

Program Complot  
(Version 2021-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

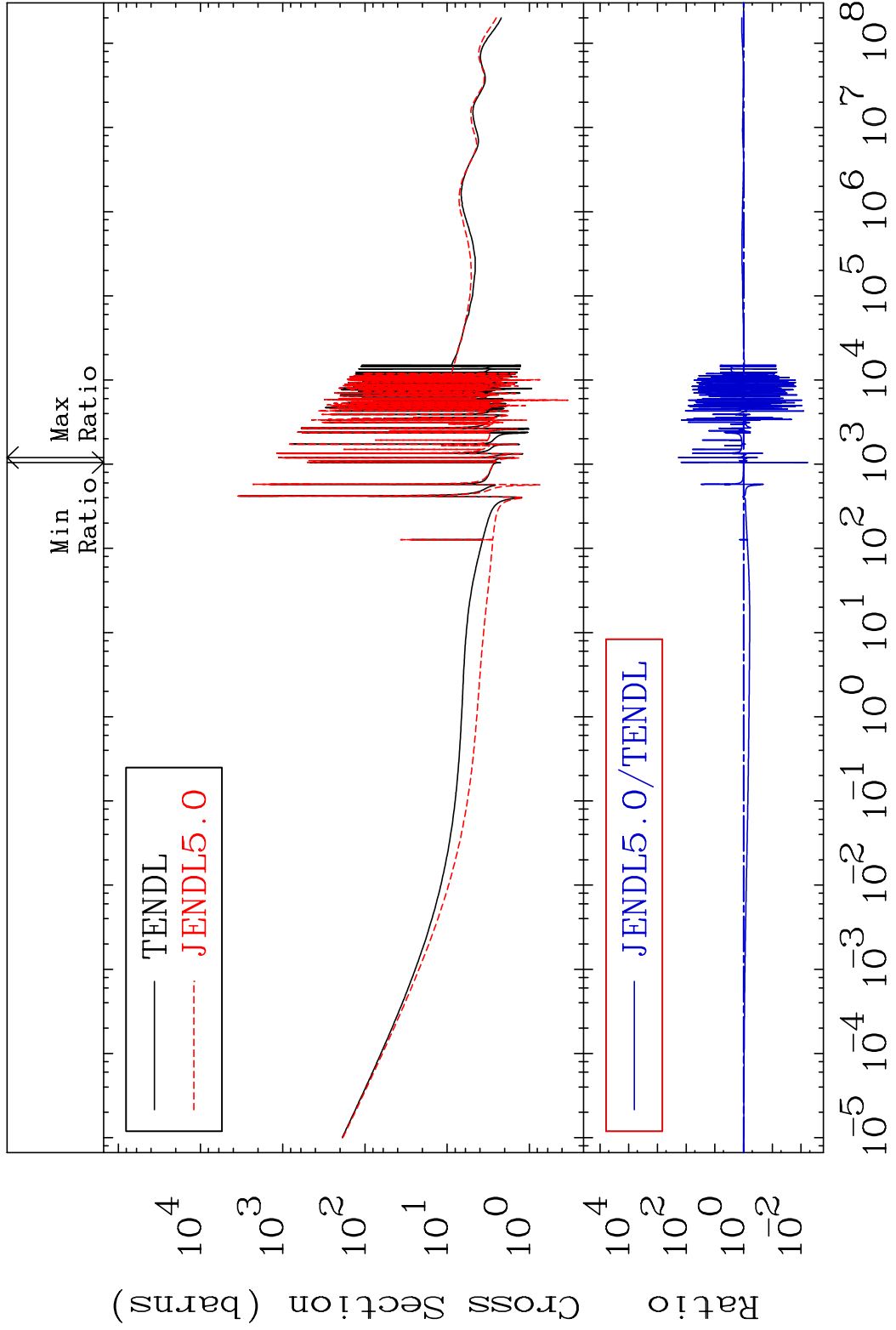
U.S.A.

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 5646      Total      56-Ba-137  
 Cross Section      -99.41 To 9999. %



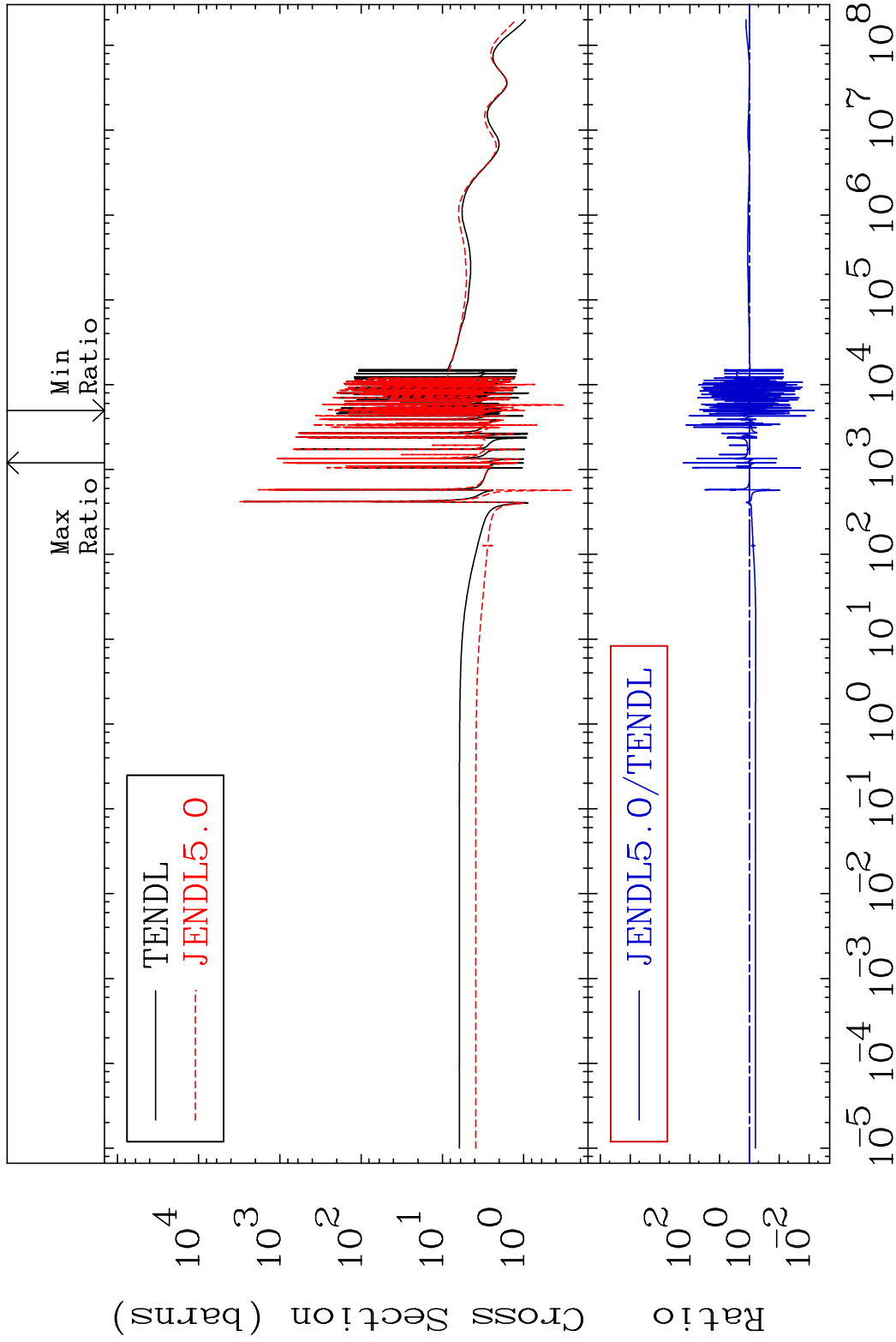
1      Incident Energy (eV)      56-Ba-137

MAT 5646

Elastic

56-Ba-137

Cross Section -99.31 To 9999. %



2

Incident Energy (eV)

