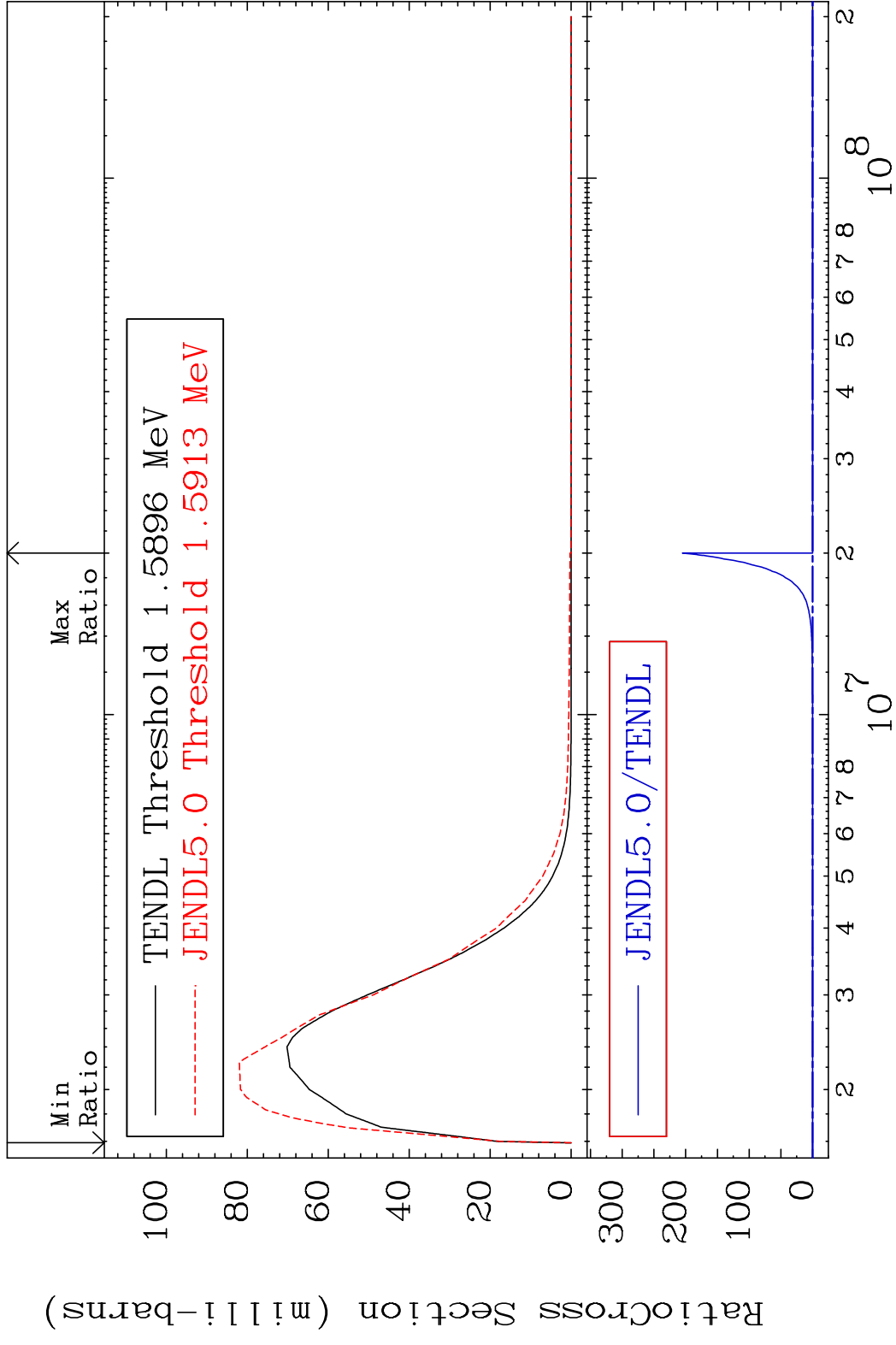


MAT 5728 MT= 62 (n,n') Level 57-La-139  
 Cross Section -100.0 To 139.5 %

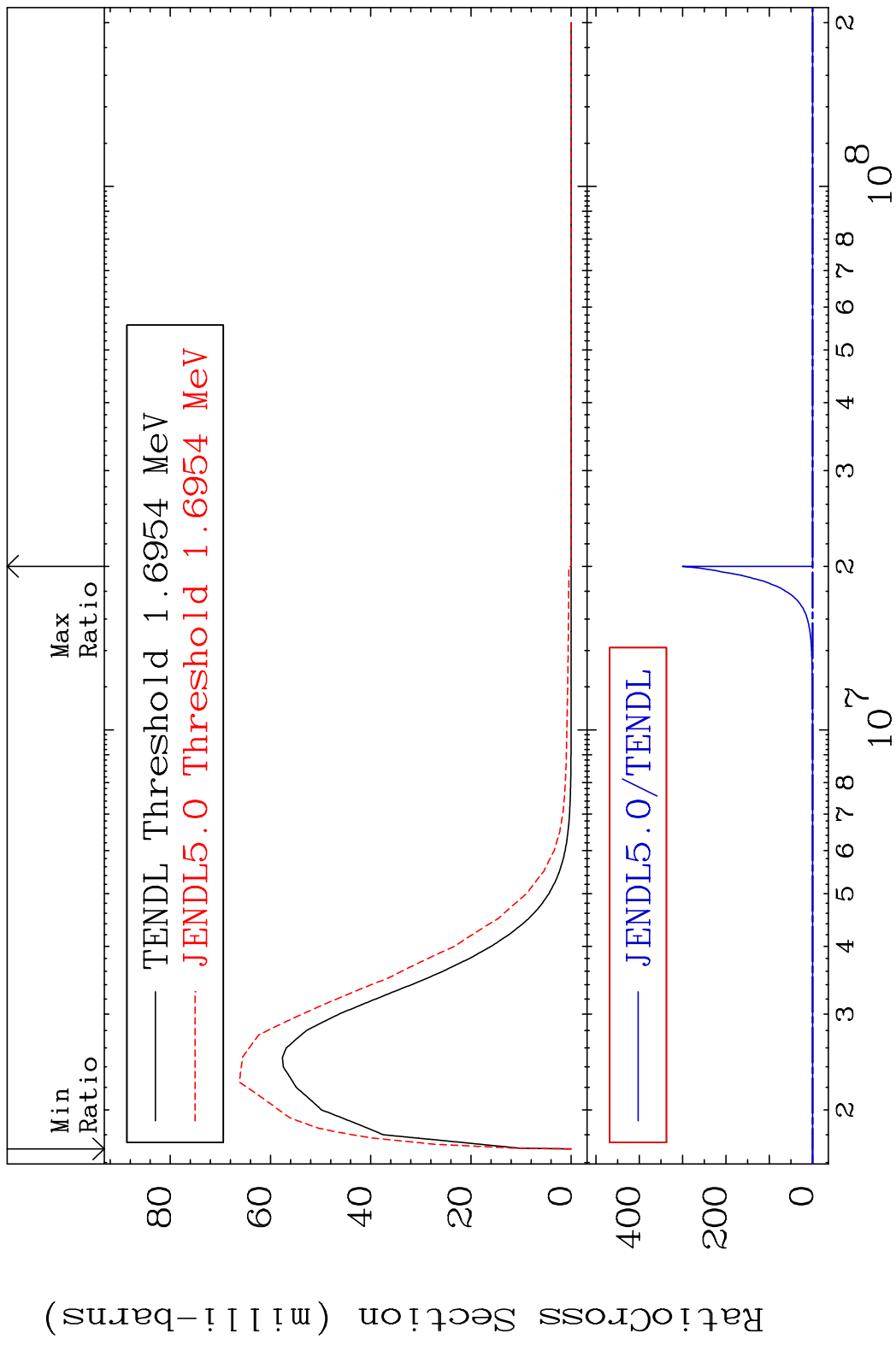




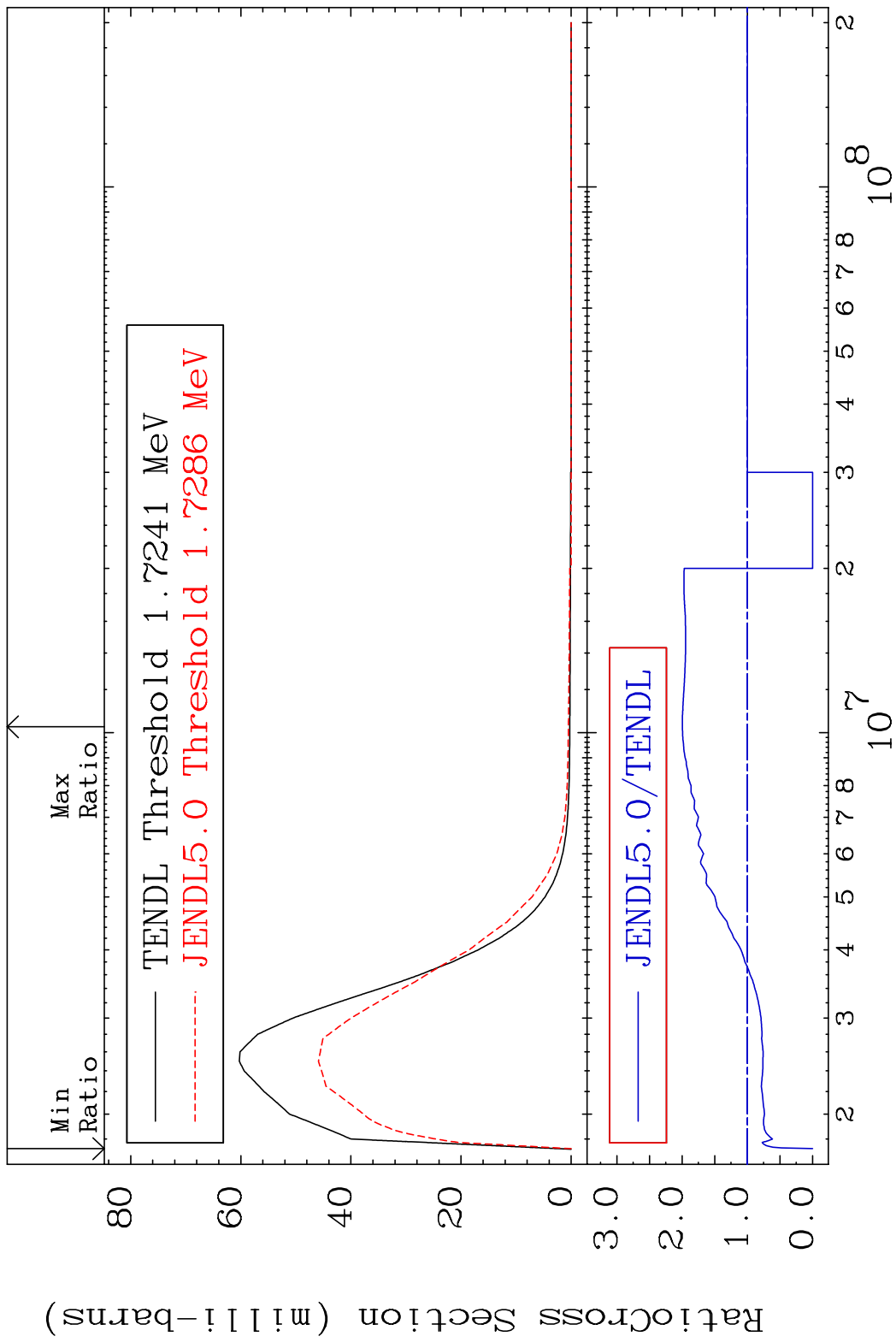
MAT 5728 MT= 63 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



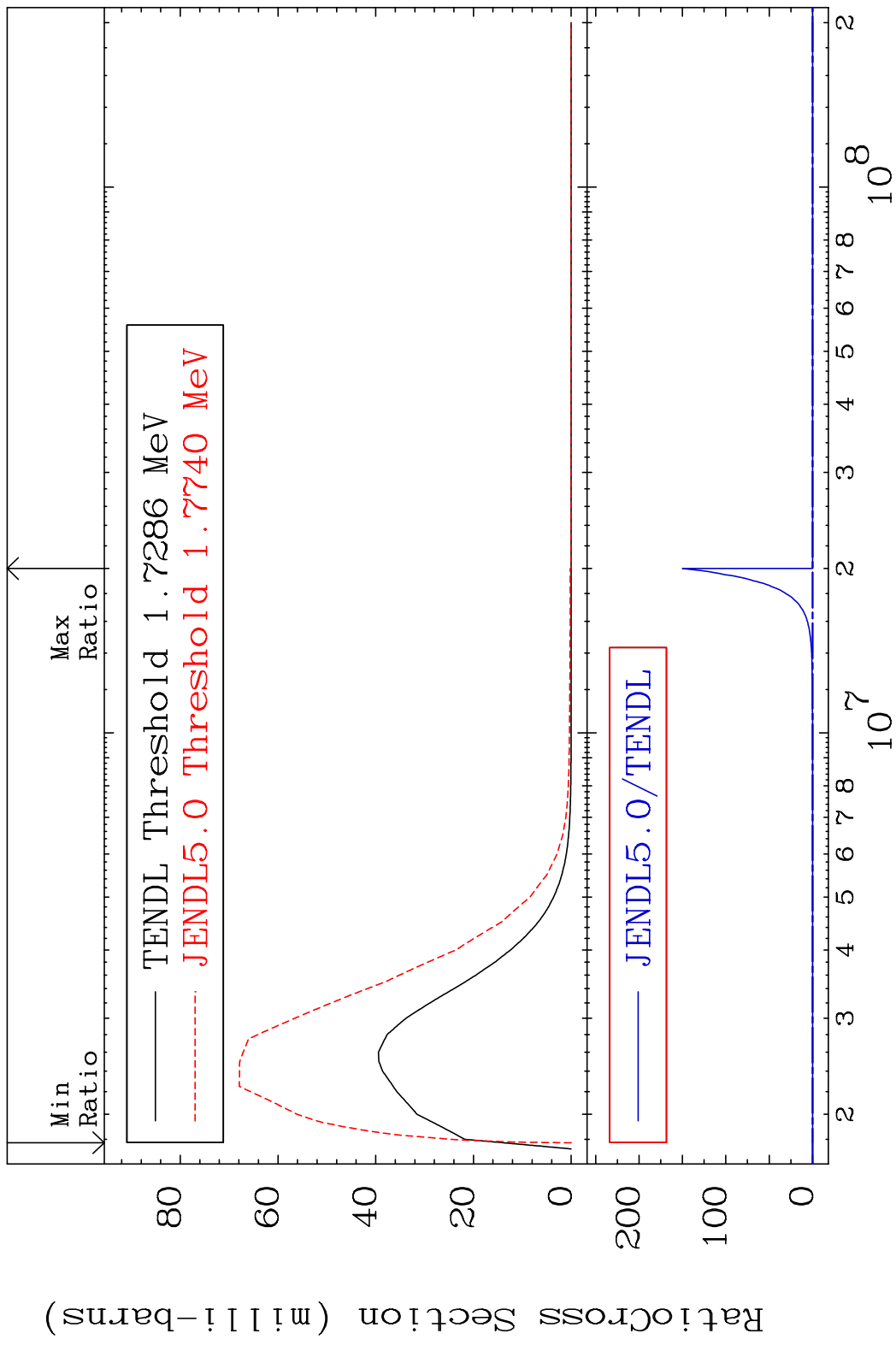
MAT 5728 MT= 64 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



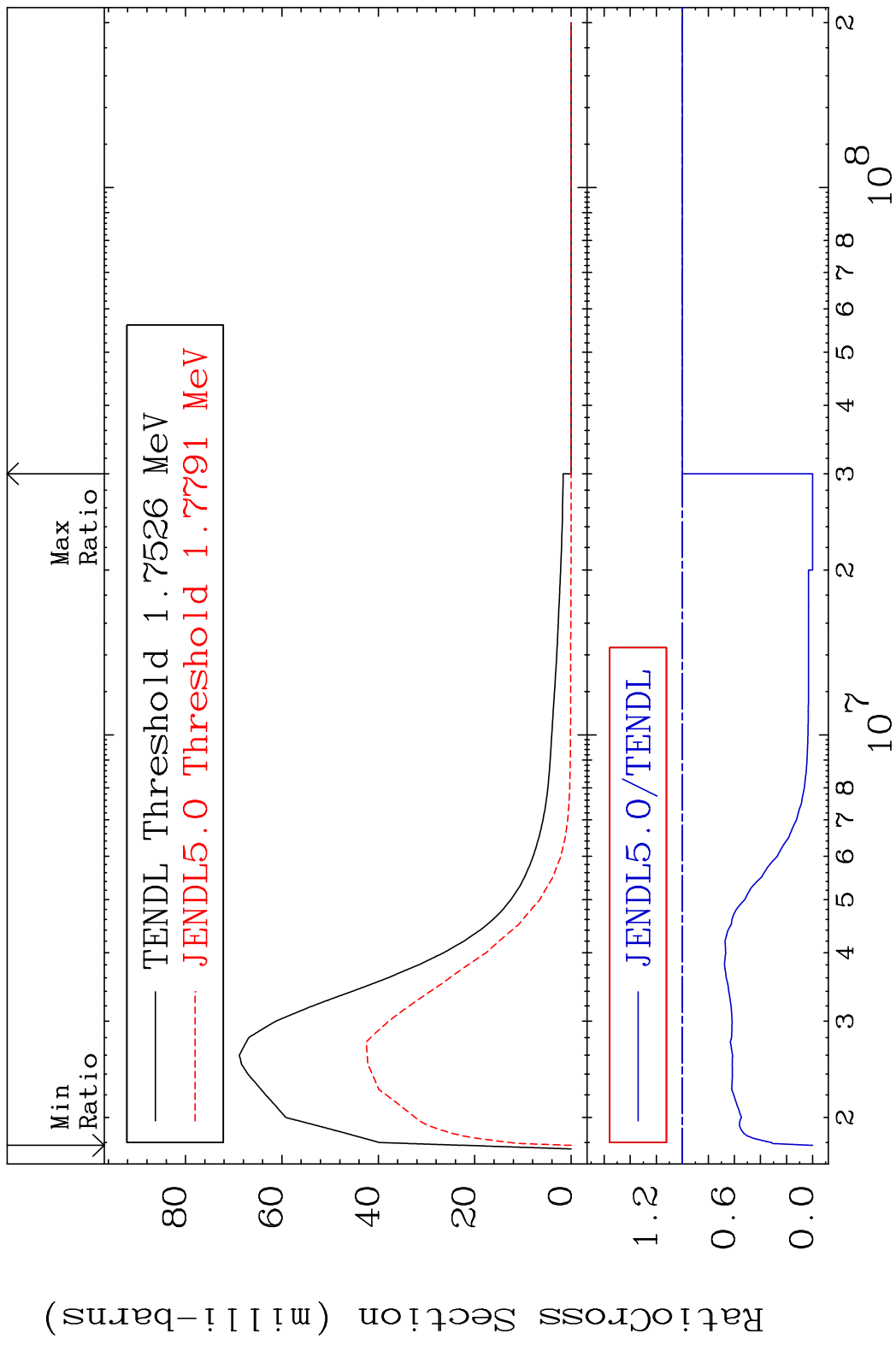
MAT 5728 MT= 65 (n, n') Level 57-La-139  
 Cross Section -100.0 To 99.59 %



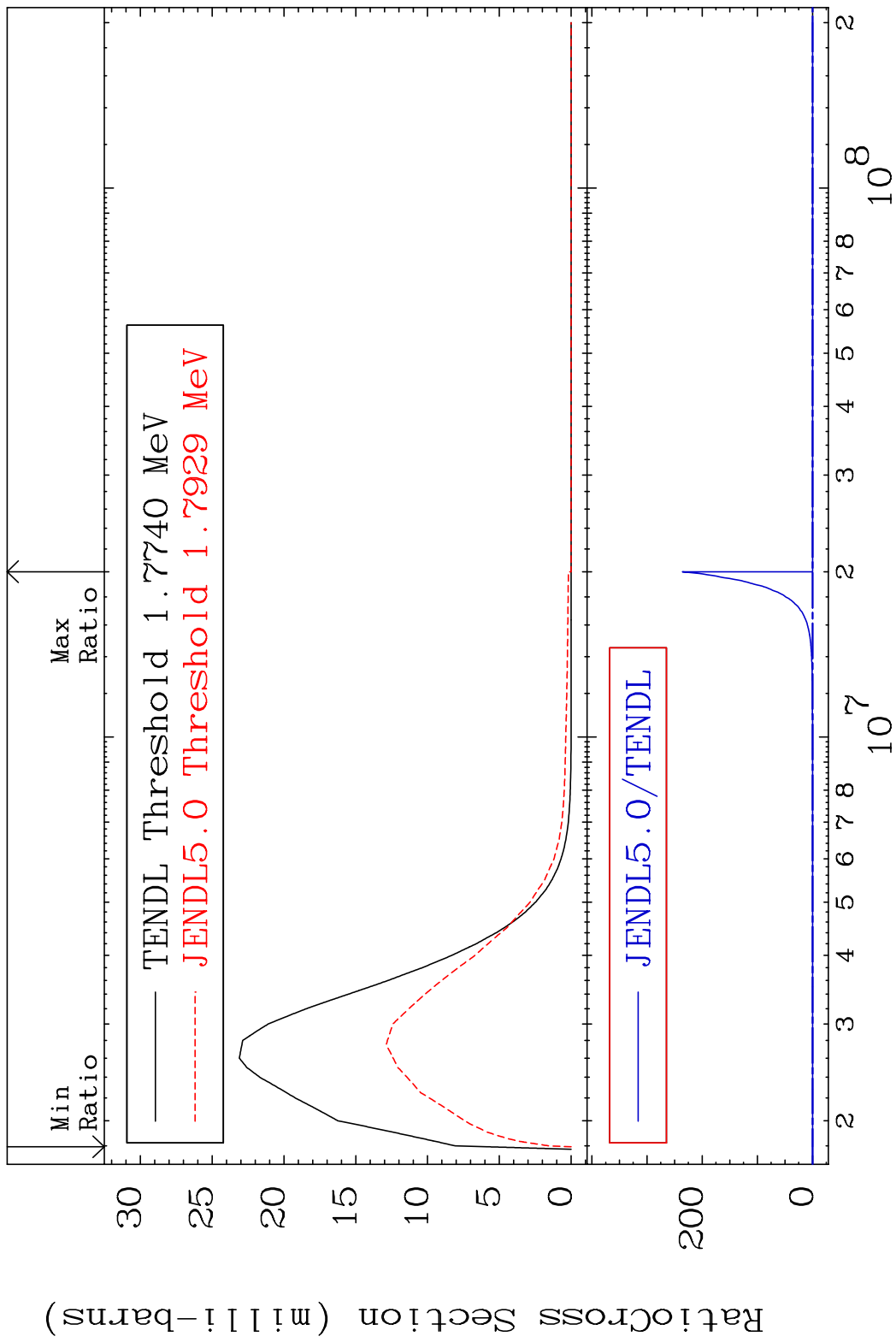
MAT 5728 MT= 66 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



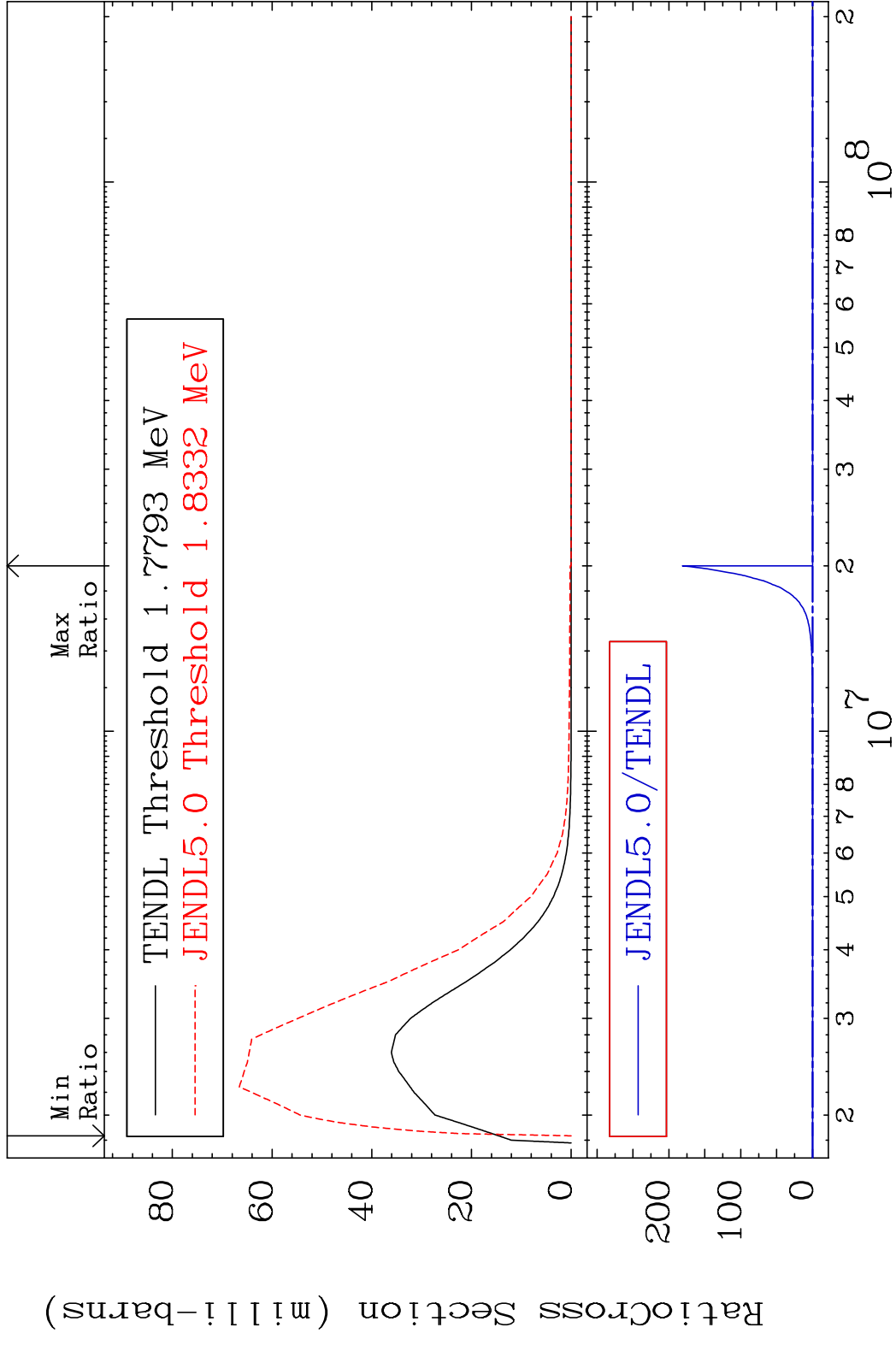
MAT 5728 MT= 67 (n, n') Level 57-La-139  
 Cross Section -100.0 To 0.000 %



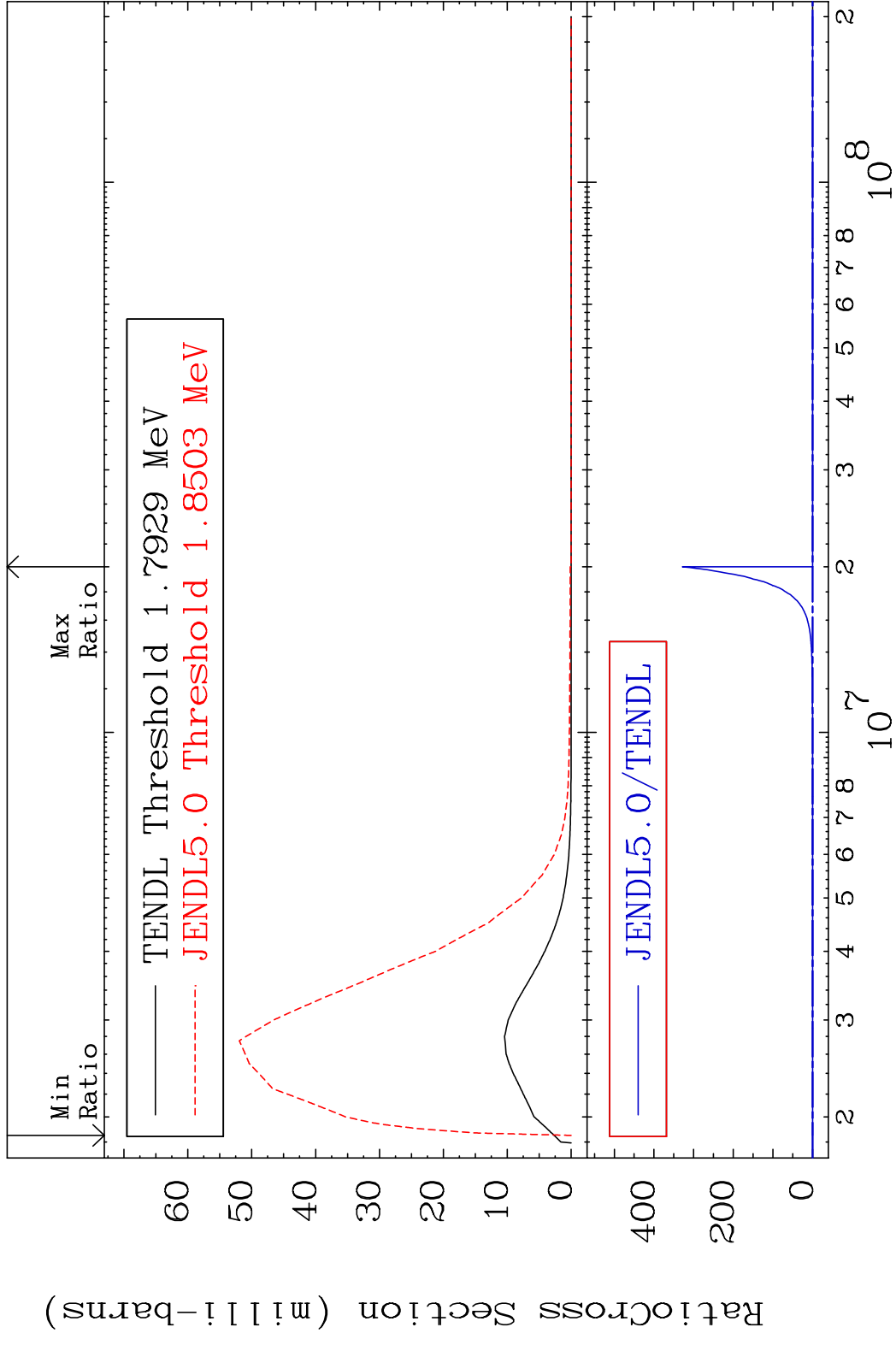
MAT 5728 MT= 68 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %



MAT 5728 MT= 69 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %

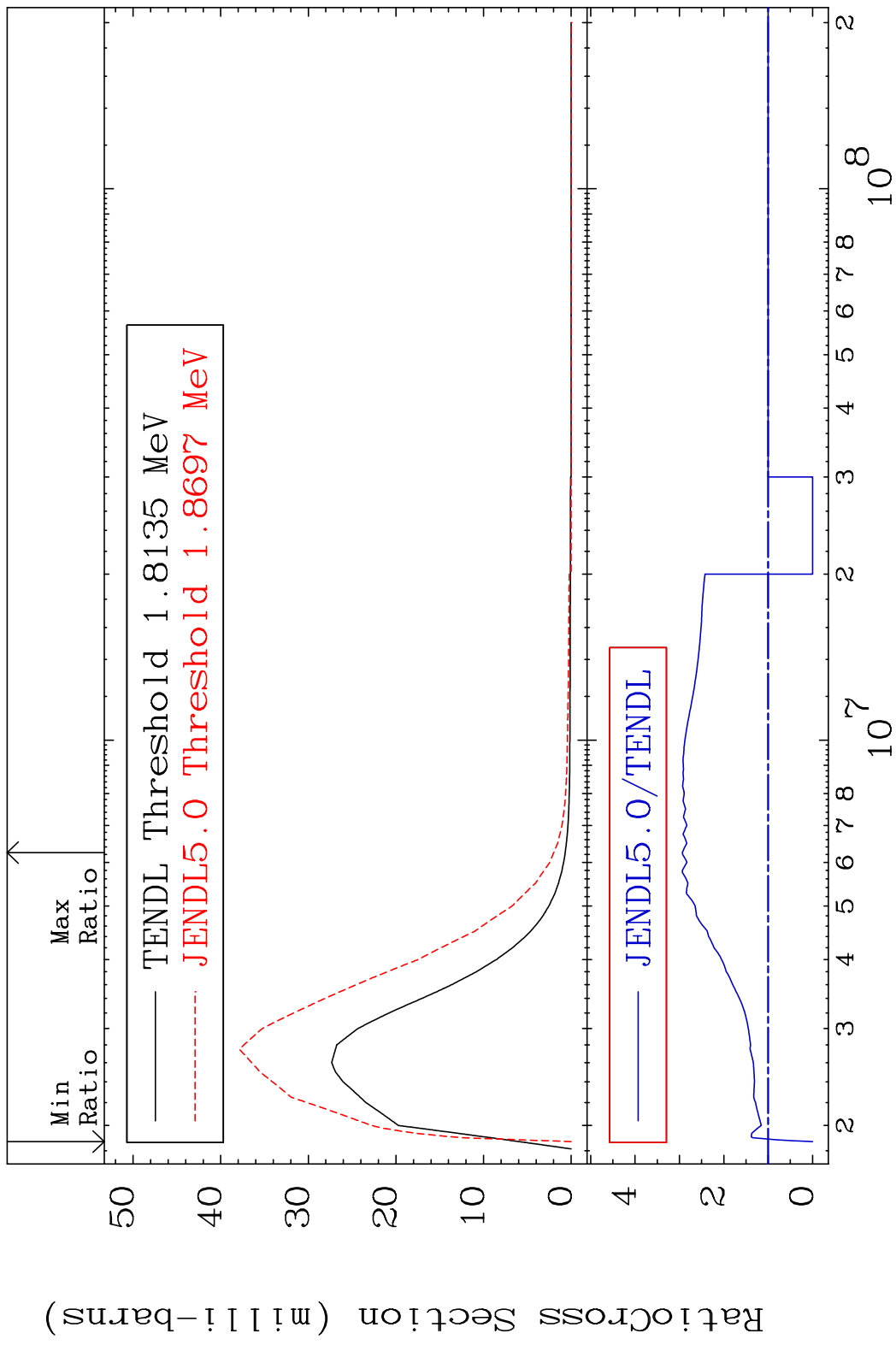


MAT 5728 MT= 70 (n, n') Level 57-La-139  
 Cross Section -100.0 To 9999. %





MAT 5728 MT= 71 (n, n') Level 57-La-139  
 Cross Section -100.0 To 193.4 %

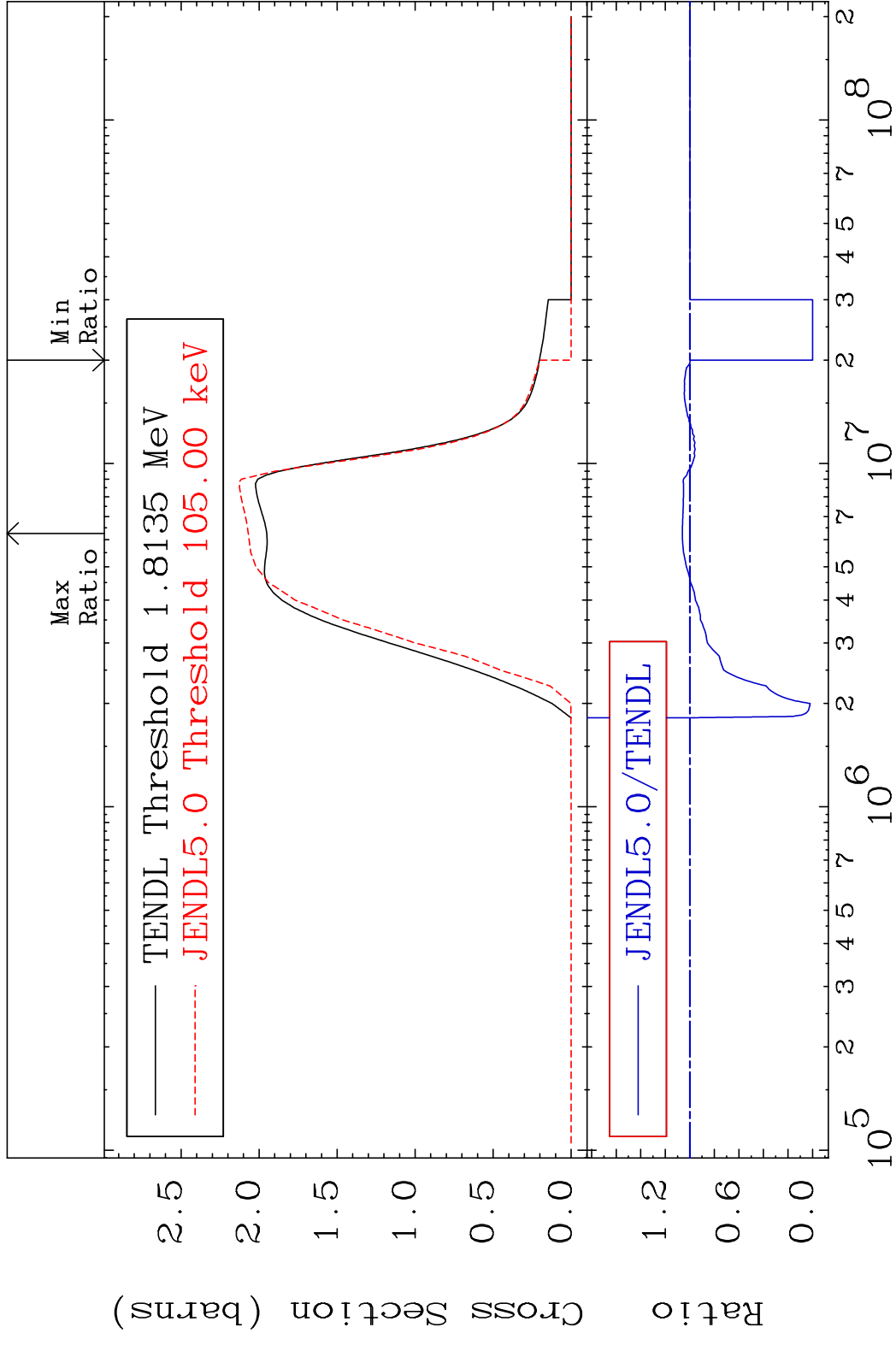


MAT 5728

(n,n') Continuum

57-La-139

Cross Section -100.0 To 6.076 %



33

Incident Energy (eV)