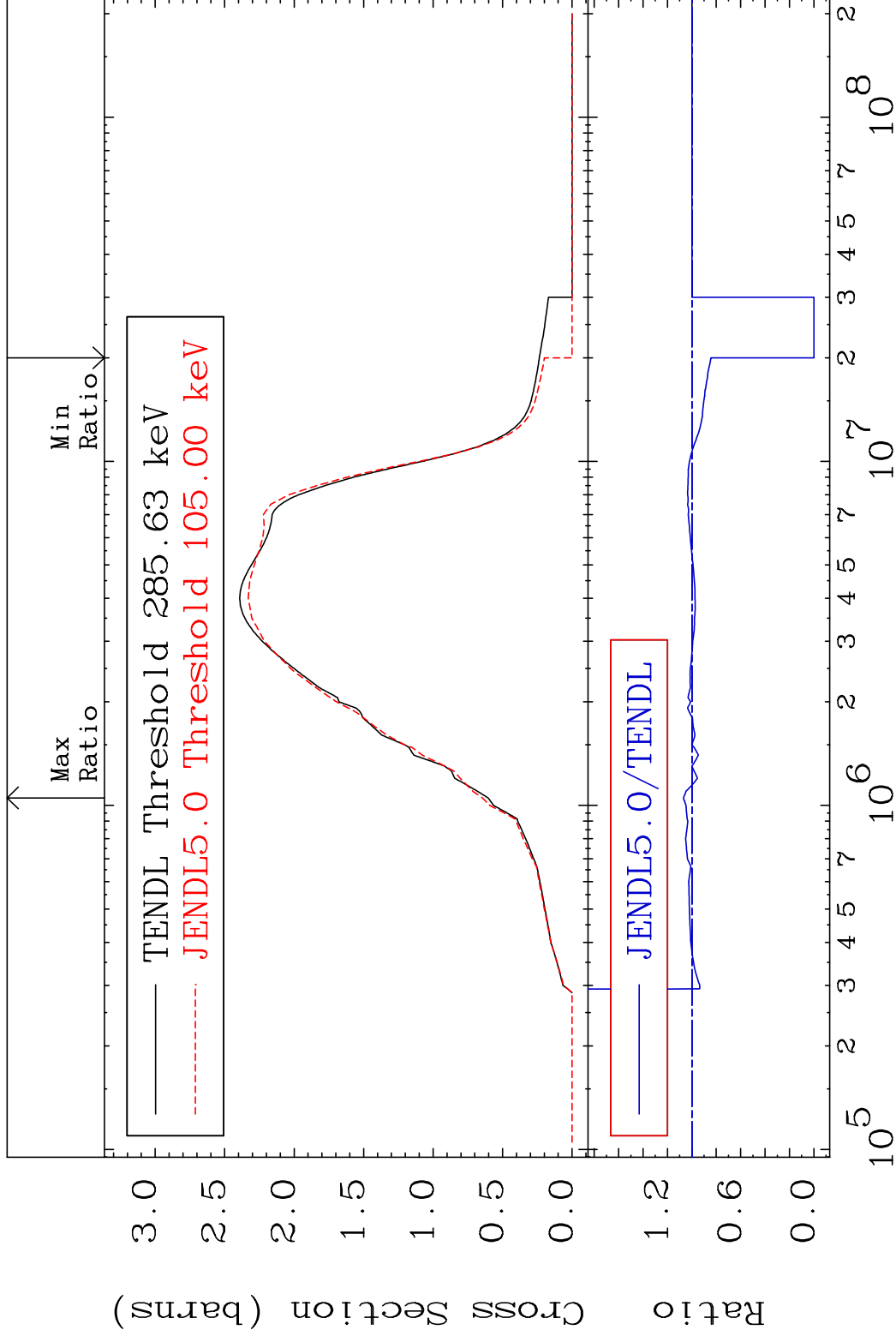
56-Ba-137

MAT 5646

Inelastic

56-Ba-137

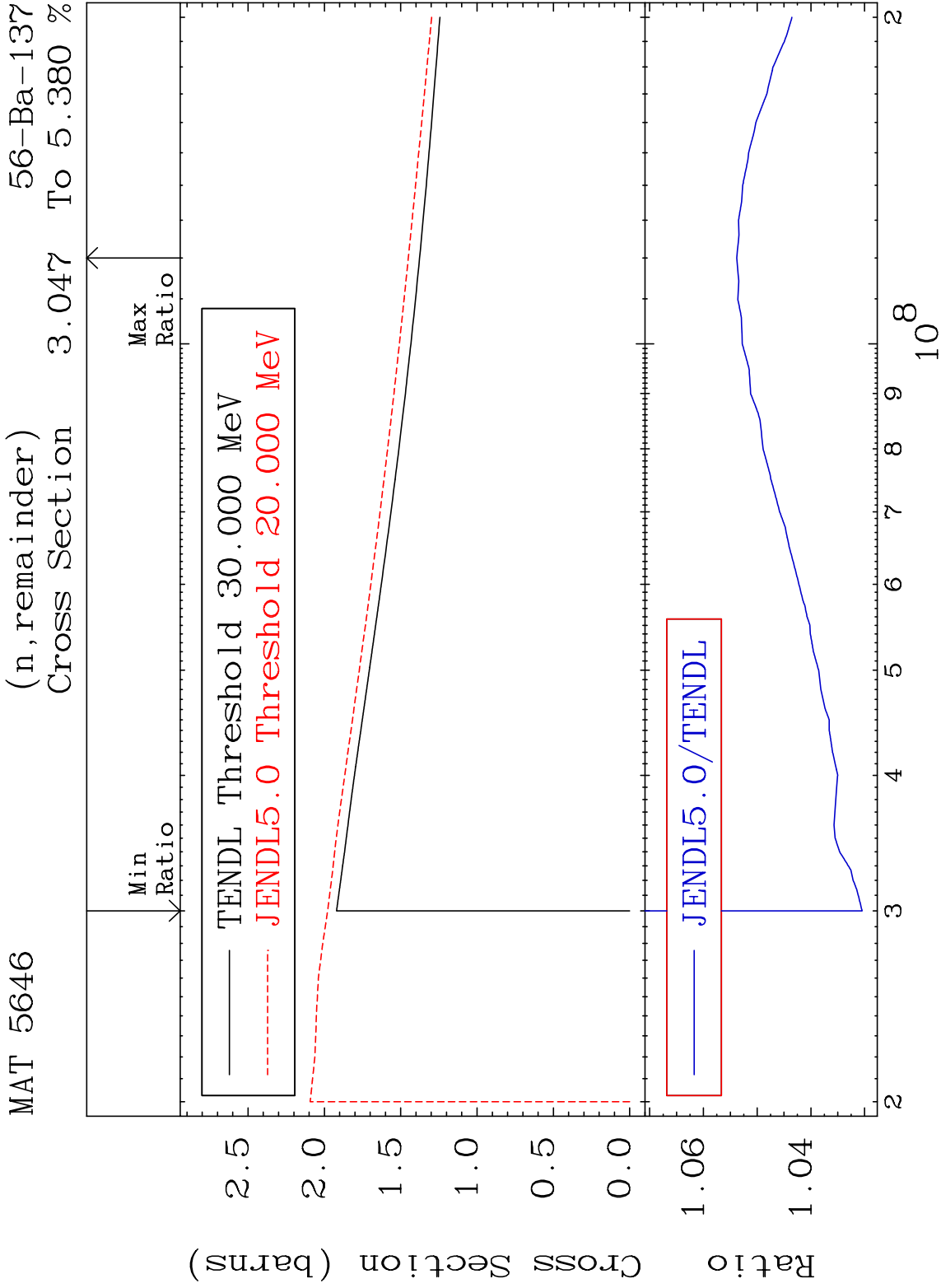
Cross Section -100.0 To 6.888 %



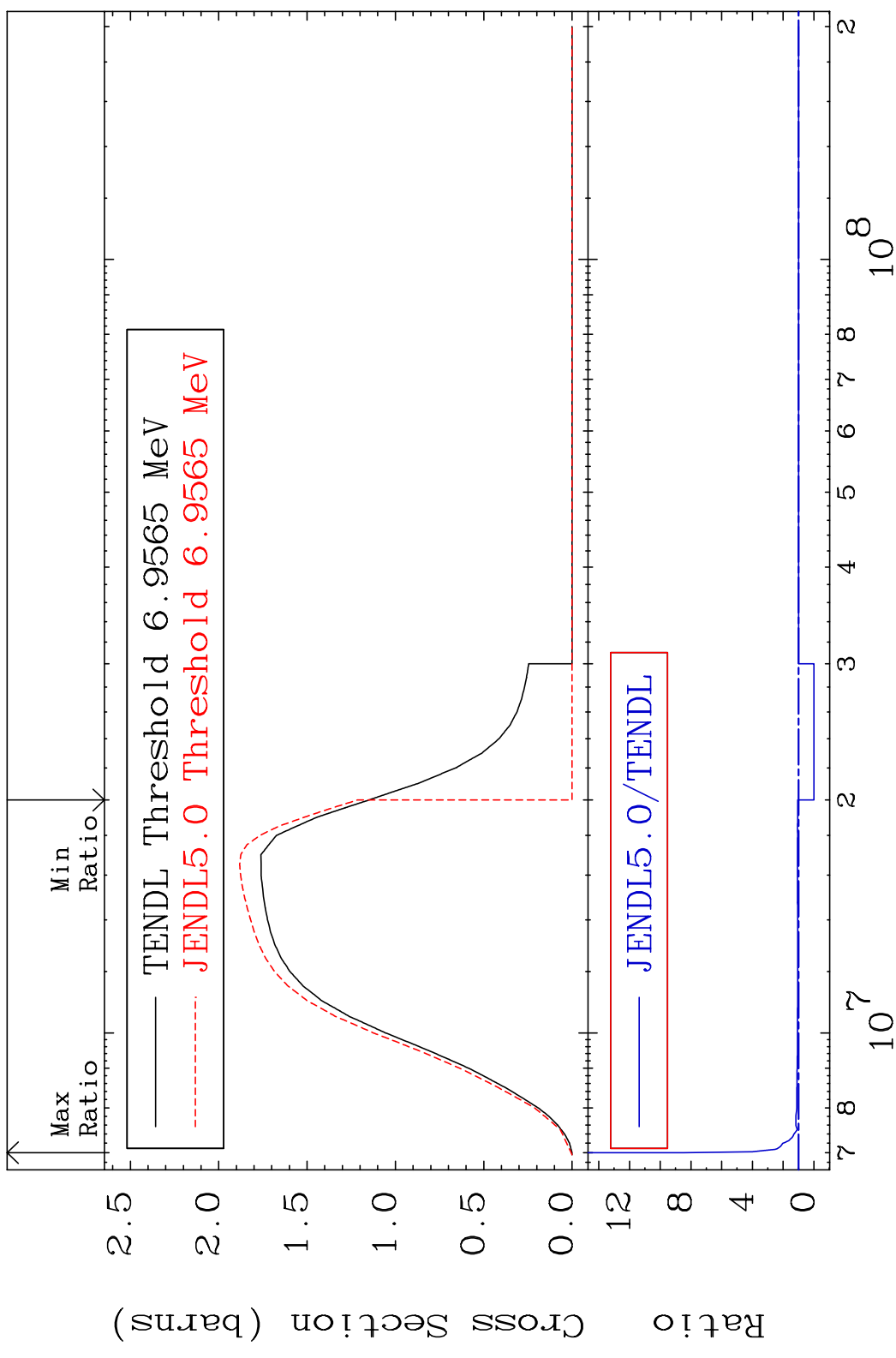
3

Incident Energy (eV)