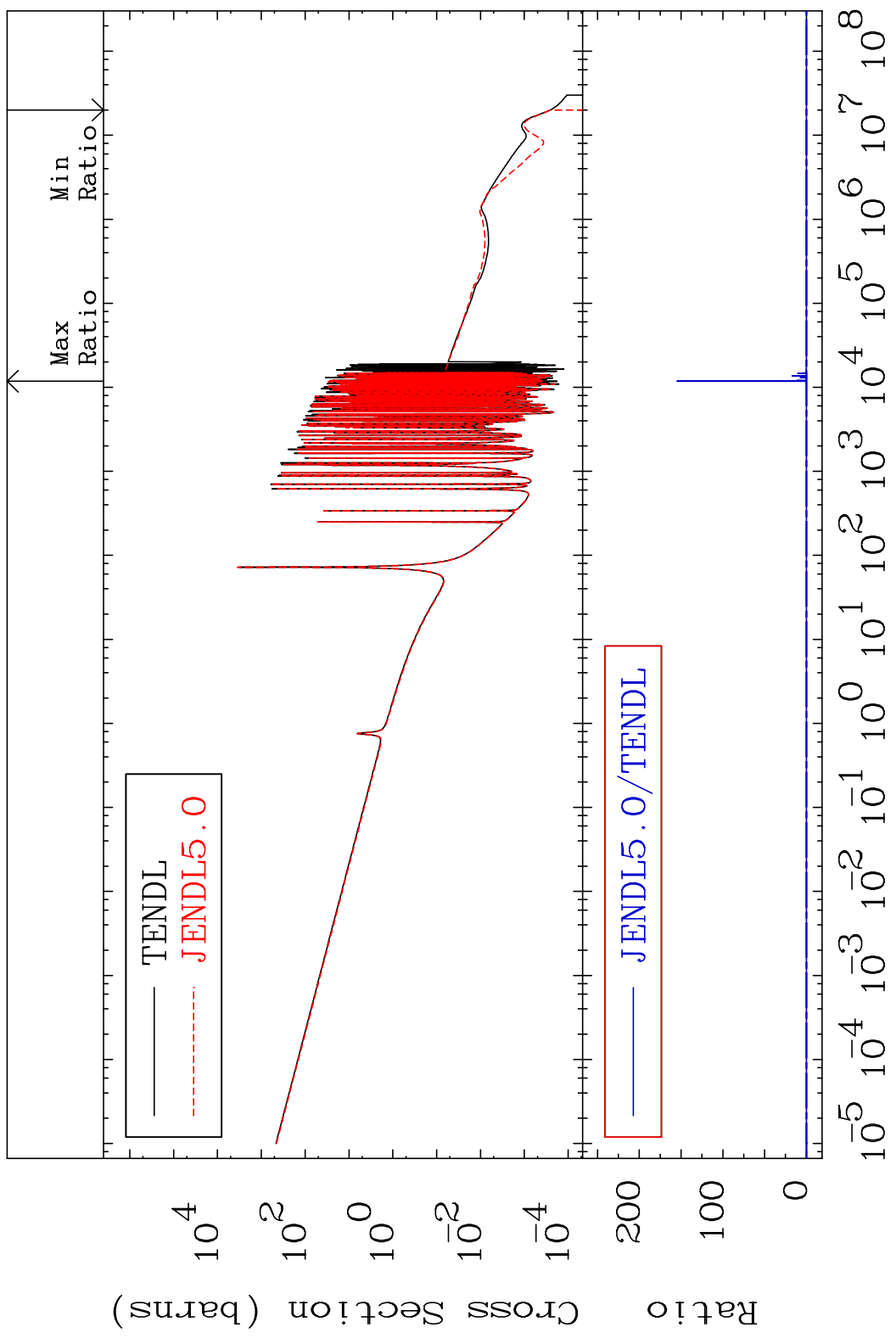
57-La-139

MAT 5728

(n,  $\gamma$ )

57-La-139

Cross Section -100.0 To 9999. %

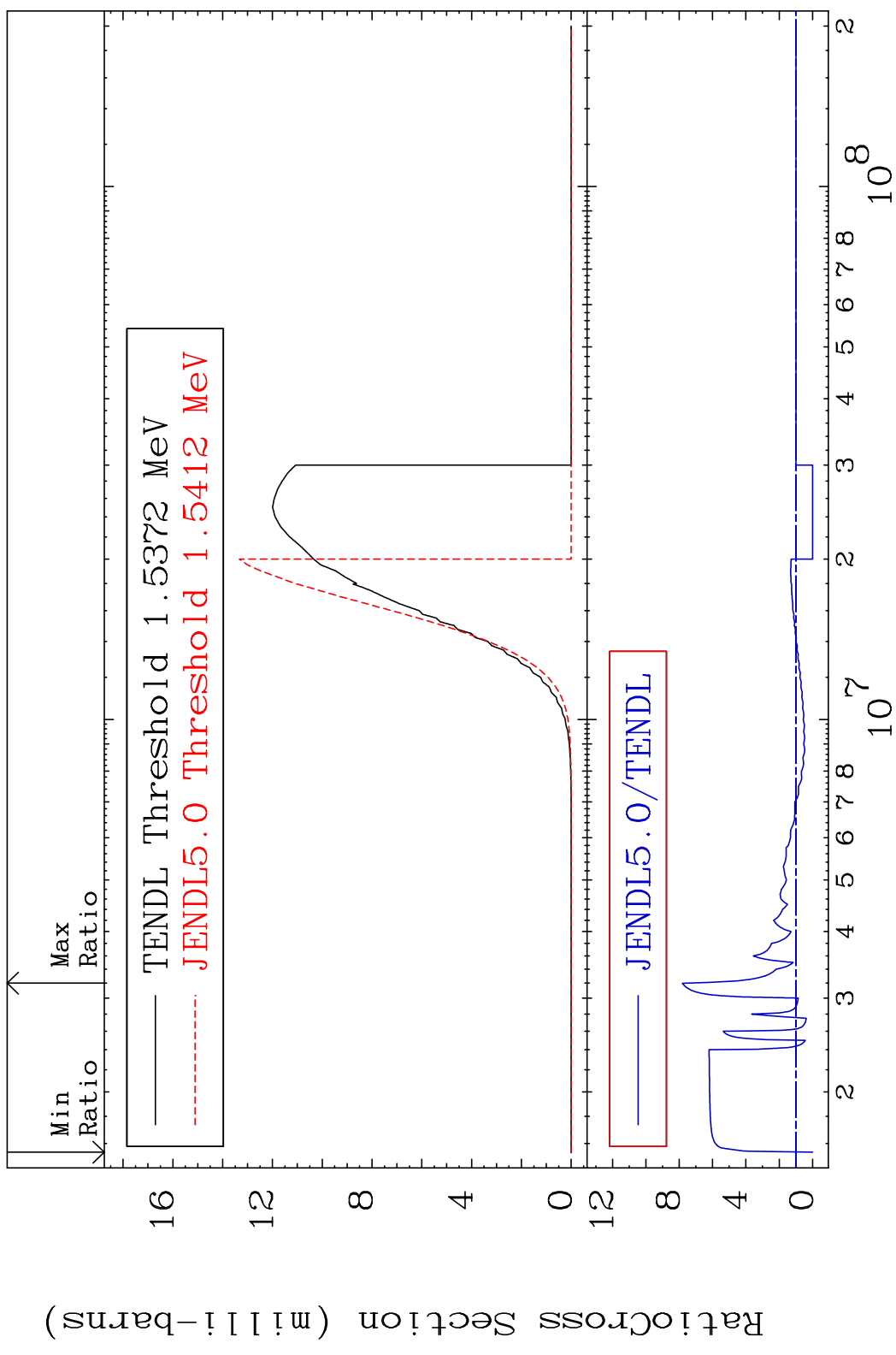


MAT 5728

(n,p)

57-La-139

Cross Section -100.0 To 681.1 %

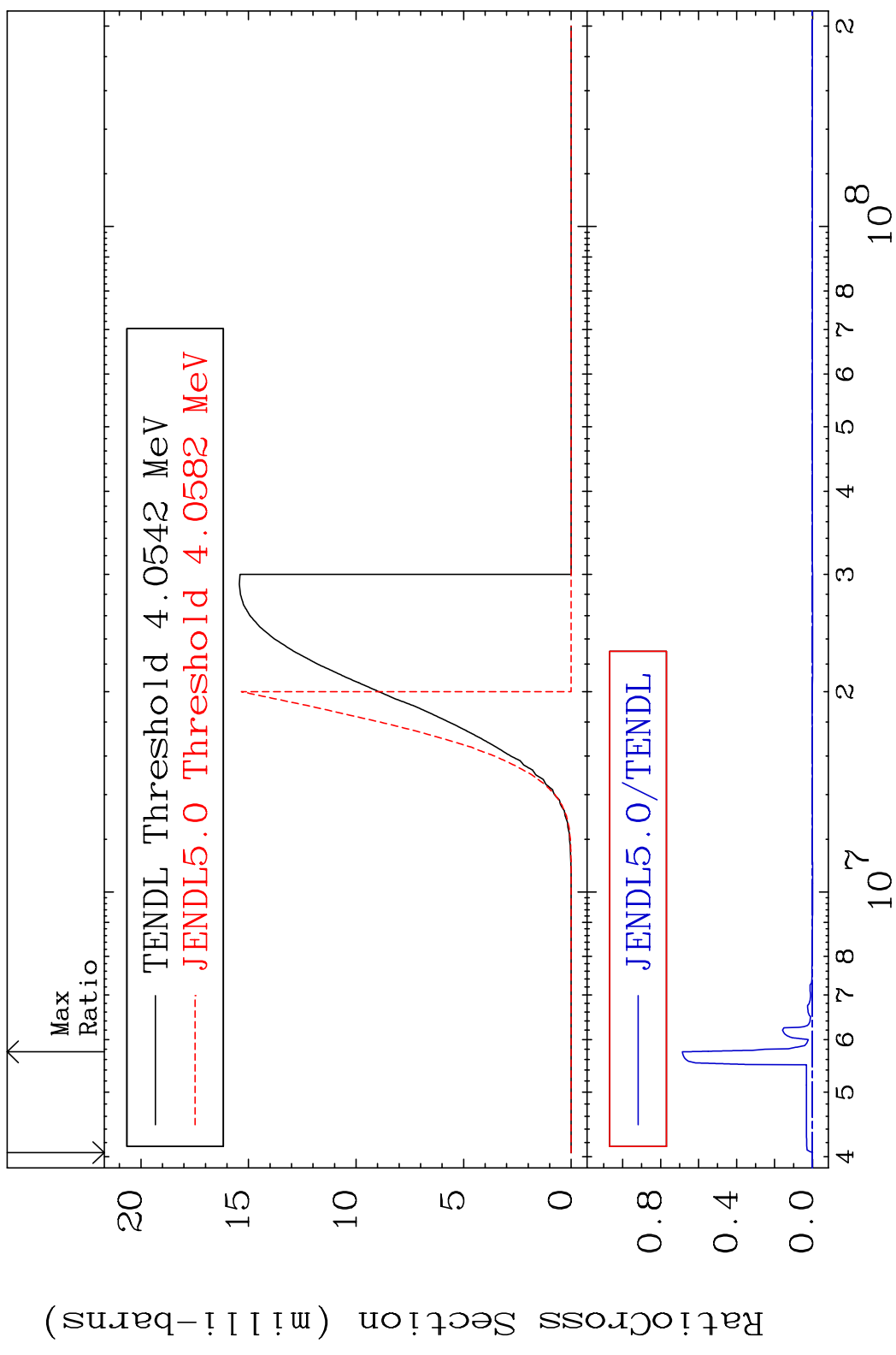


MAT 5728

(n,d)

57-La-139

Cross Section -100.0 To 9999. %

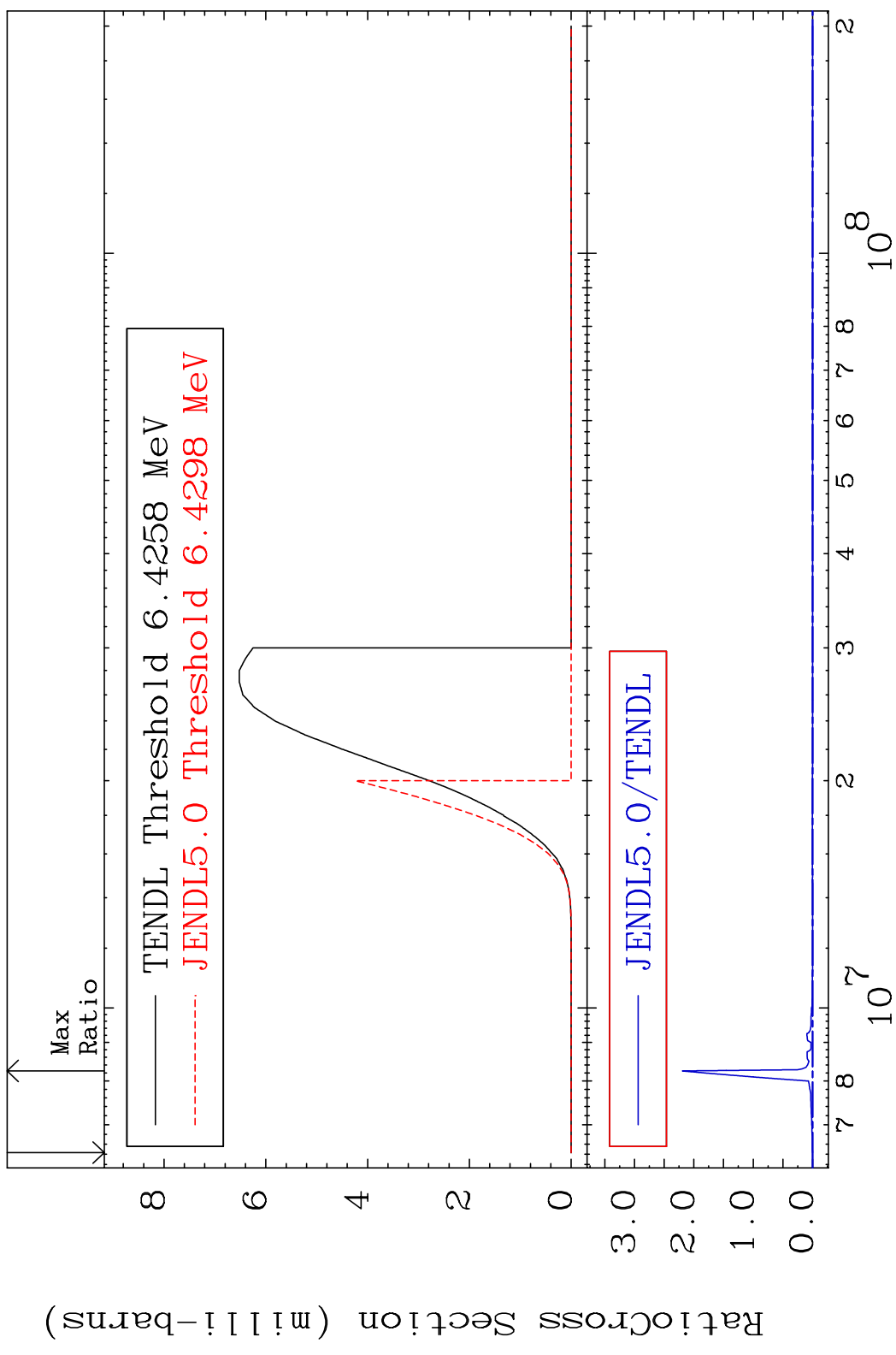


MAT 5728

(n, t)

57-La-139

Cross Section -100.0 To 9999. %

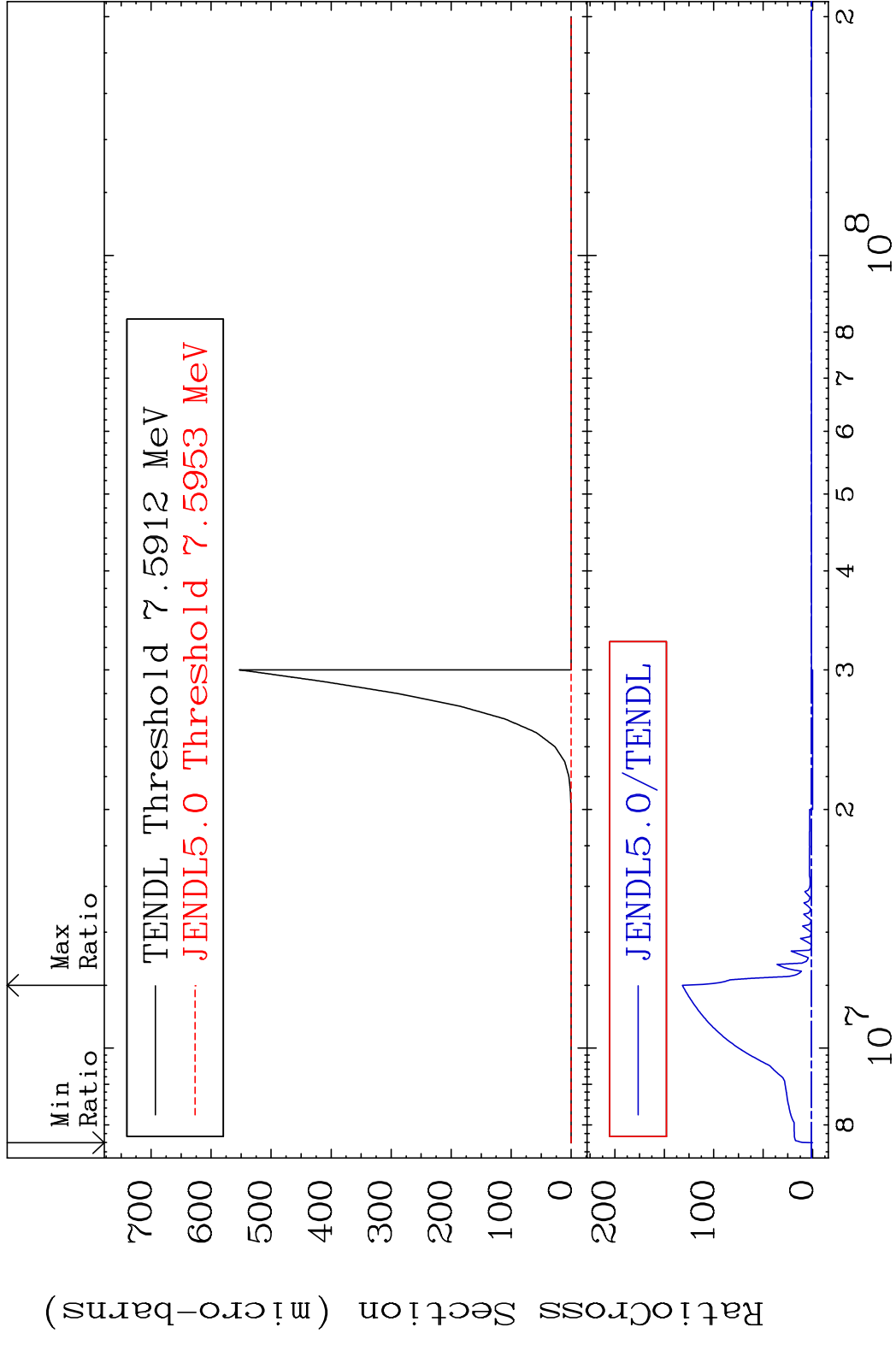


MAT 5728

(n, He-3)

57-La-139

Cross Section -100.0 To 9999. %

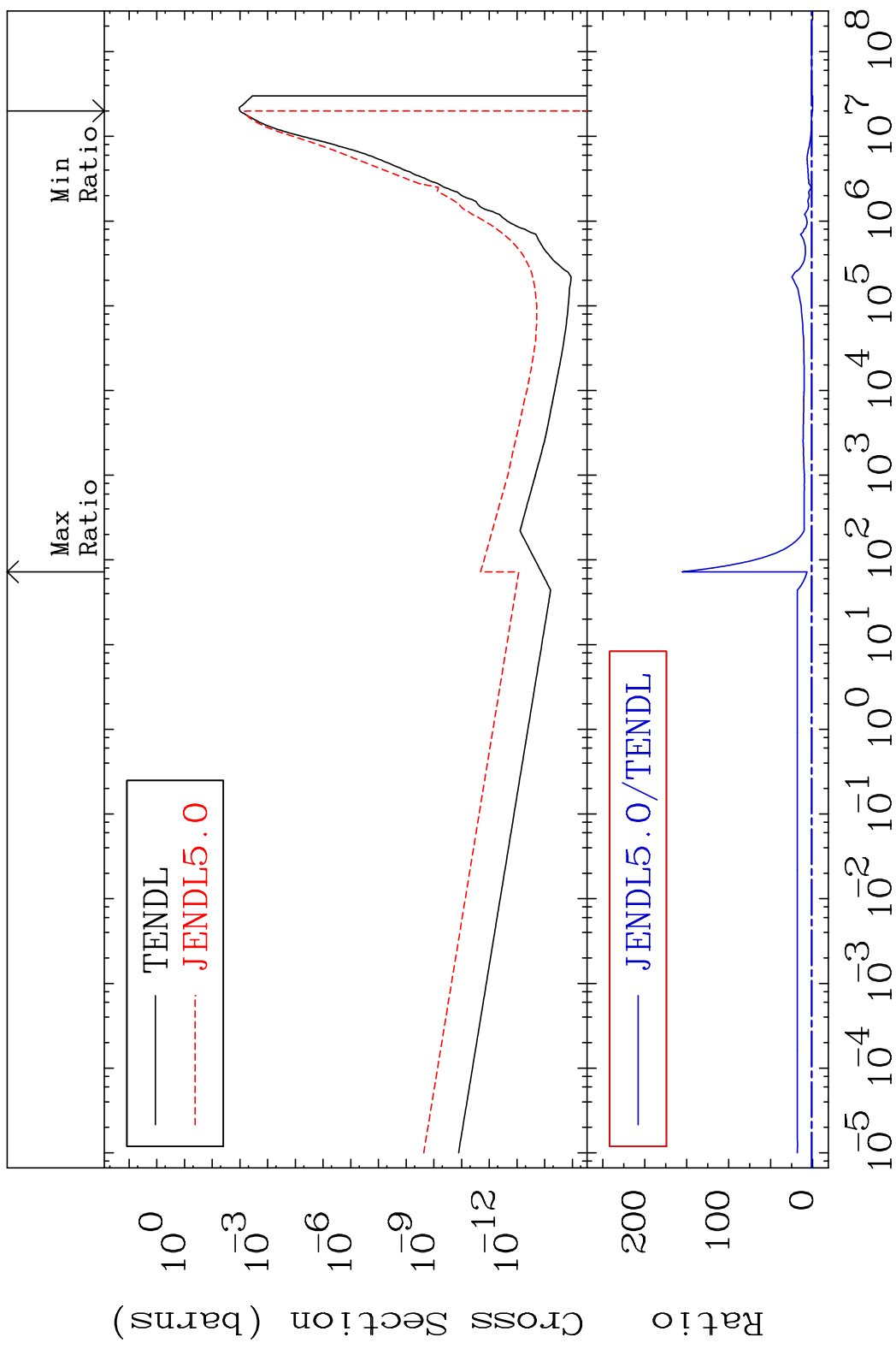


MAT 5728

(n,  $\alpha$ )

57-La-139

Cross Section -100.0 To 9999. %



39

Incident Energy (eV)

57-La-139

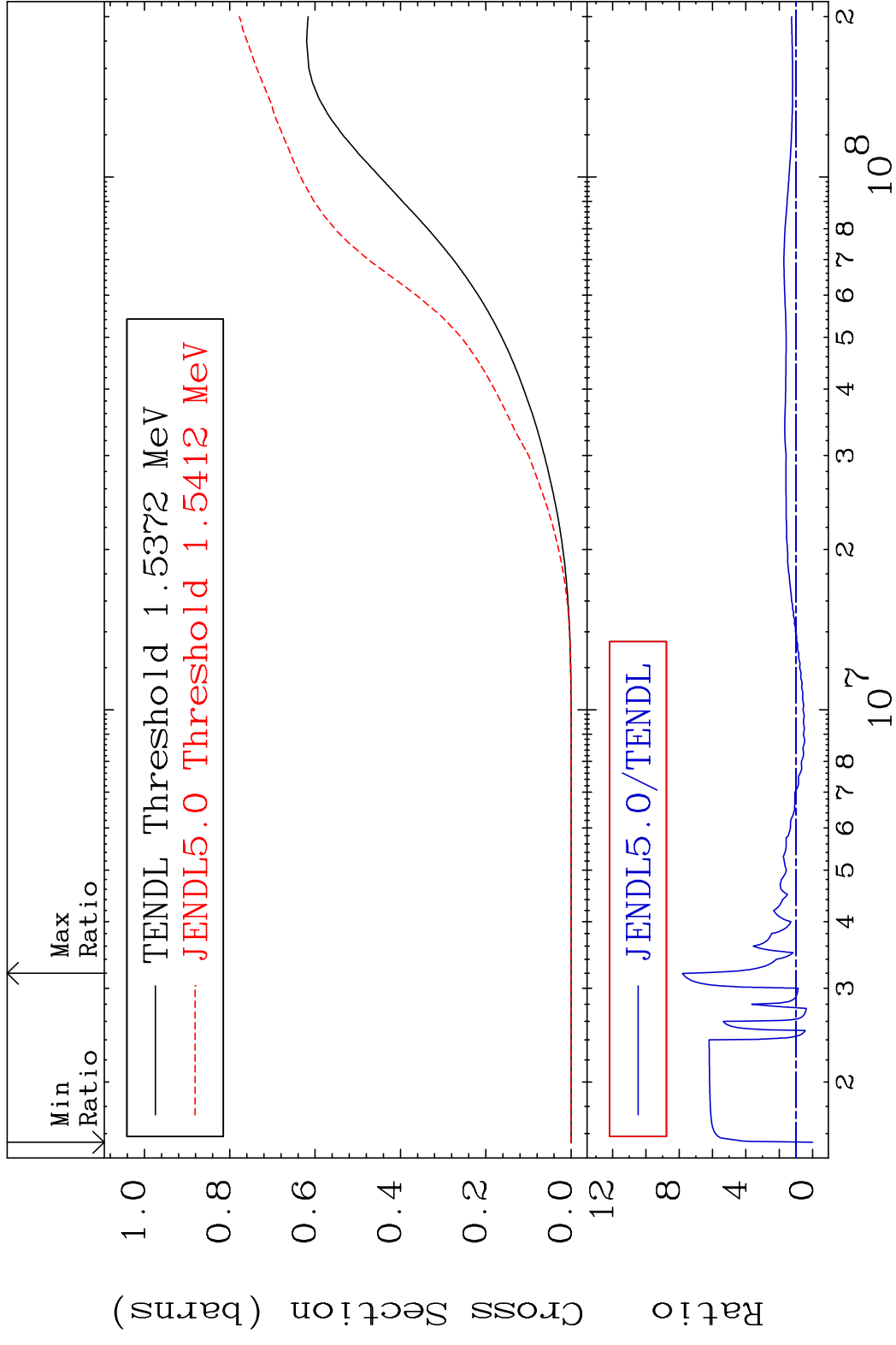


MAT 5728

Hydrogen Production

57-La-139

Cross Section -100.0 To 681.1 %



40

Incident Energy (eV)