56-Ba-137

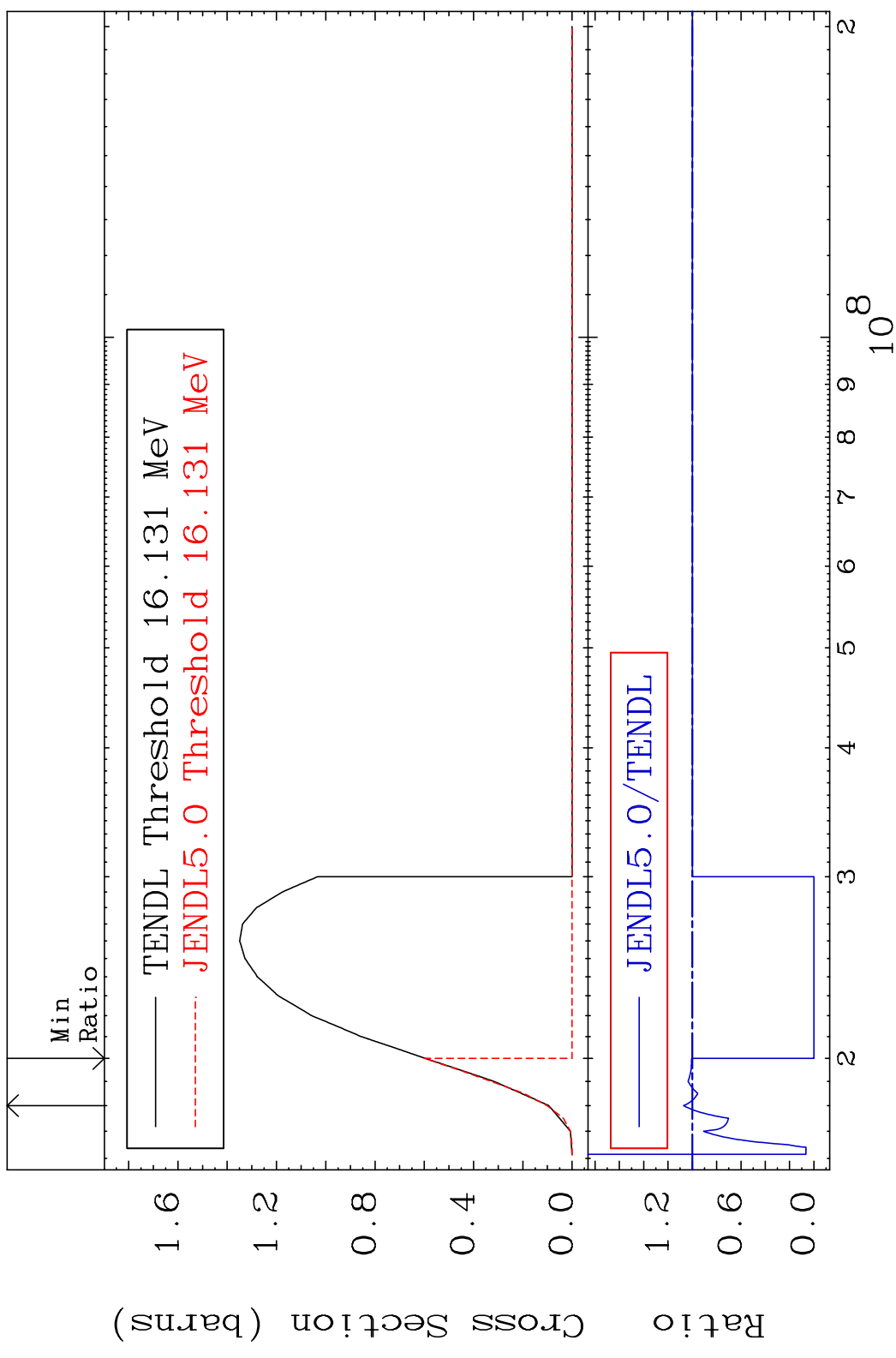


MAT 5646 (n,2n) 56-Ba-137  
 Cross Section -100.0 To 748.7 %

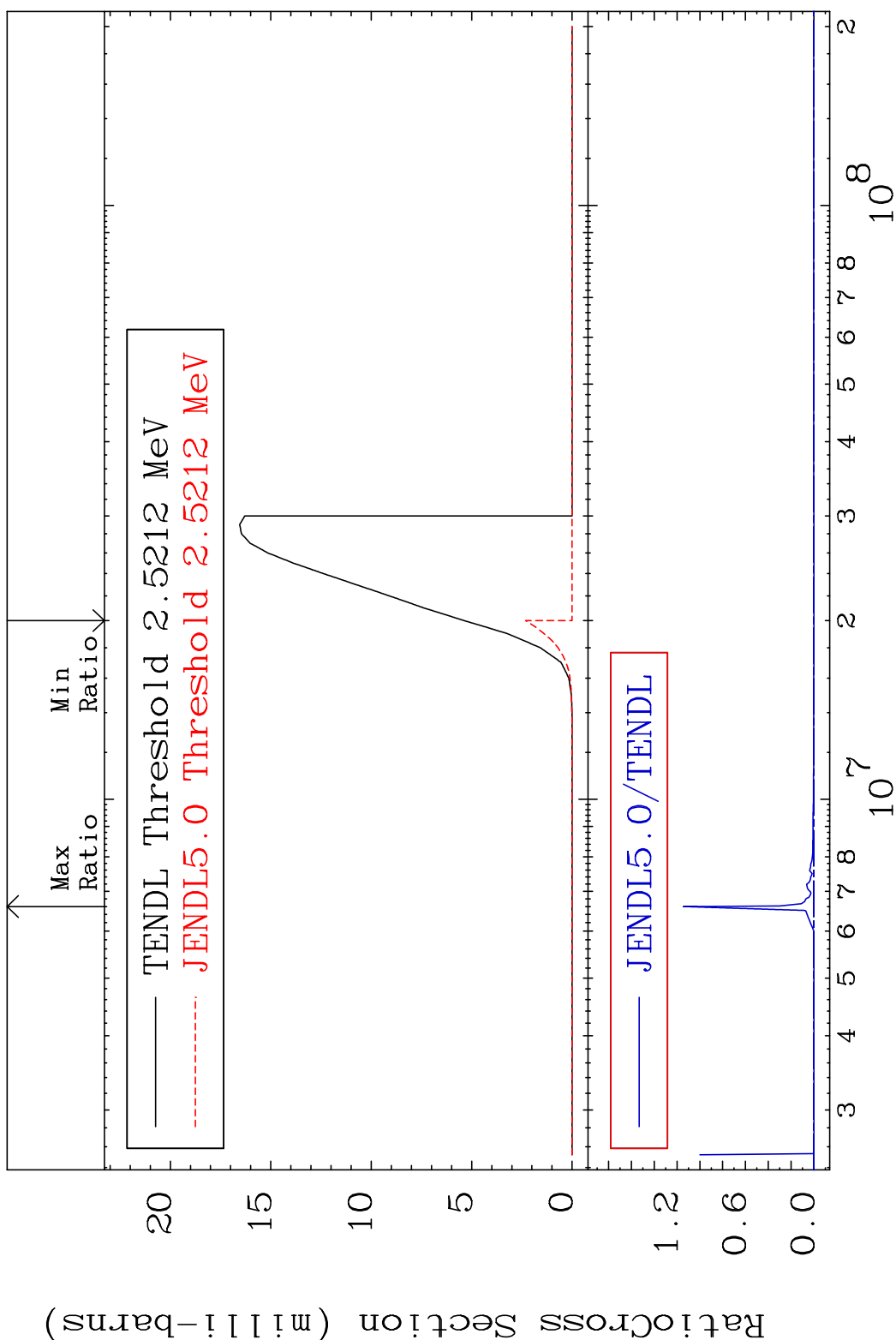


5 Incident Energy (eV) 56-Ba-137

MAT 5646 (n,3n) 56-Ba-137  
 Cross Section -100.0 To 7.303 %



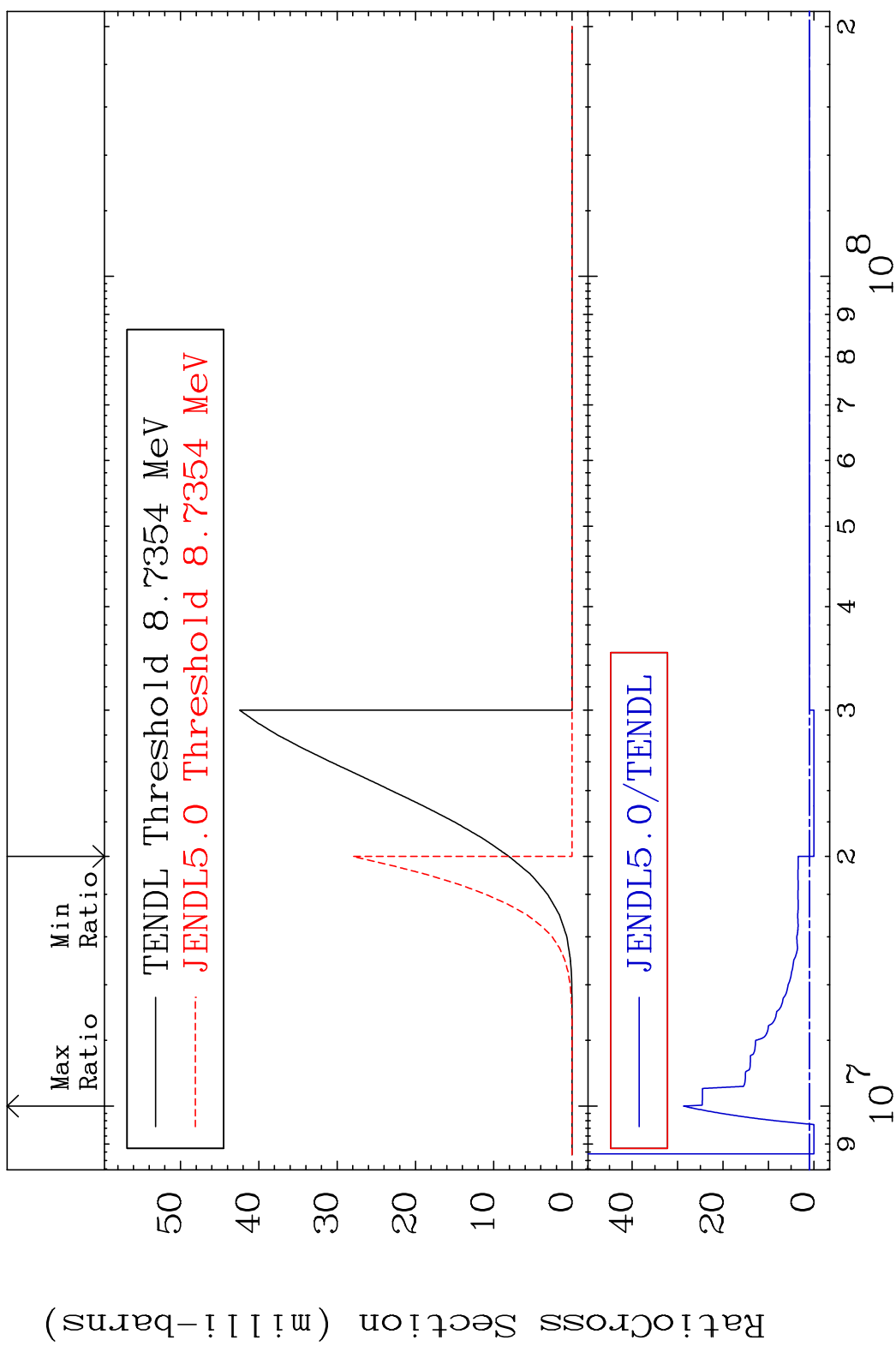
MAT 5646 (n, n')  $\alpha$  56-Ba-137  
 Cross Section -100.0 To 9999. %