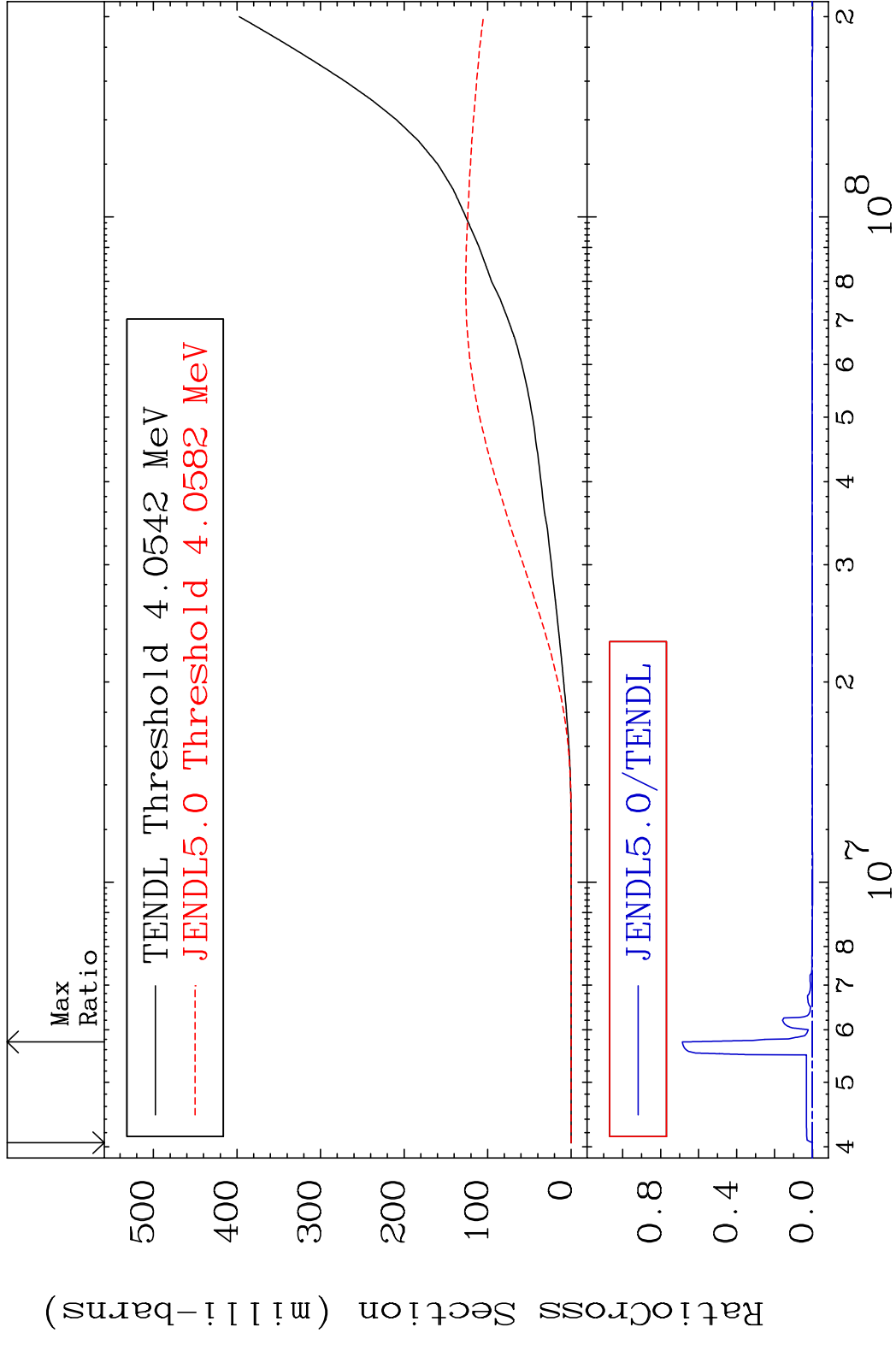
57-La-139

MAT 5728

Deuterium Production

57-La-139

Cross Section -100.0 To 9999. %

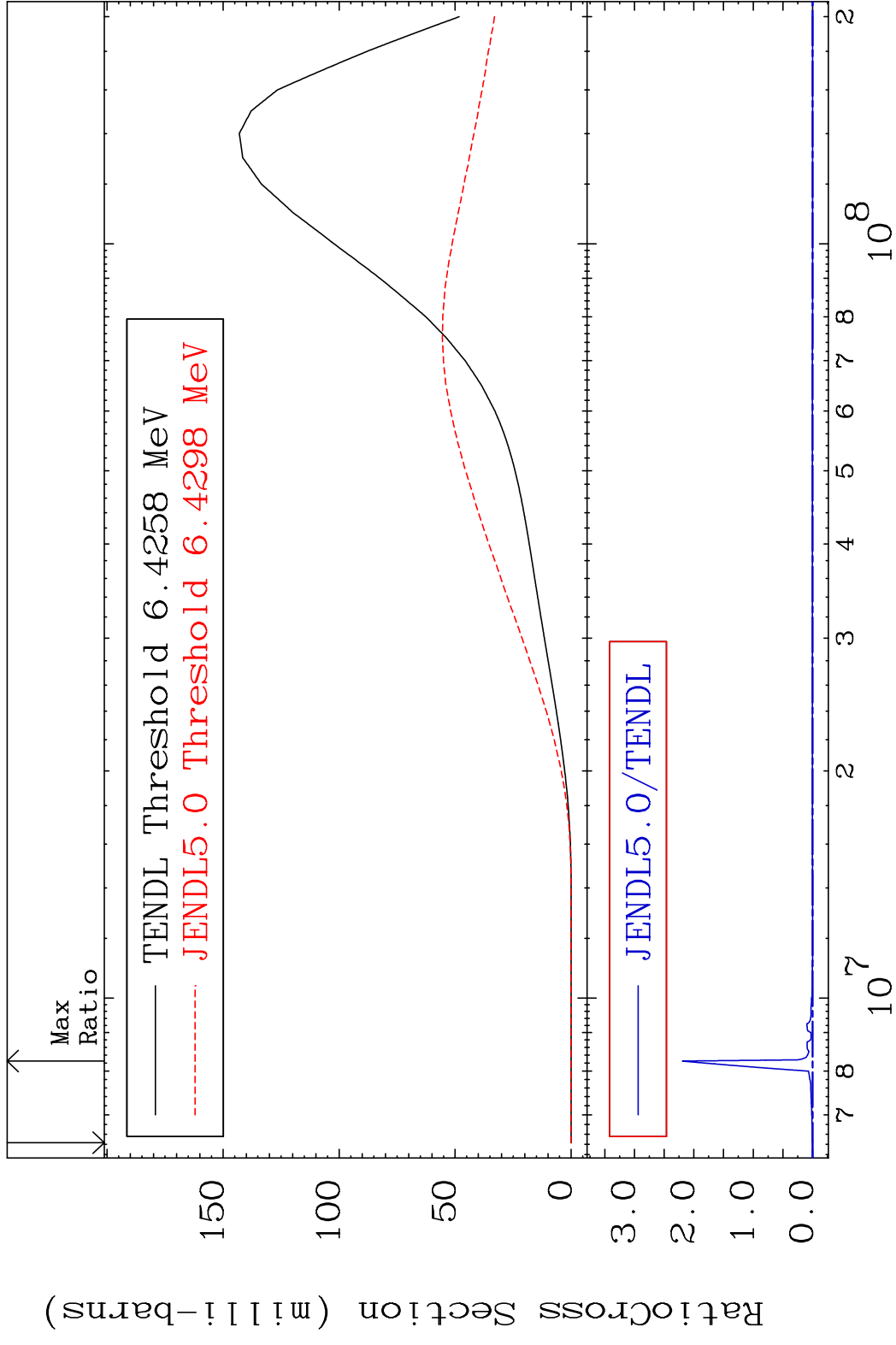


MAT 5728

Tritium Production

57-La-139

Cross Section -100.0 To 9999. %

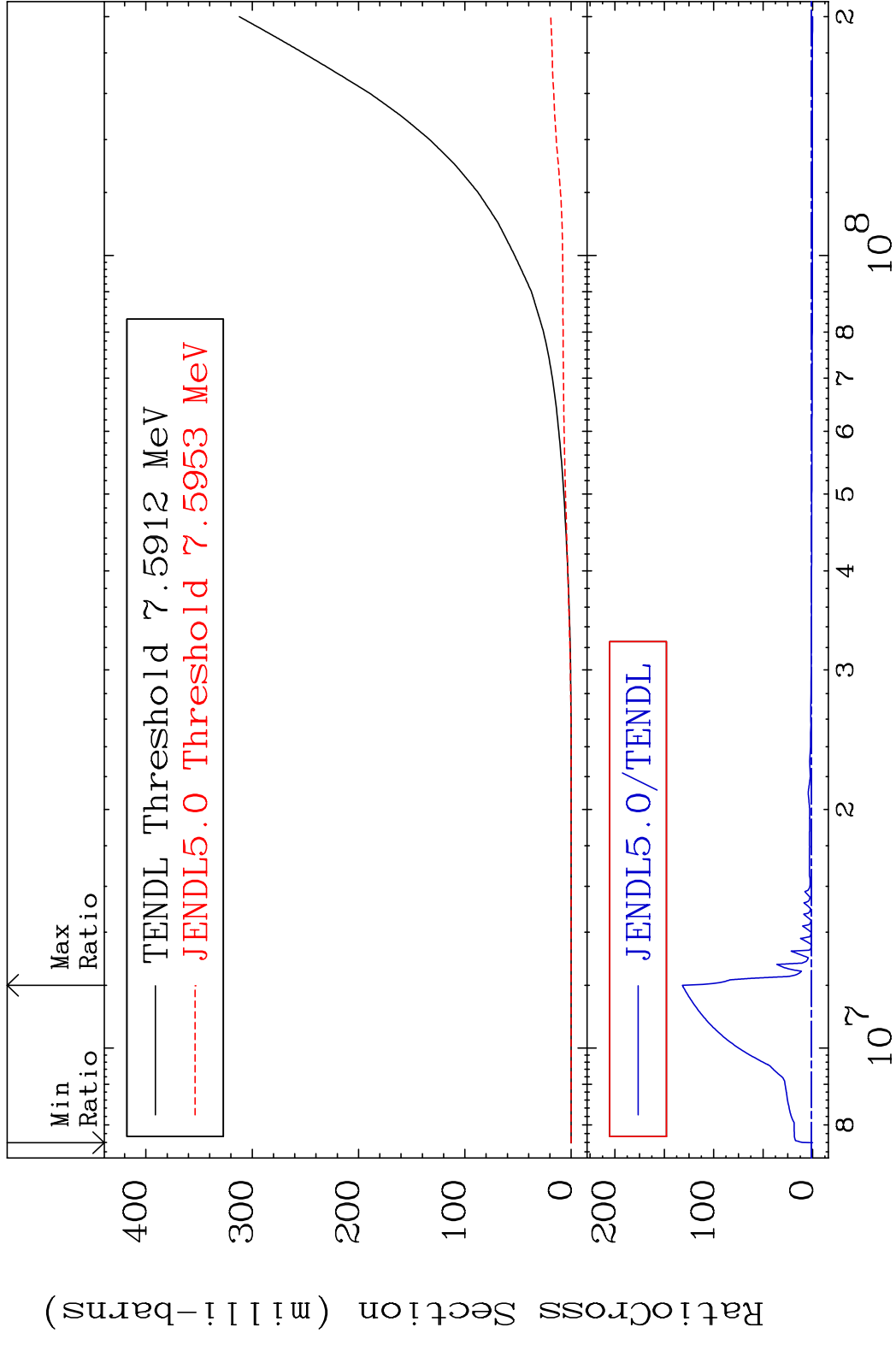


MAT 5728

He-3 Production

57-La-139

Cross Section -100.0 To 9999. %



43

Incident Energy (eV)

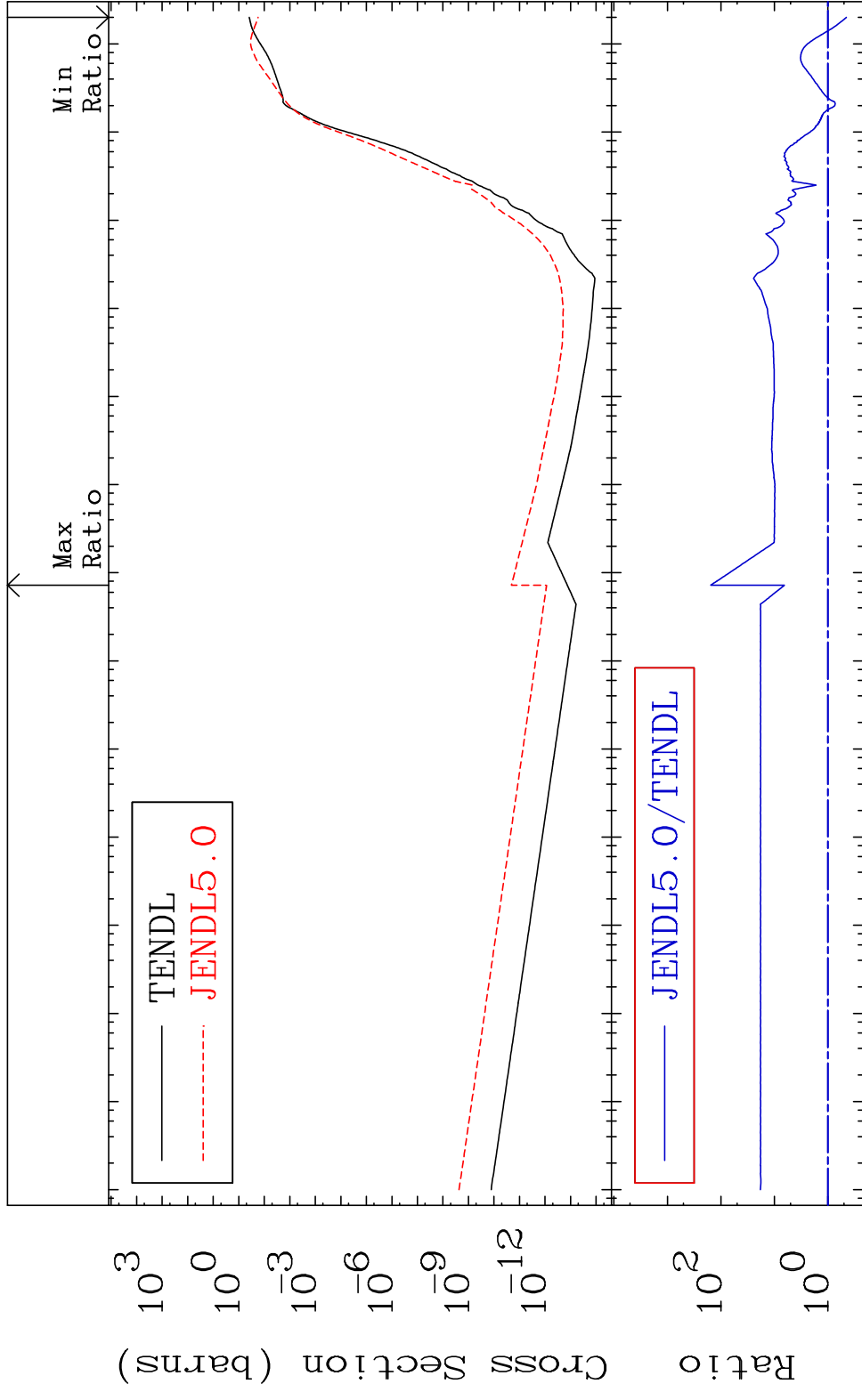
57-La-139

MAT 5728

He-4 Production

57-La-139

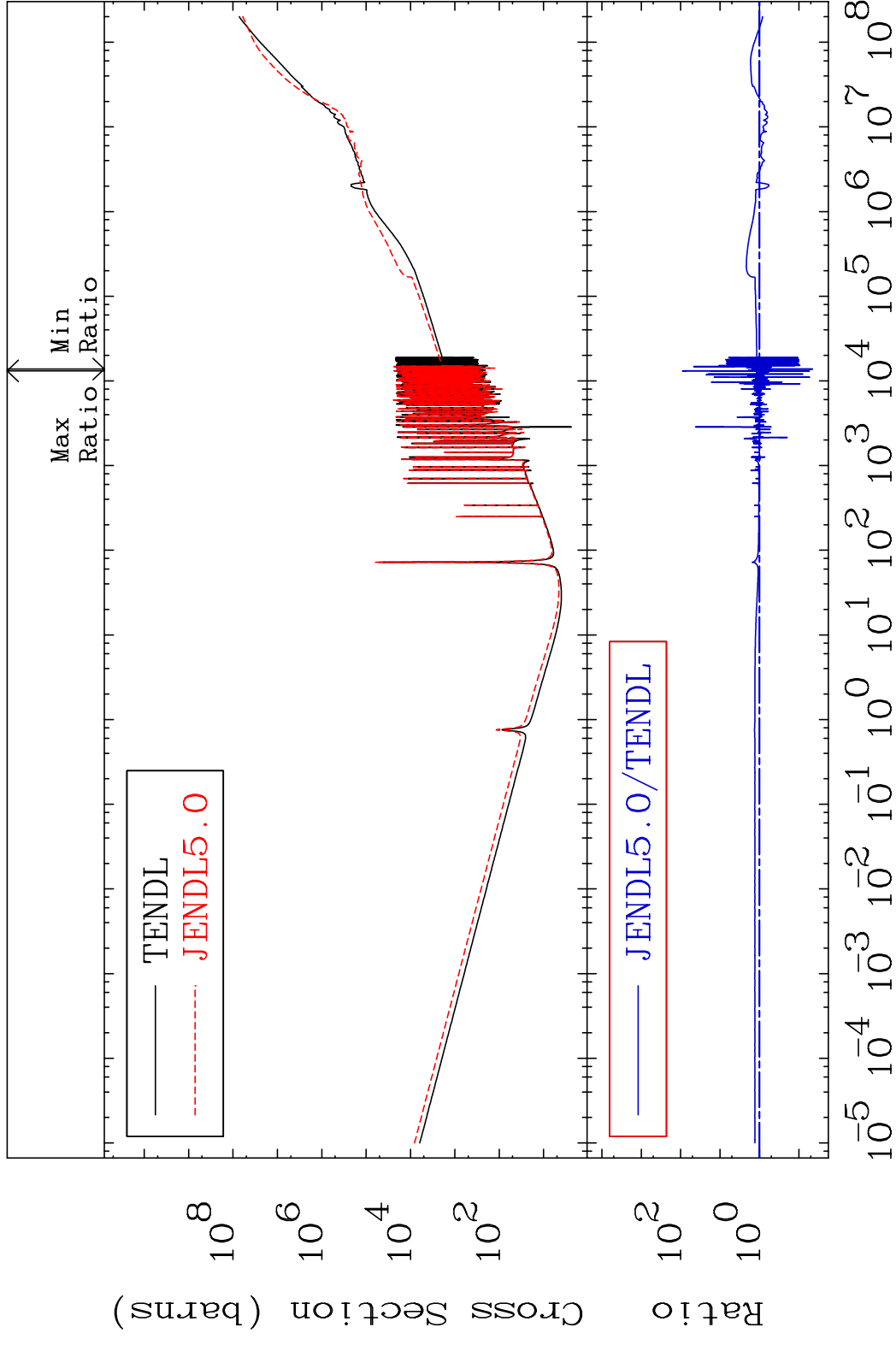
Cross Section -54.77 To 9999. %



MAT 5728

Kerma total (eV-barns) 57-La-139

Cross Section -95.49 To 8959. %



45

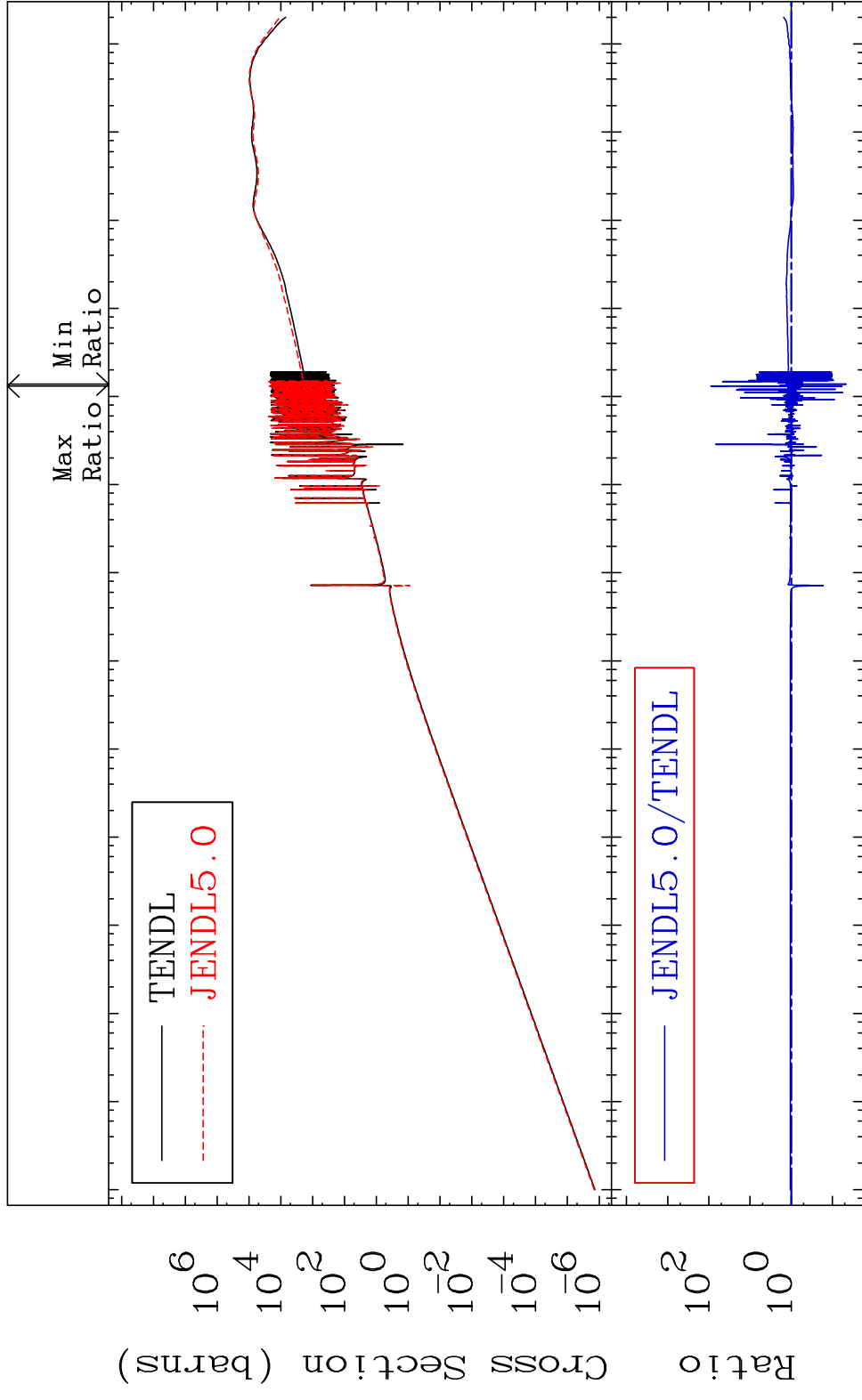
Incident Energy (eV)

57-La-139

MAT 5728

Kerma elastic  
Cross Section

57-La-139  
-95.42 To 8917. %

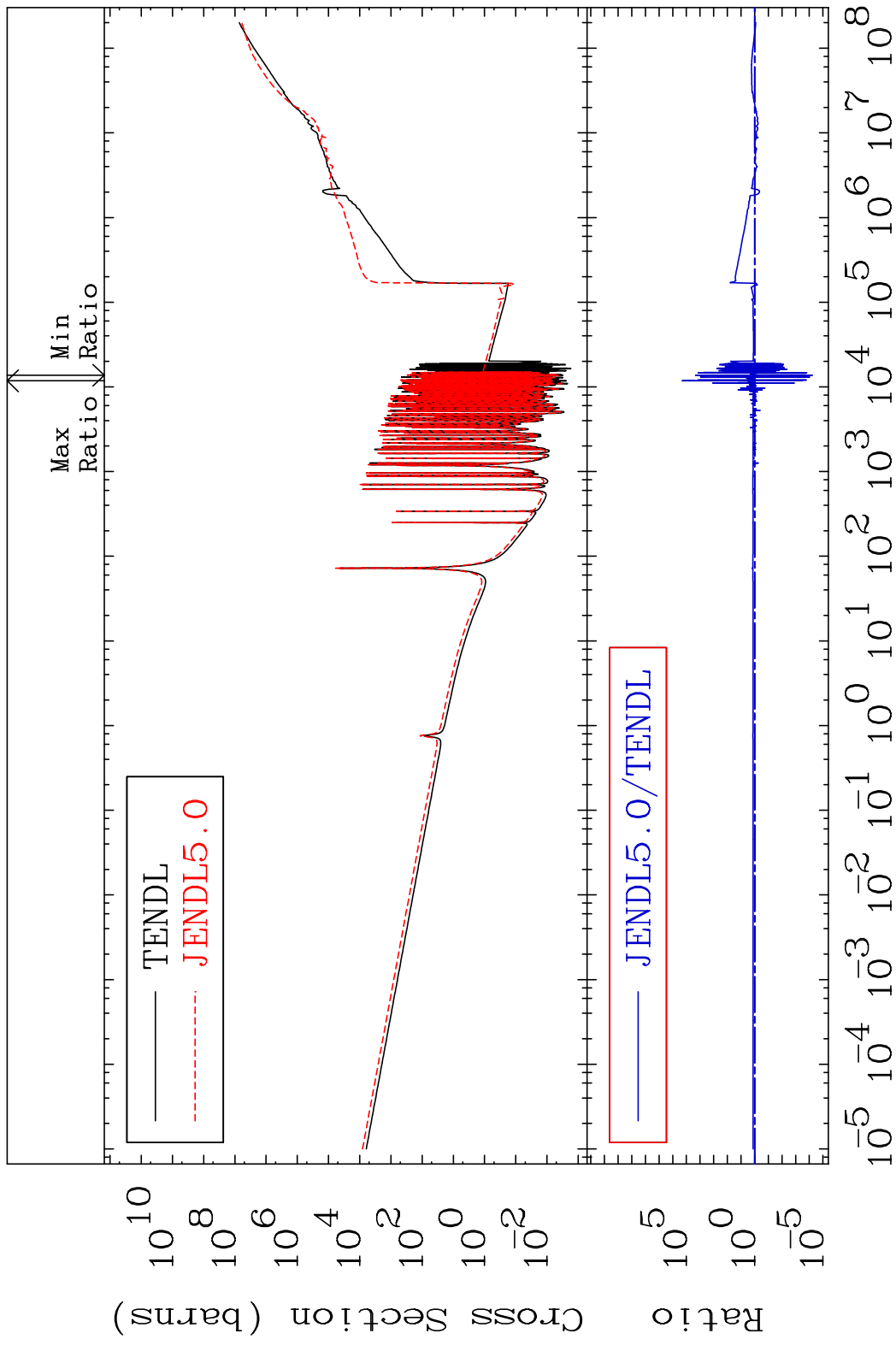


46

Incident Energy (eV)