7 56-Ba-137

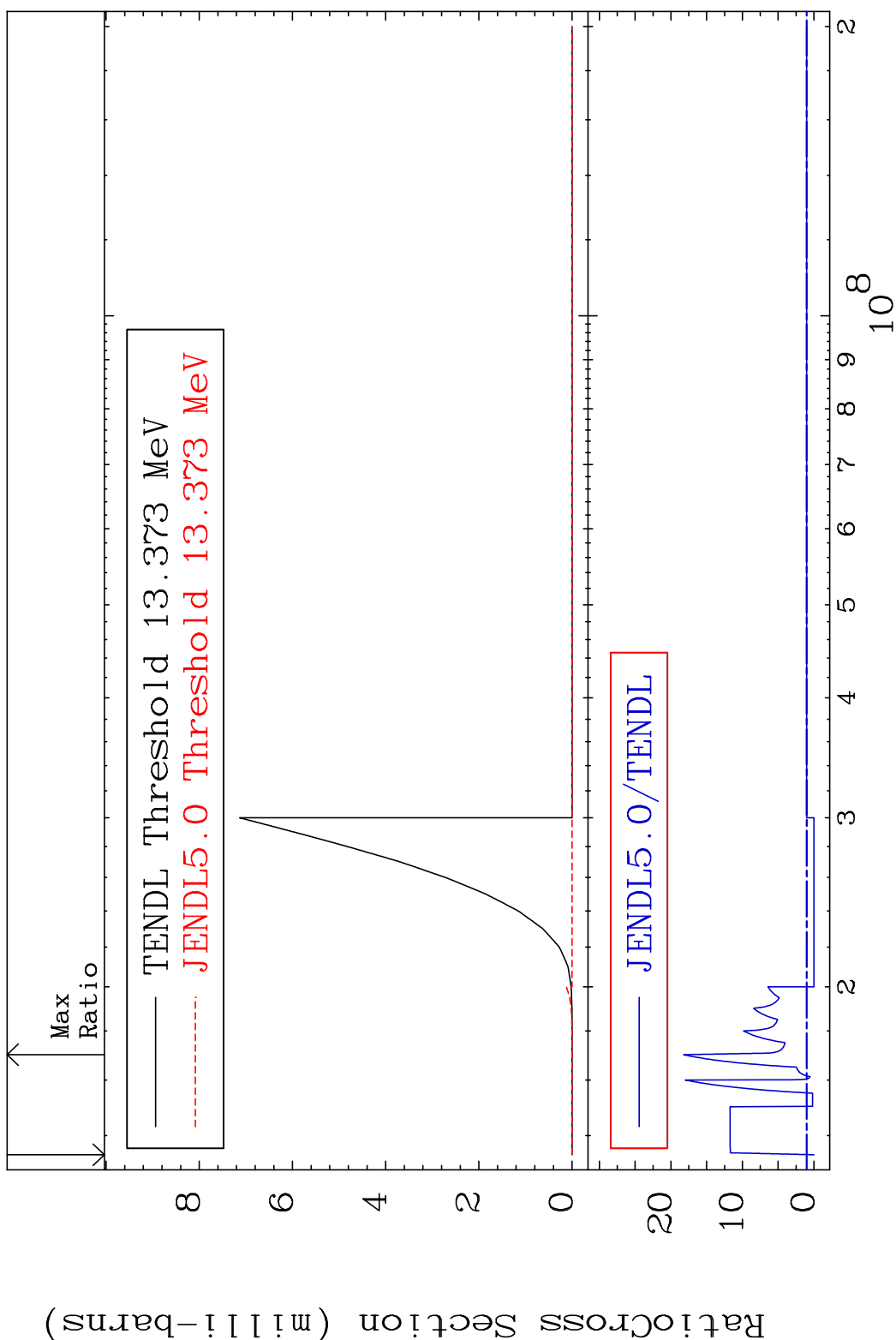


MAT 5646 (n, n') p 56-Ba-137  
 Cross Section -100.0 To 2770. %

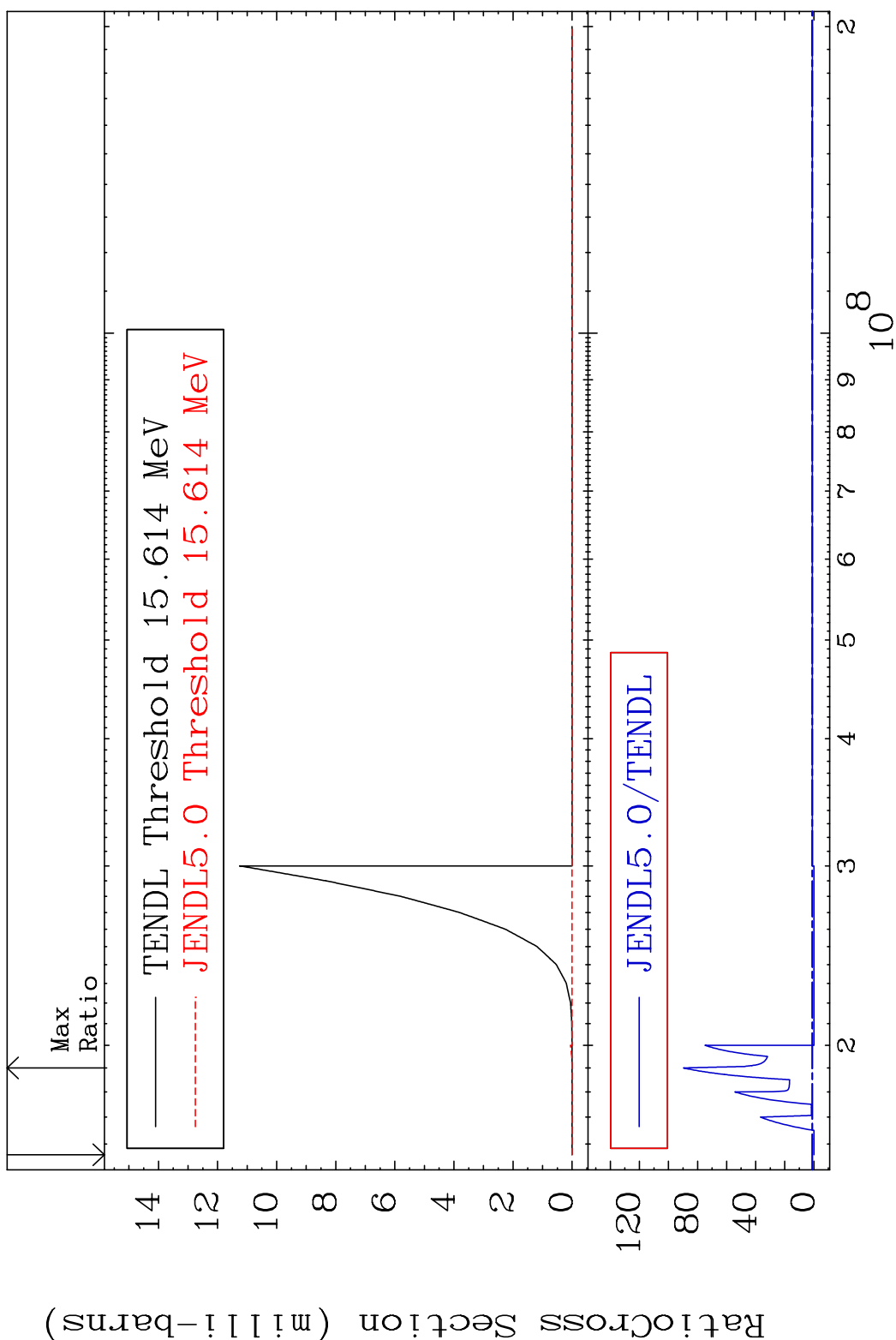


8 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, n') d 56-Ba-137  
 Cross Section -100.0 To 1724. %