57-La-139

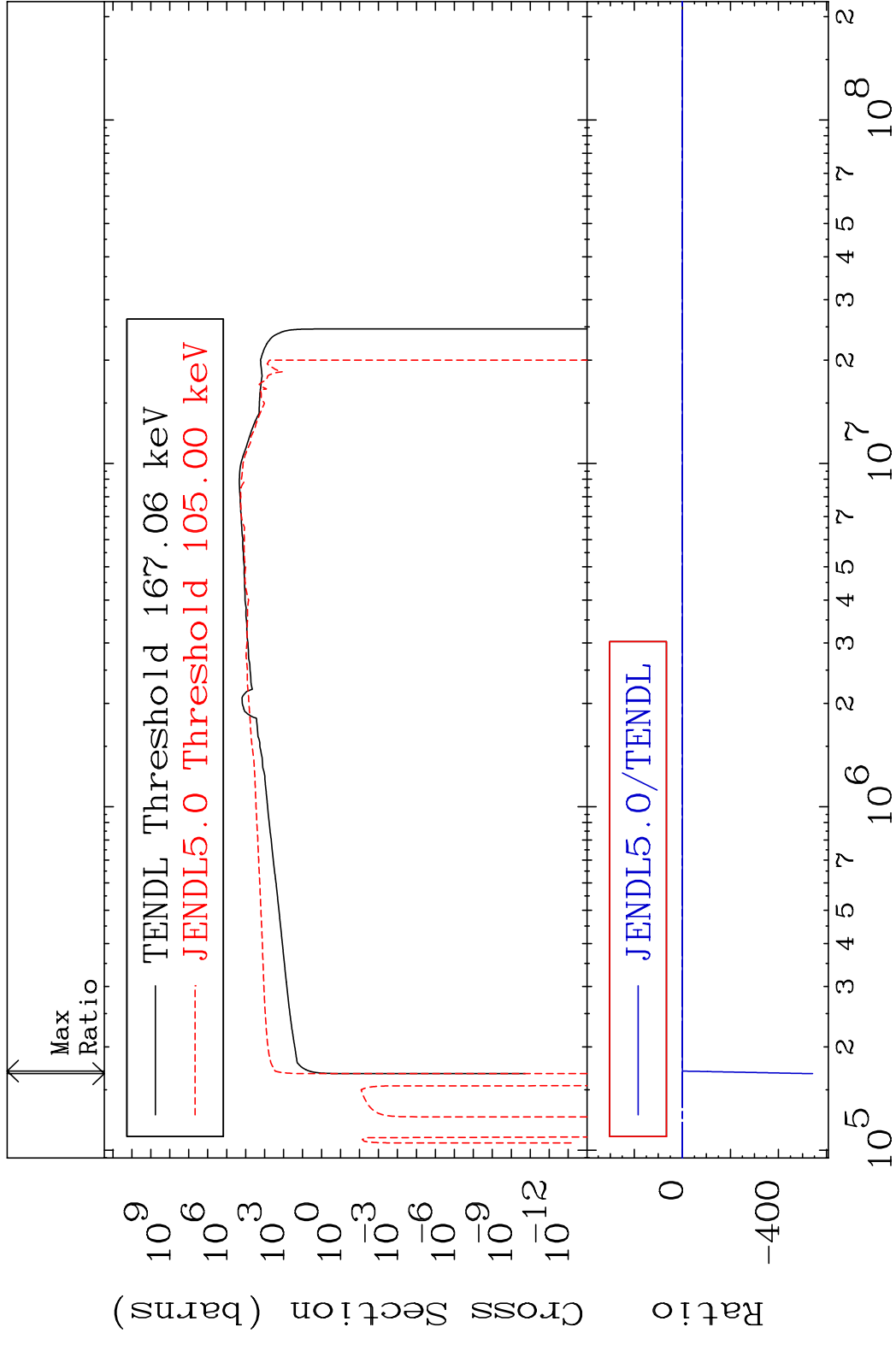
MAT 5728 Kerma non-elastic (all but mt2) 57-La-139  
 Cross Section -99.99 To 9999. %



47 Incident Energy (eV) 57-La-139

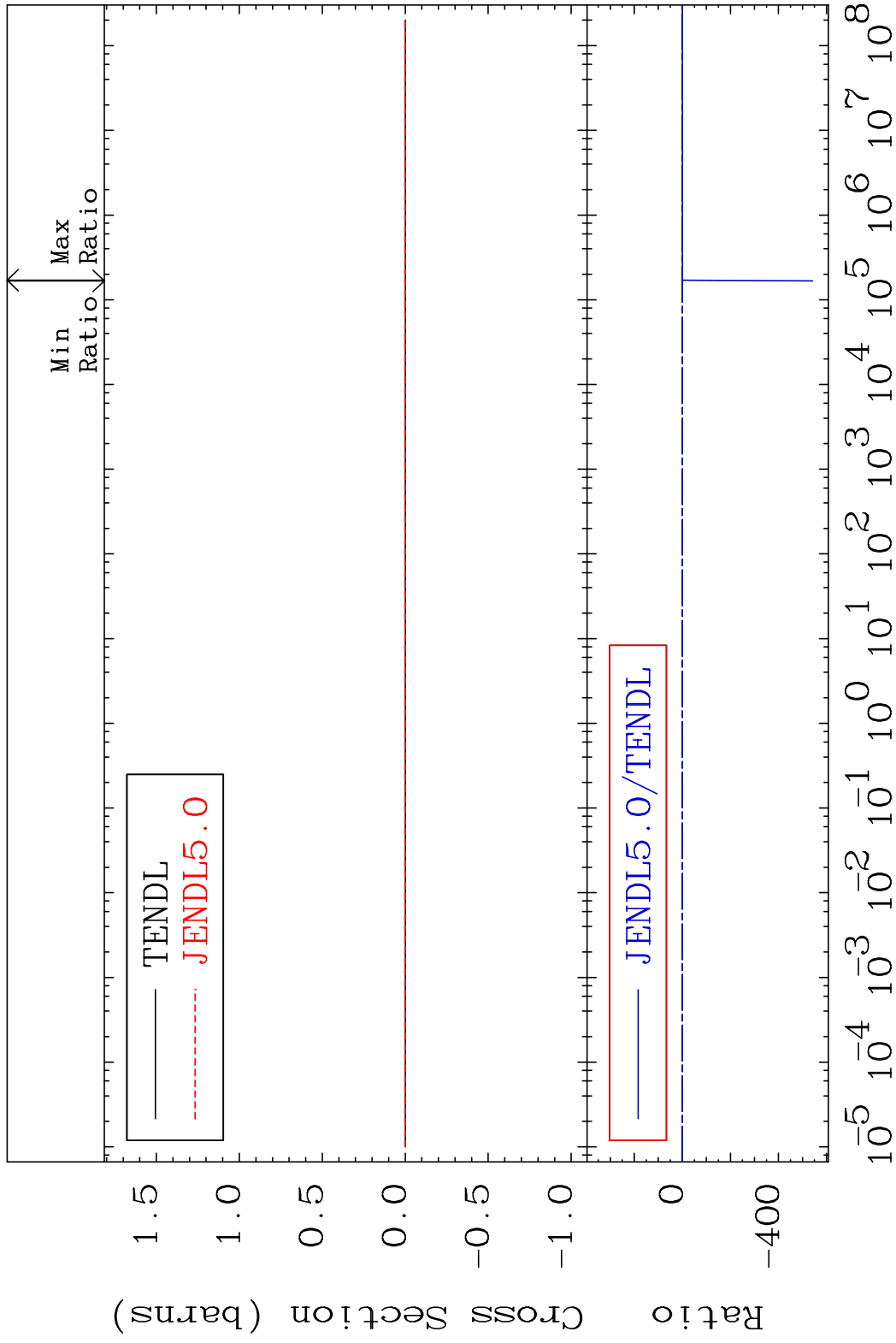


MAT 5728 Kerma inelastic (mt51-91) 57-La-139  
 Cross Section -9999. To 6243. %



48 Incident Energy (eV) 57-La-139

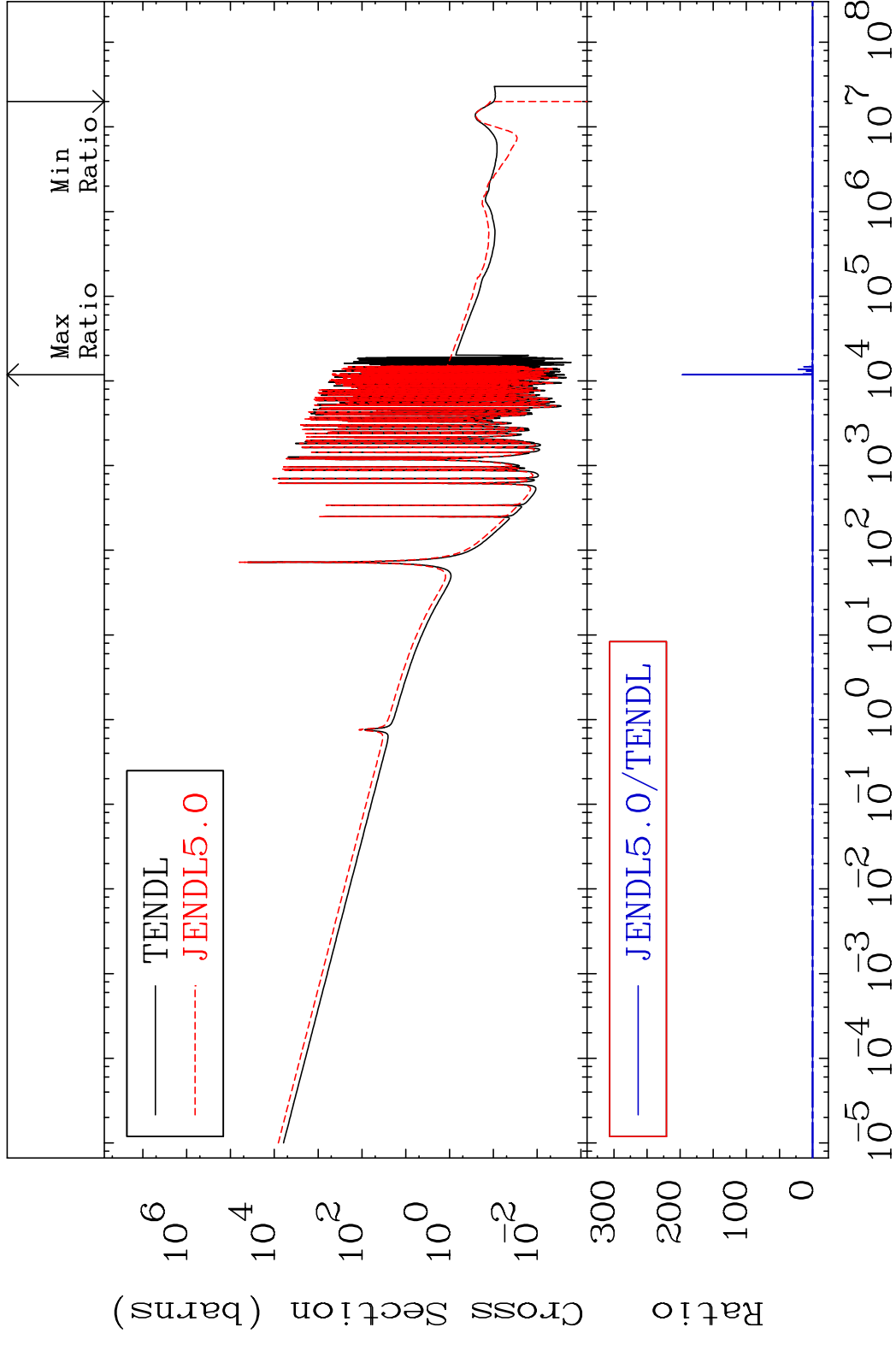
MAT 5728 Kerma fission (mt18 or mt19-20-21-38) 57-La-139  
 Cross Section -9999. To 6243. %



MAT 5728

Kerma capture (mt102) 57-La-139

Cross Section -100.0 To 9999. %

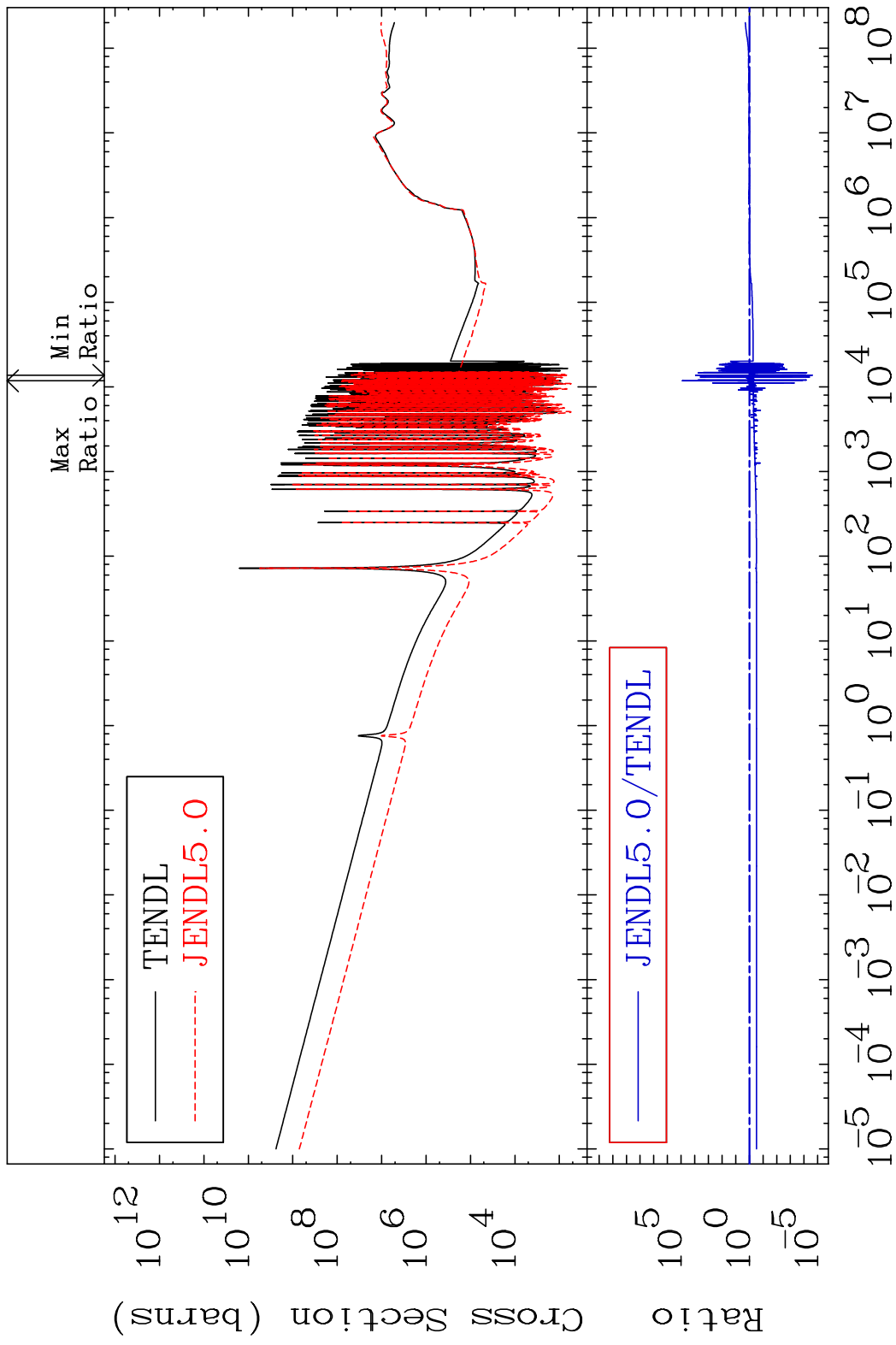


50

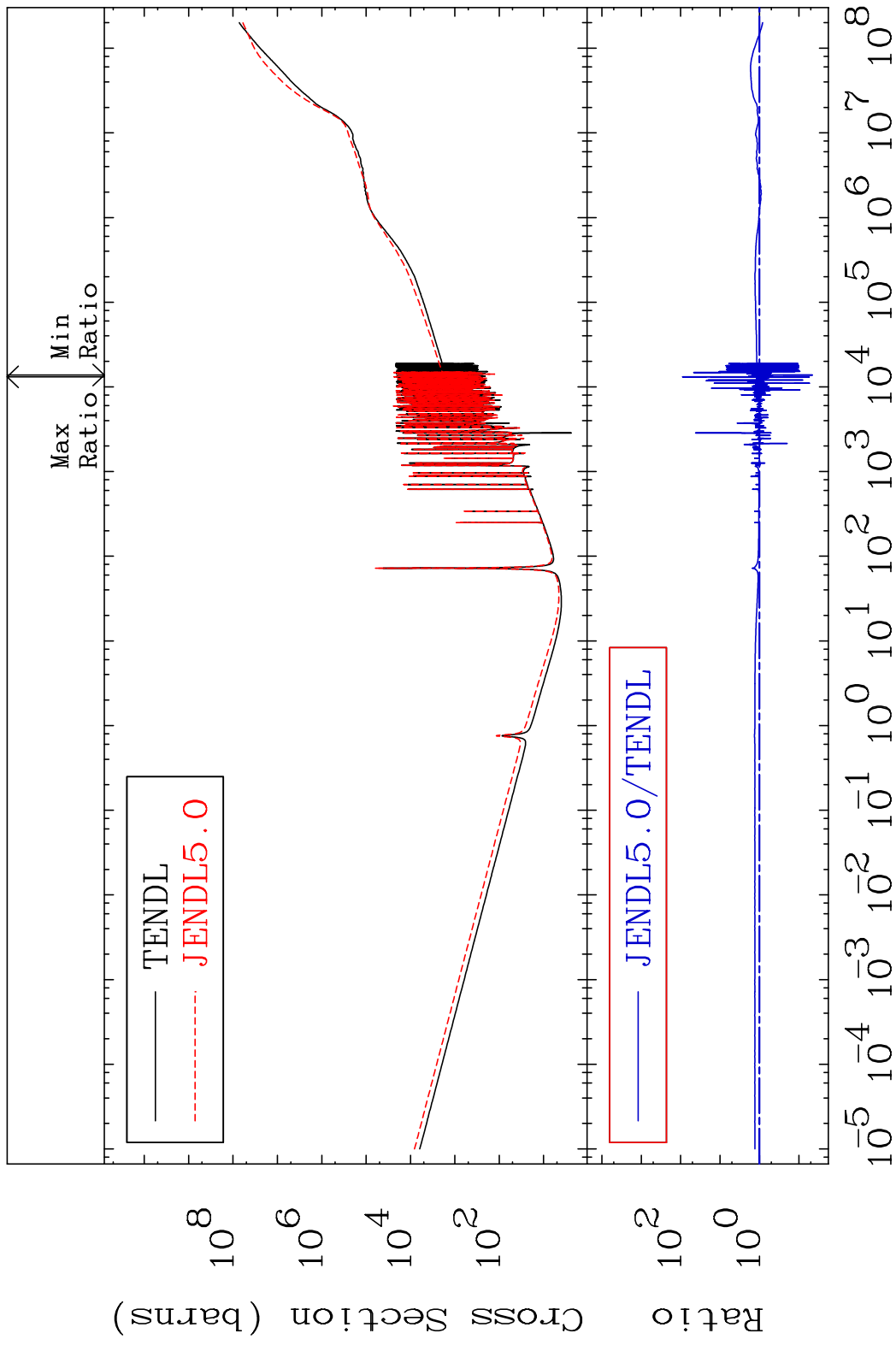
Incident Energy (eV)

57-La-139

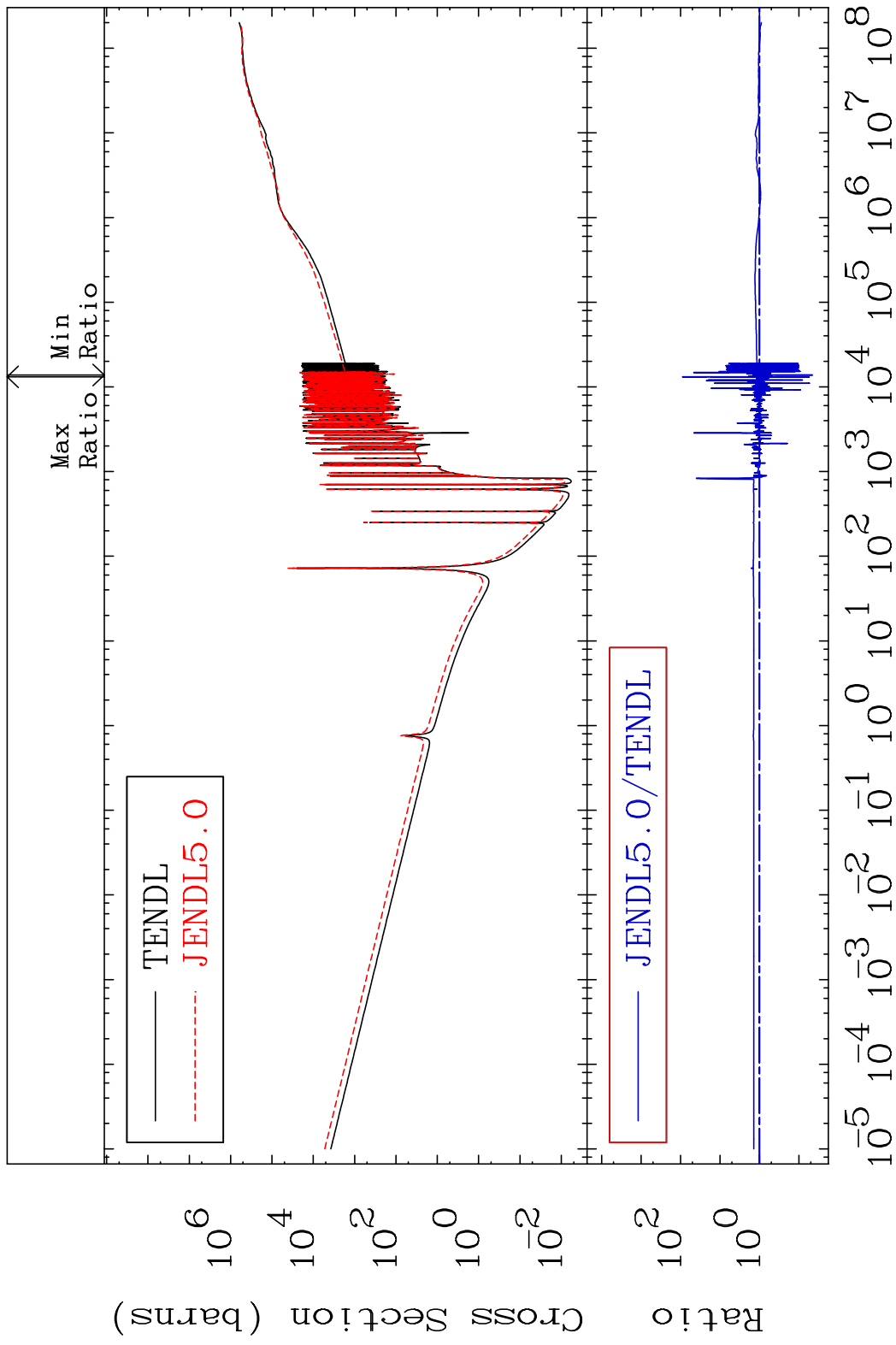
MAT 5728 Total photon (eV-barns) 57-La-139  
 Cross Section -100.0 To 9999. %



MAT 5728 Total kinematic kerma (high limit) 57-La-139  
 Cross Section -95.49 To 8959. %



MAT 5728      Dpa total (eV-barns)      57-La-139  
 Cross Section      -95.47 To 8946. %

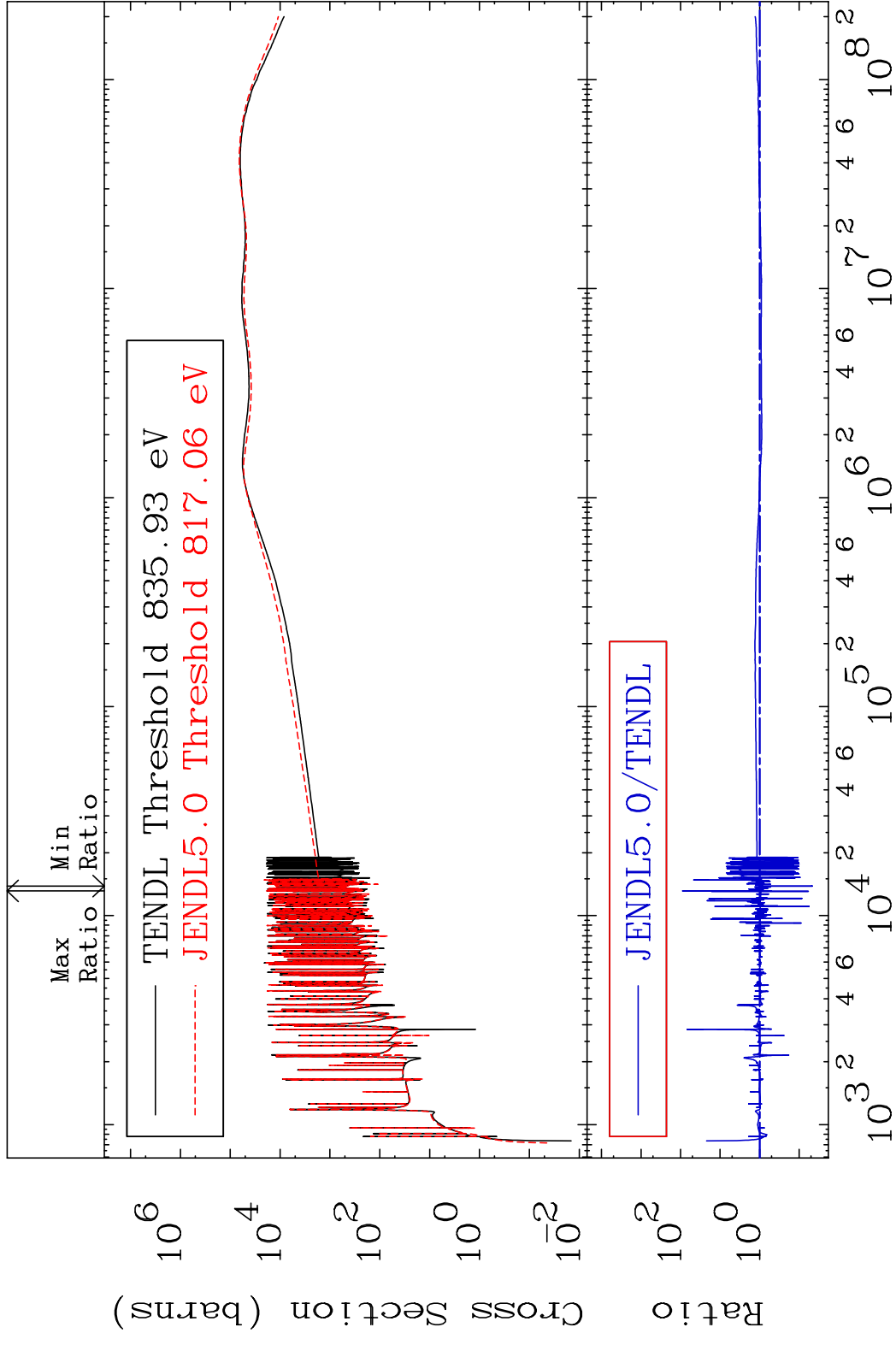


MAT 5728

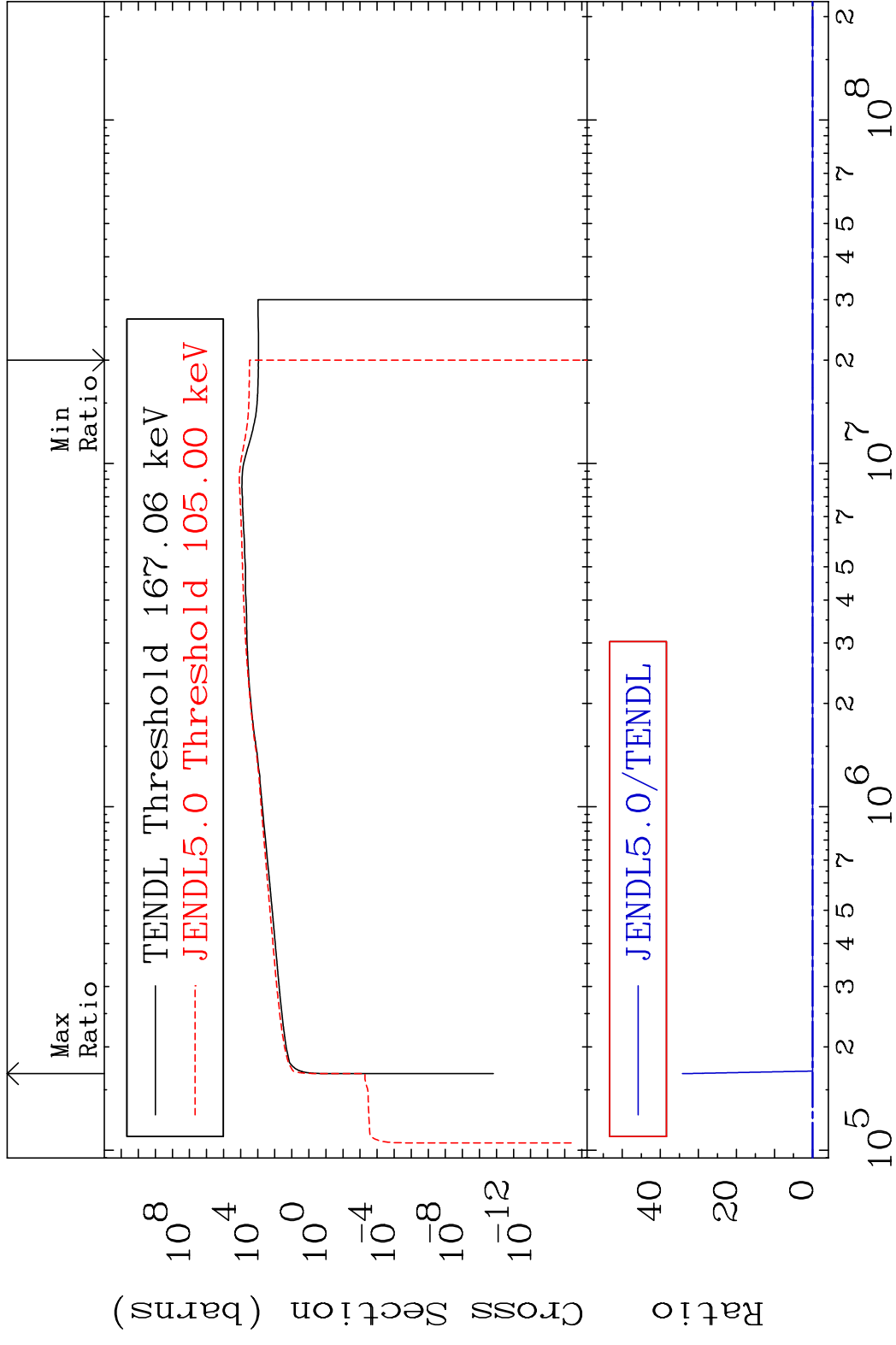
Dpa elastic (mt2)