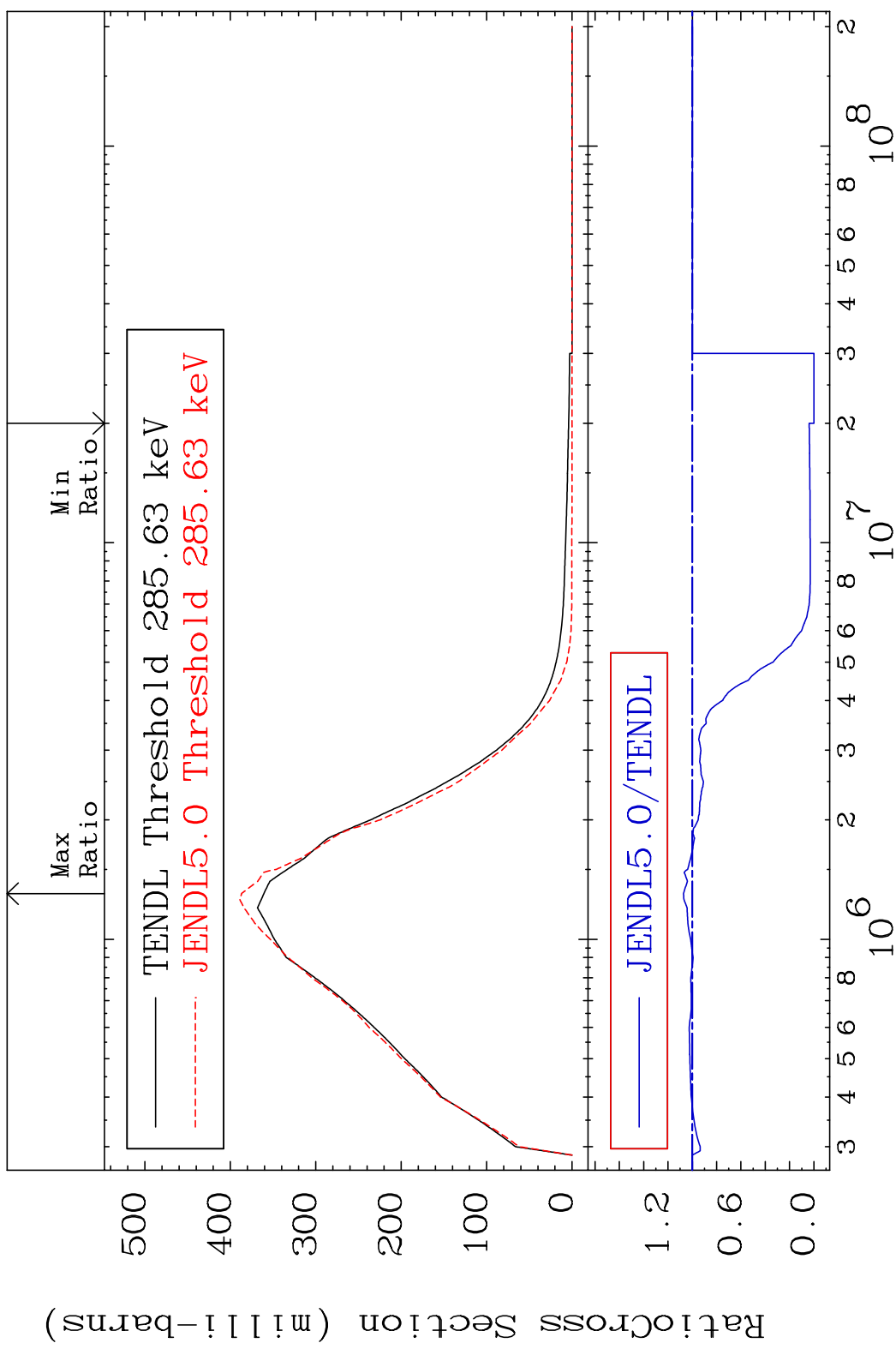


MAT 5646 (n,2n) p 56-Ba-137  
 Cross Section -100.0 To 8869. %



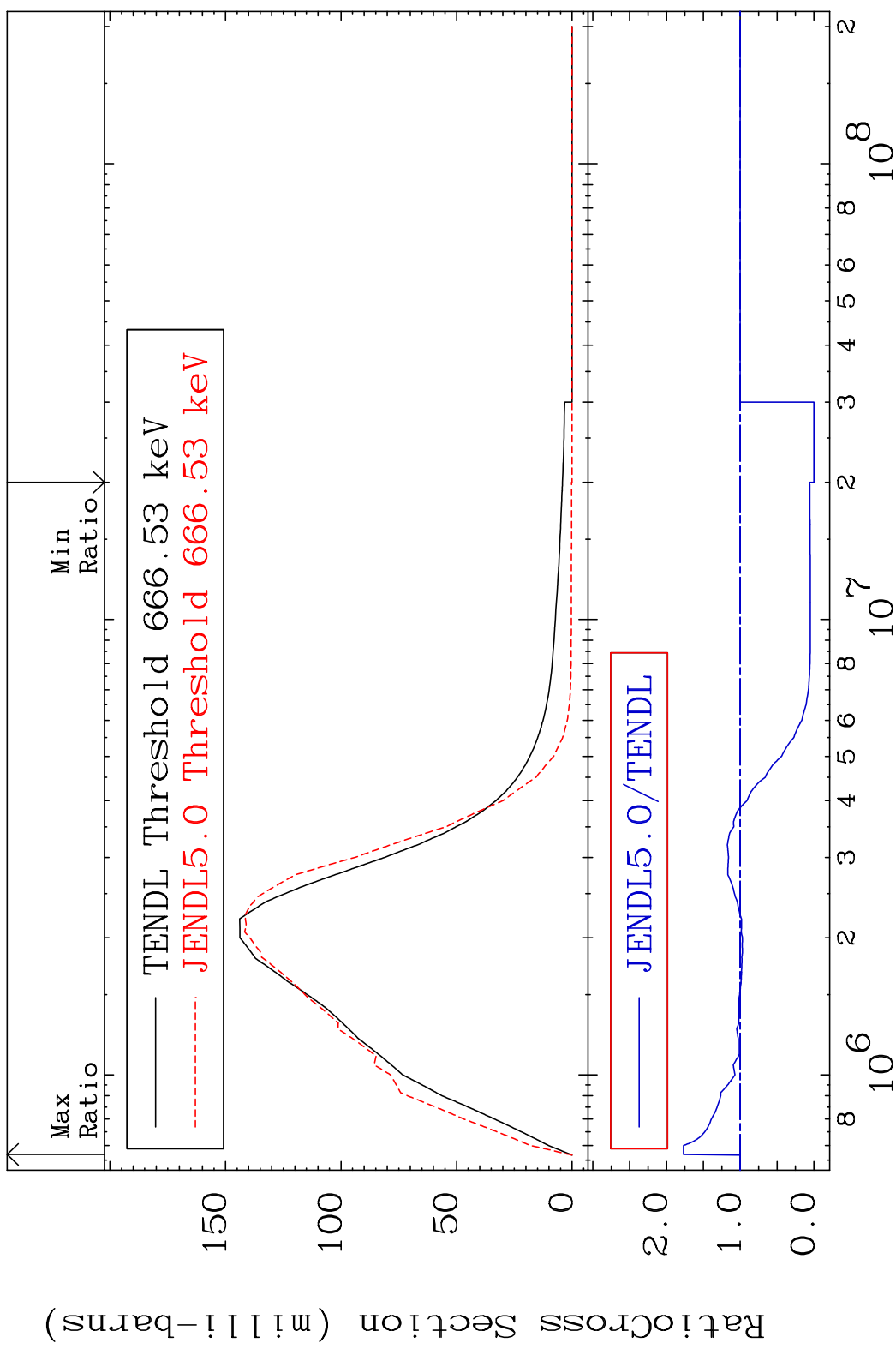
10 56-Ba-137

MAT 5646 MT= 51 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 7.266 %



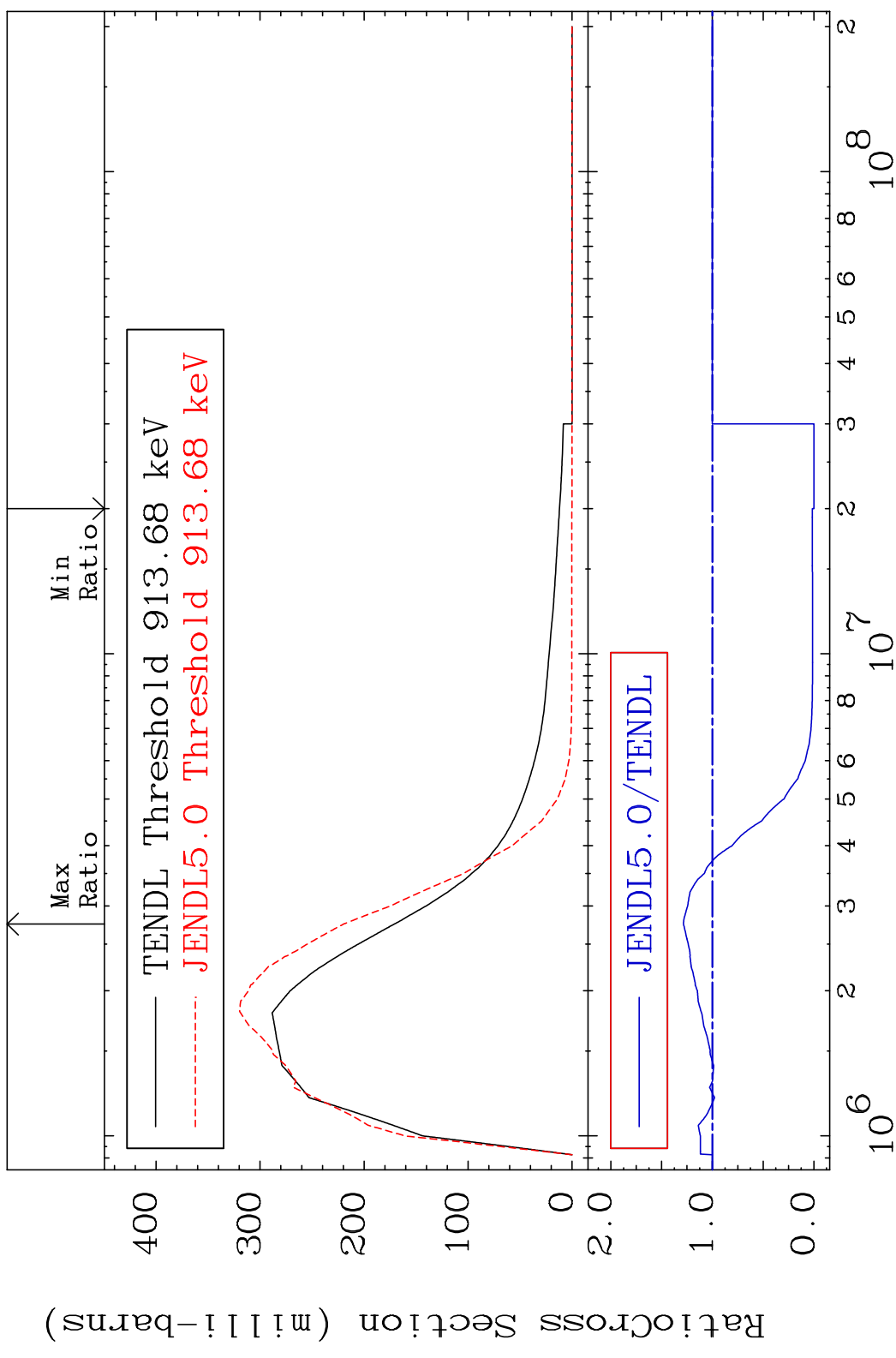
11 Incident Energy (eV) 56-Ba-137

MAT 5646 MT= 52 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 77.02 %