57-La-139

Cross Section -95.42 To 8916. %

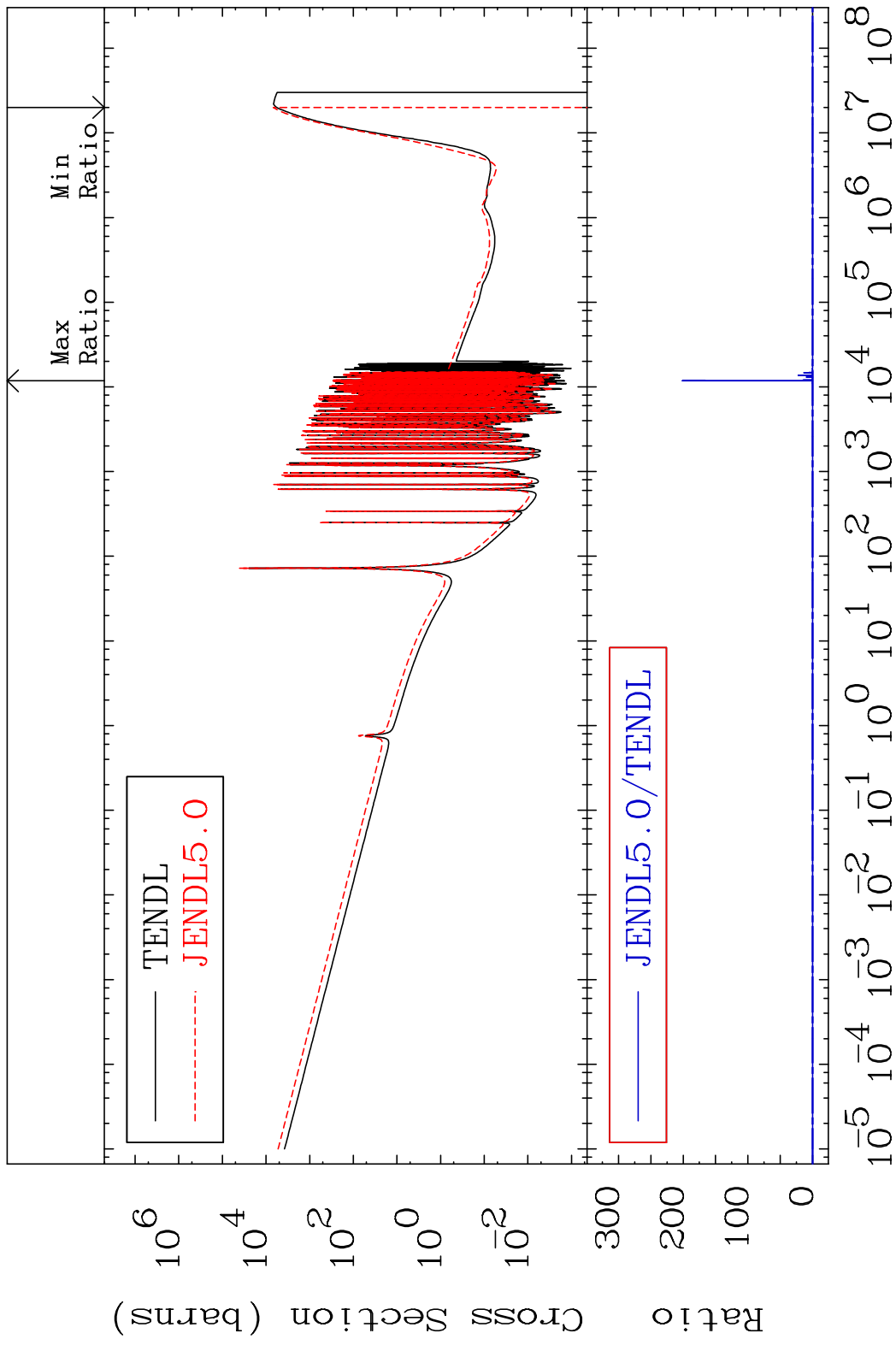


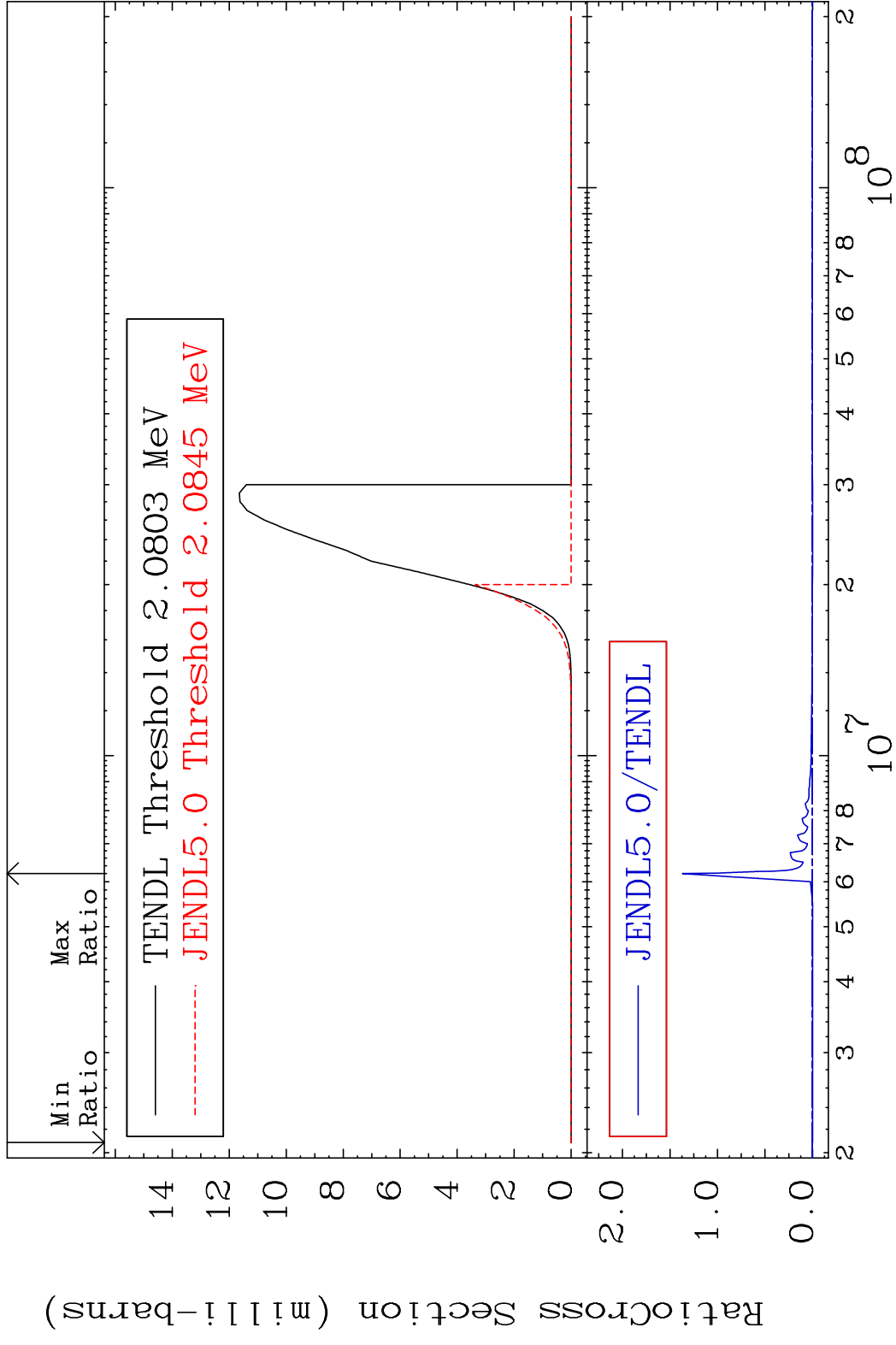
MAT 5728 Dpa inelastic (mt51-91) 57-La-139  
 Cross Section -100.0 To 9999. %

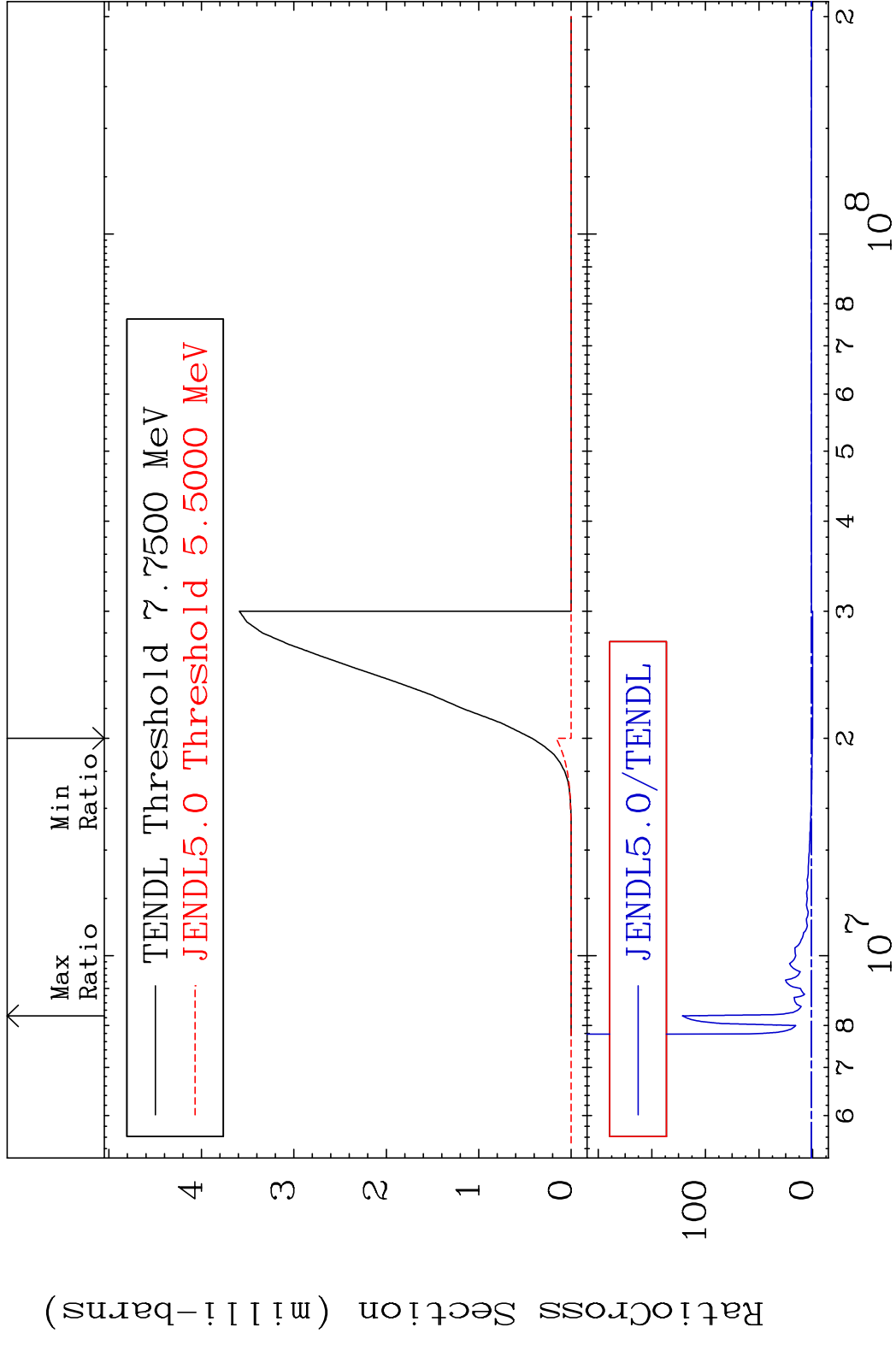


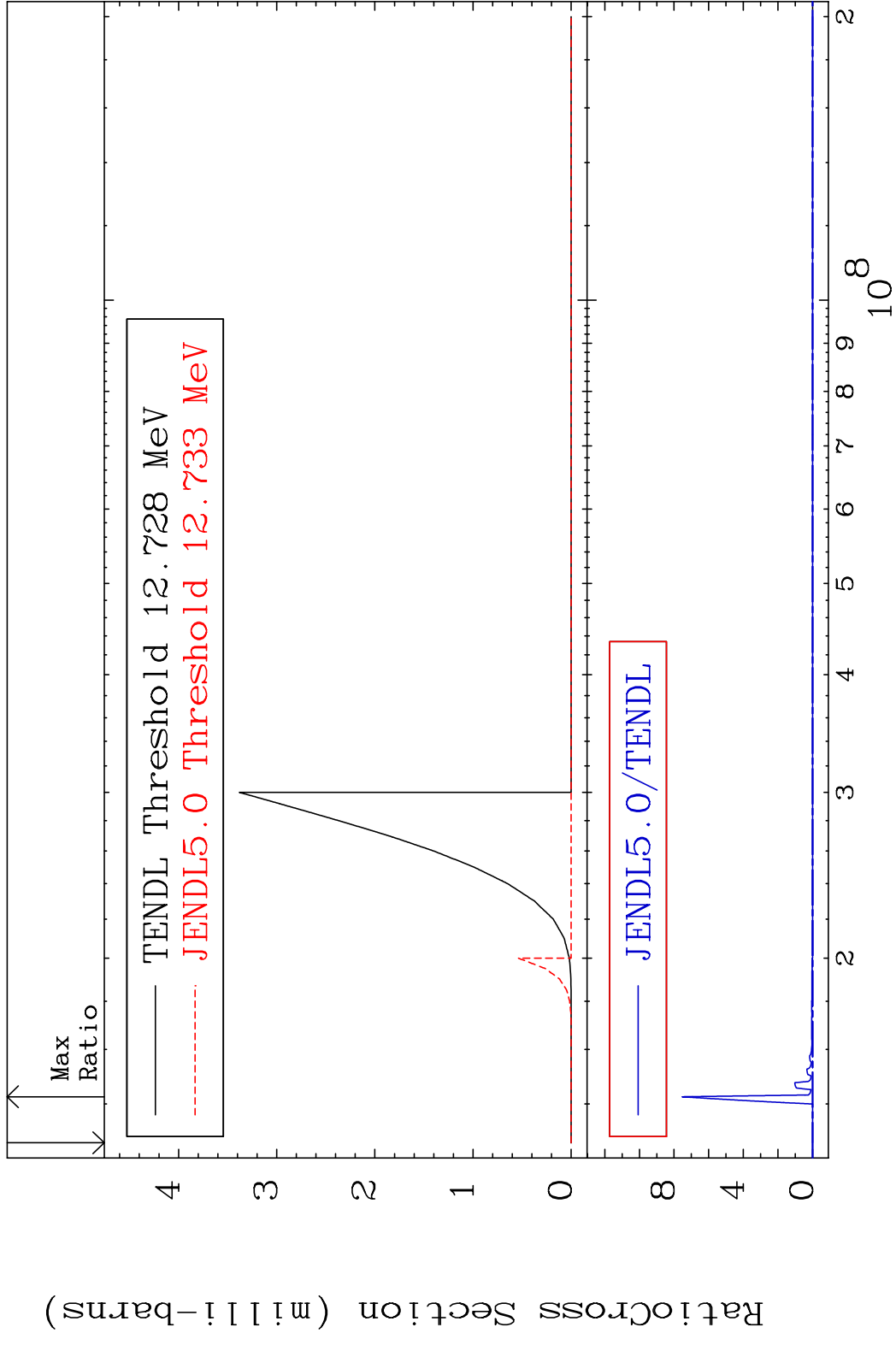


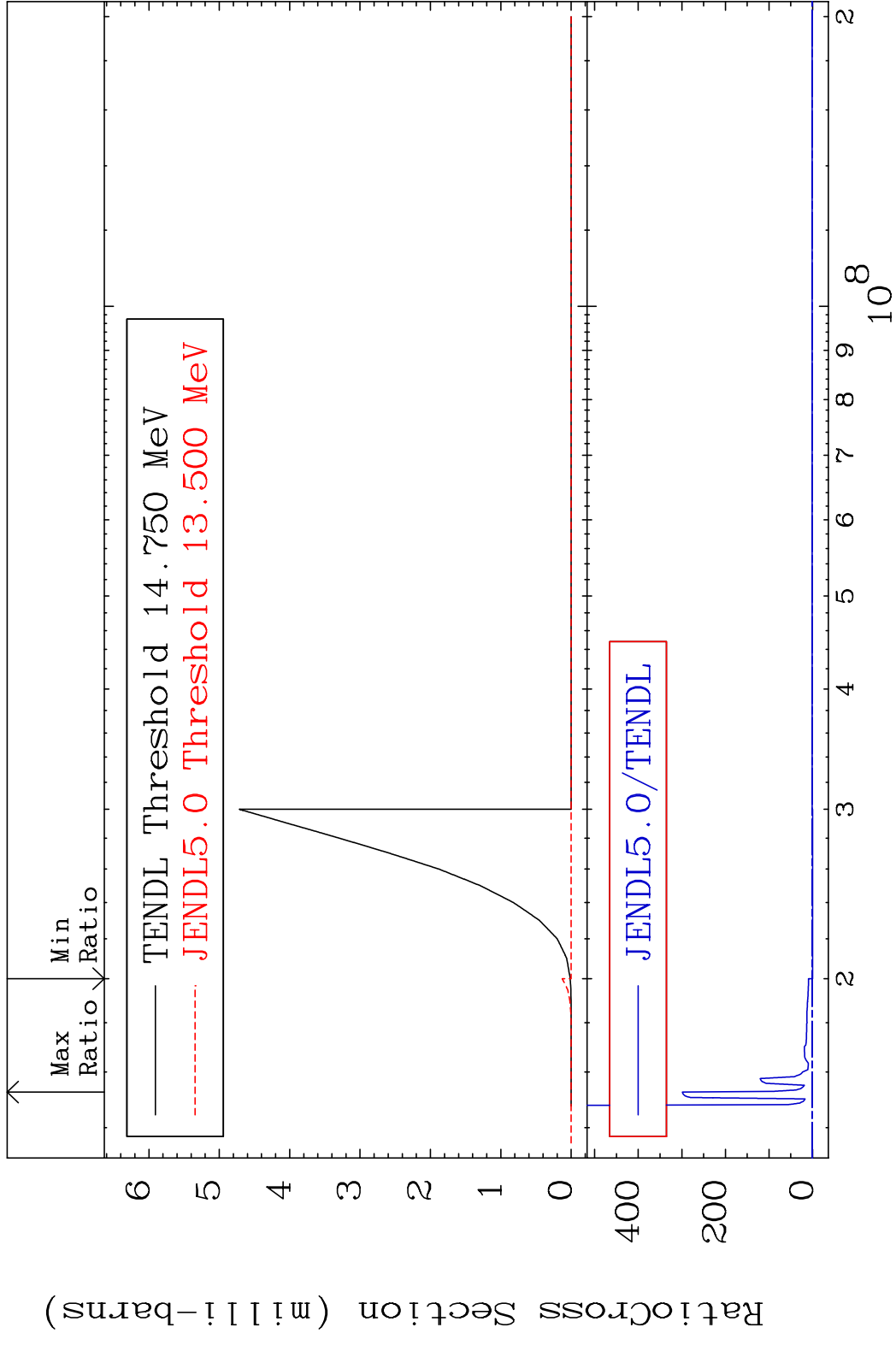
MAT 5728 Dpa disappearance (mt102 -120) 57-La-139  
 Cross Section -100.0 To 9999. %

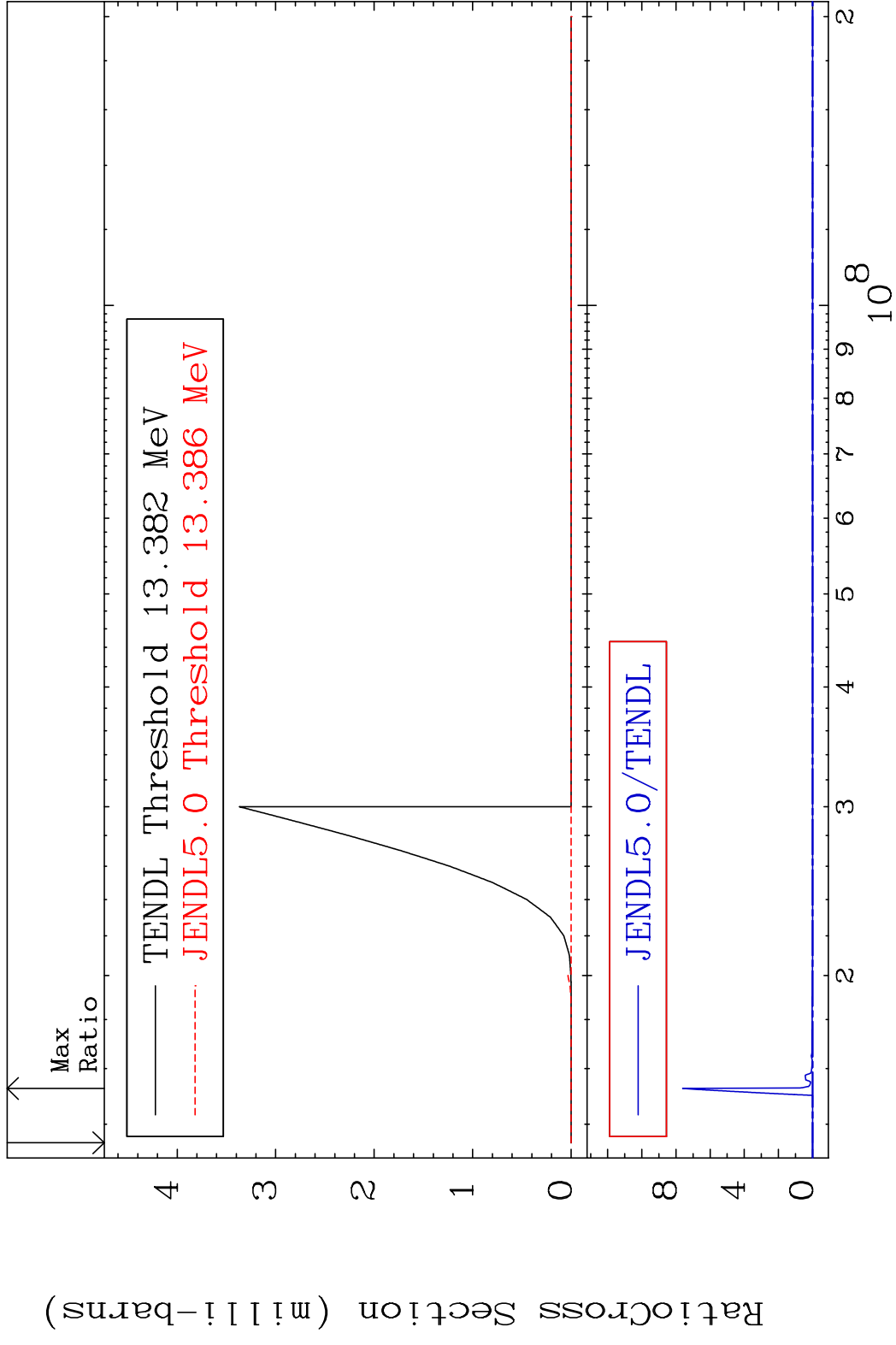












MAT 5728 (n, n') t:56-Ba-136m5 57-La-139  
 Radionuclide Production Cross Section 180.01 dth 2733. %