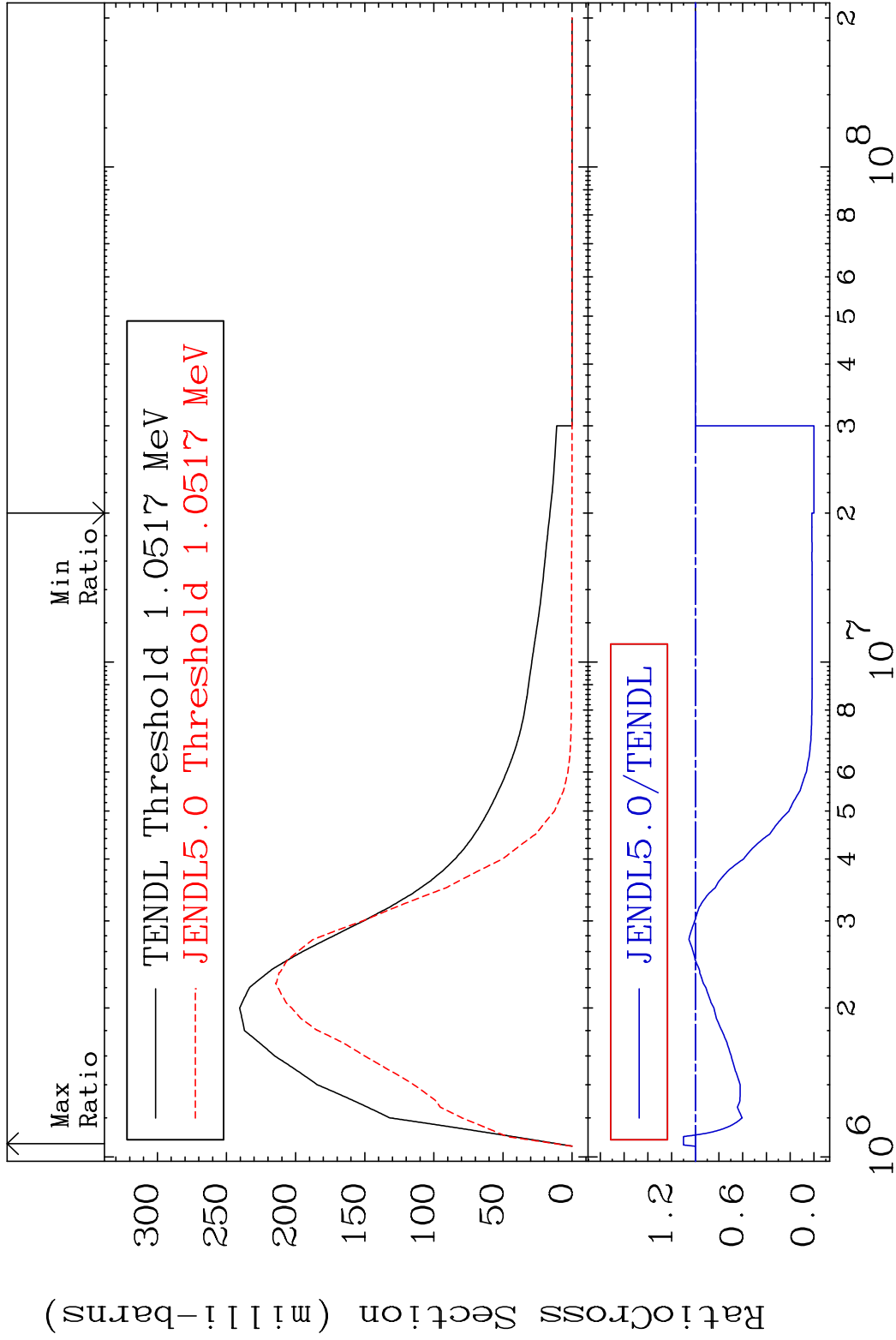
12 Incident Energy (eV) 56-Ba-137

MAT 5646 MT= 53 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 28.50 %



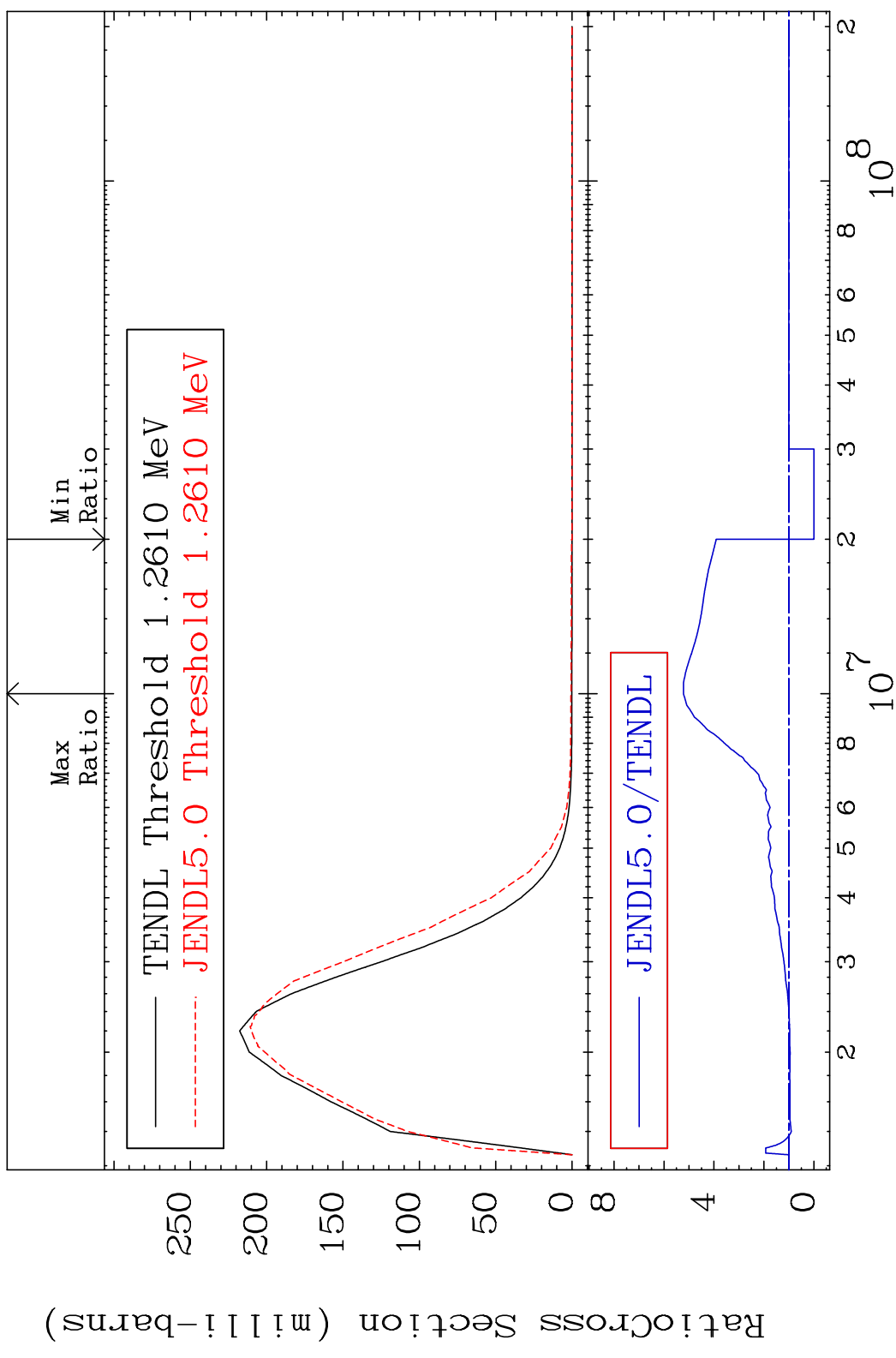
13 56-Ba-137

MAT 5646 MT= 54 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 9.977 %



14 56-Ba-137

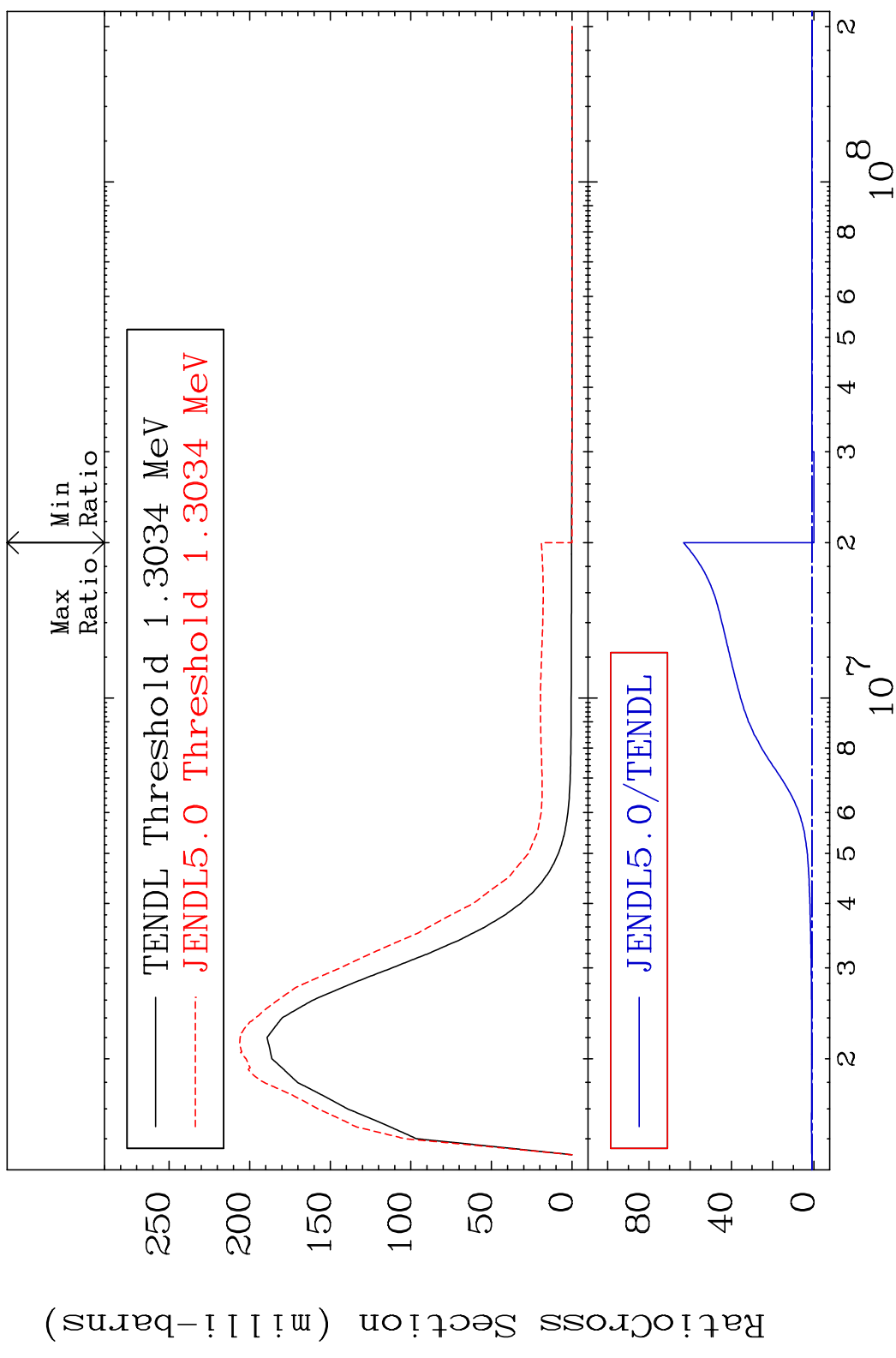
MAT 5646 MT= 55 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 422.2 %



15 56-Ba-137

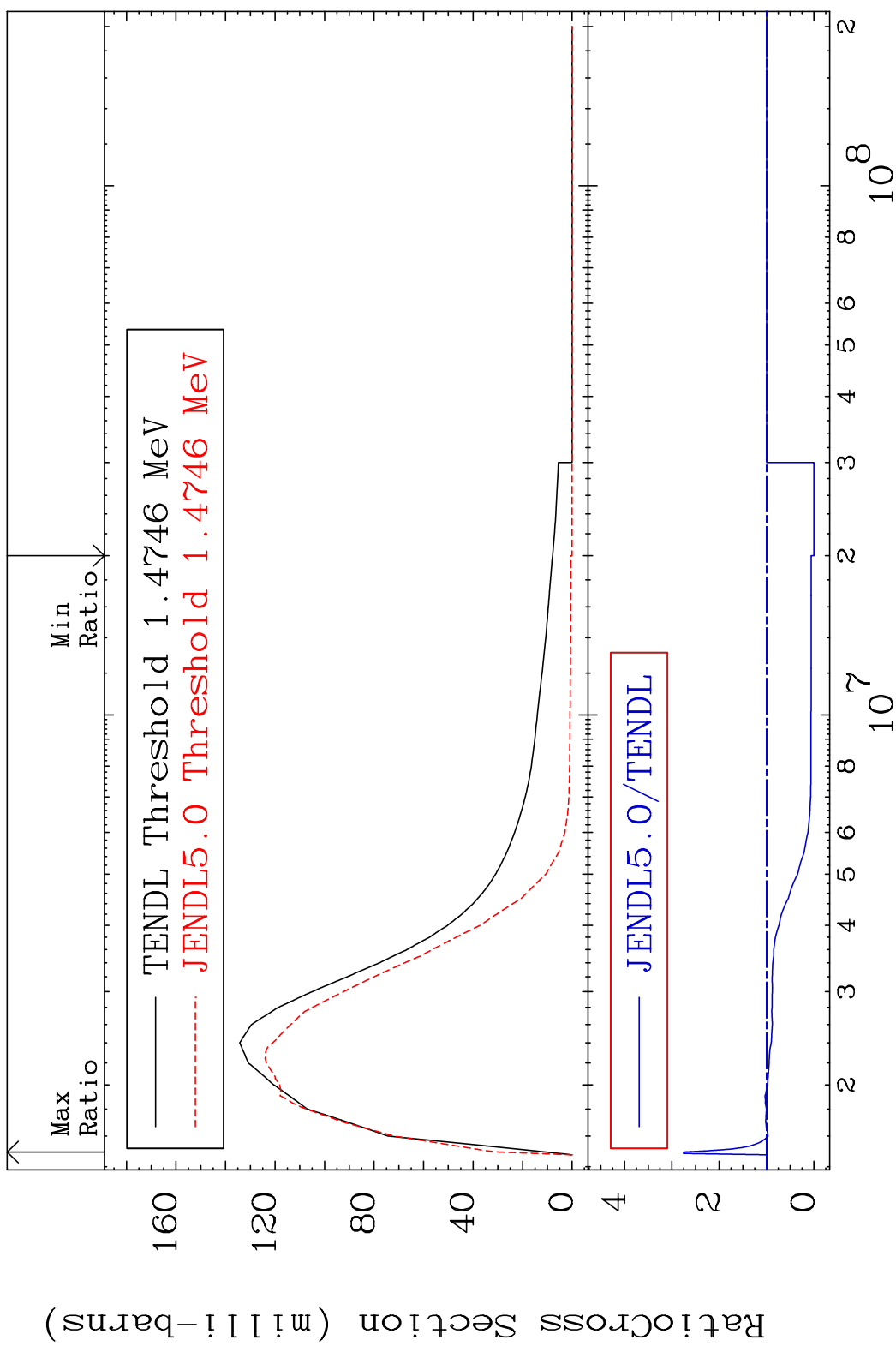


MAT 5646 MT= 56 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 6227. %



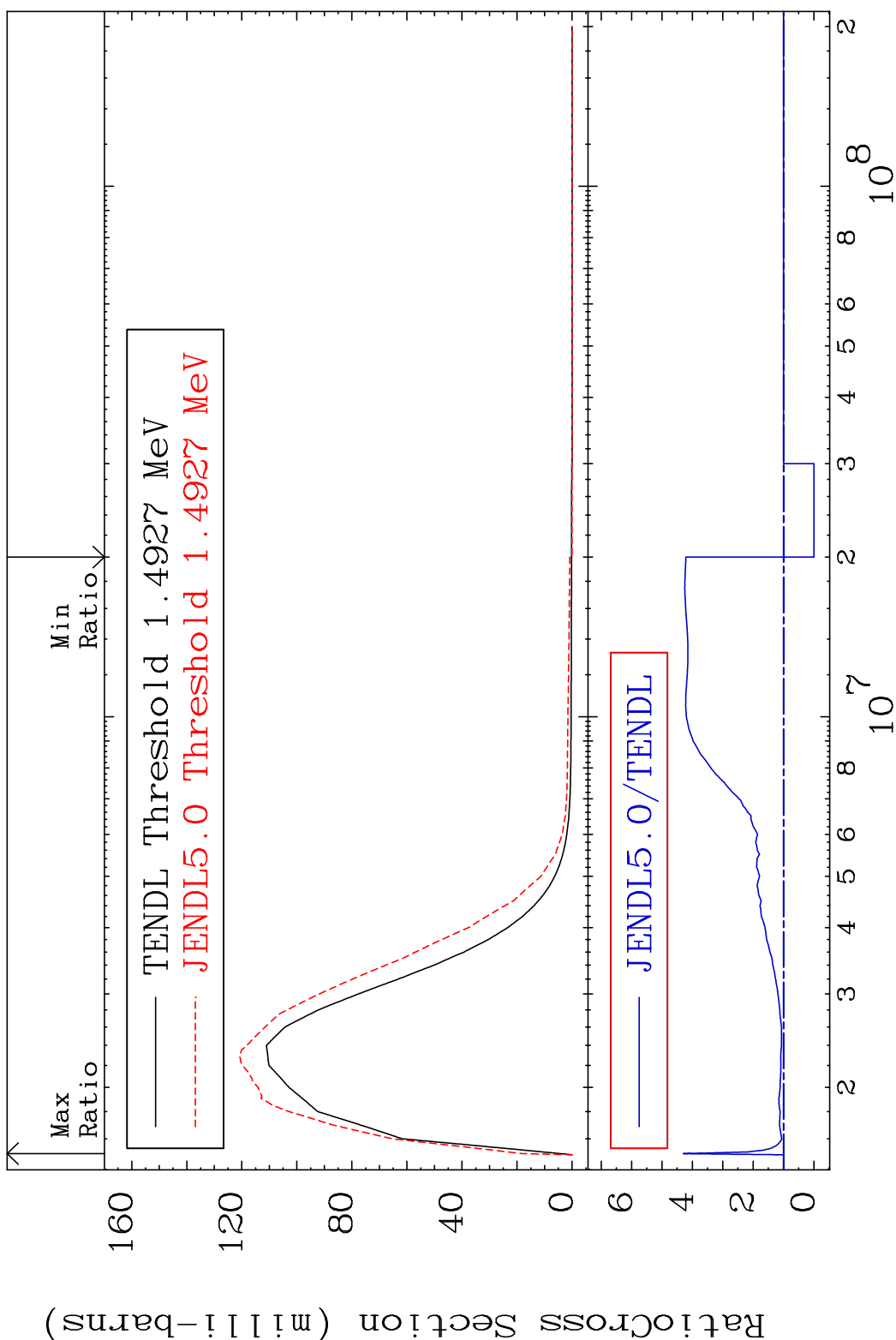
16 Incident Energy (eV) 56-Ba-137

MAT 5646 MT= 57 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 175.6 %



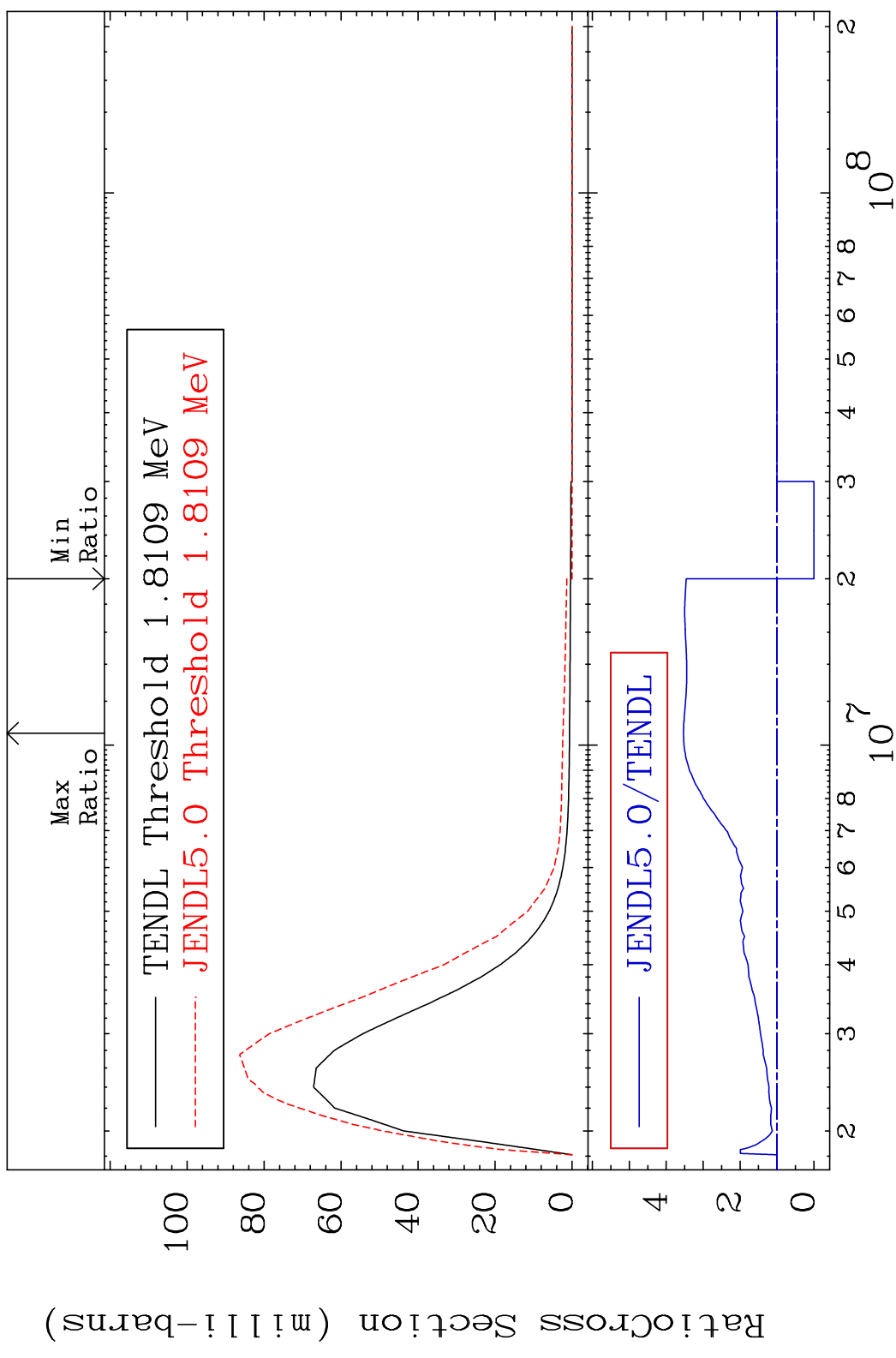
17 56-Ba-137

MAT 5646 MT= 58 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 329.3 %



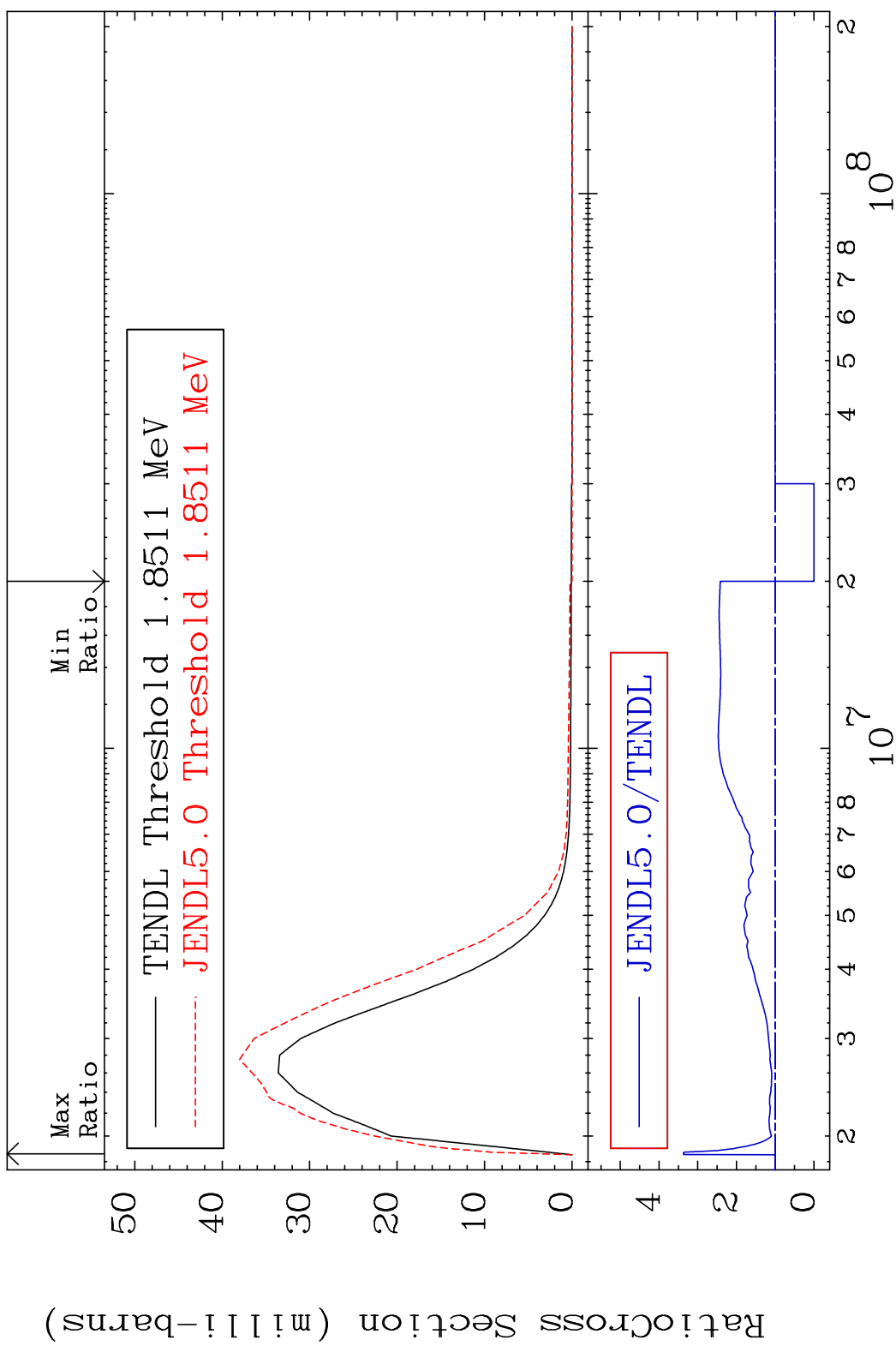
18 56-Ba-137

MAT 5646 MT= 59 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 253.3 %



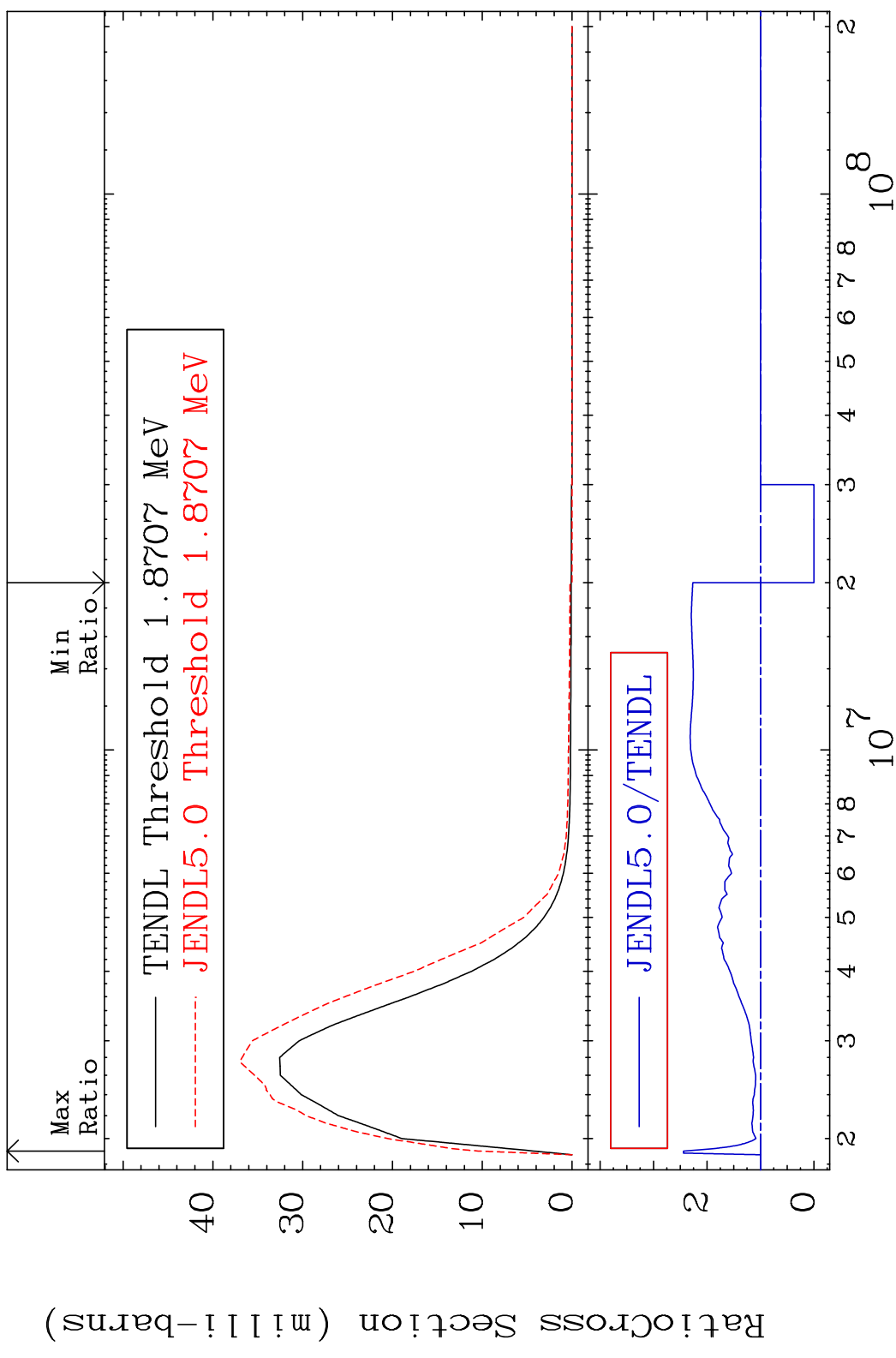
19 56-Ba-137

MAT 5646 MT= 60 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 236.9 %



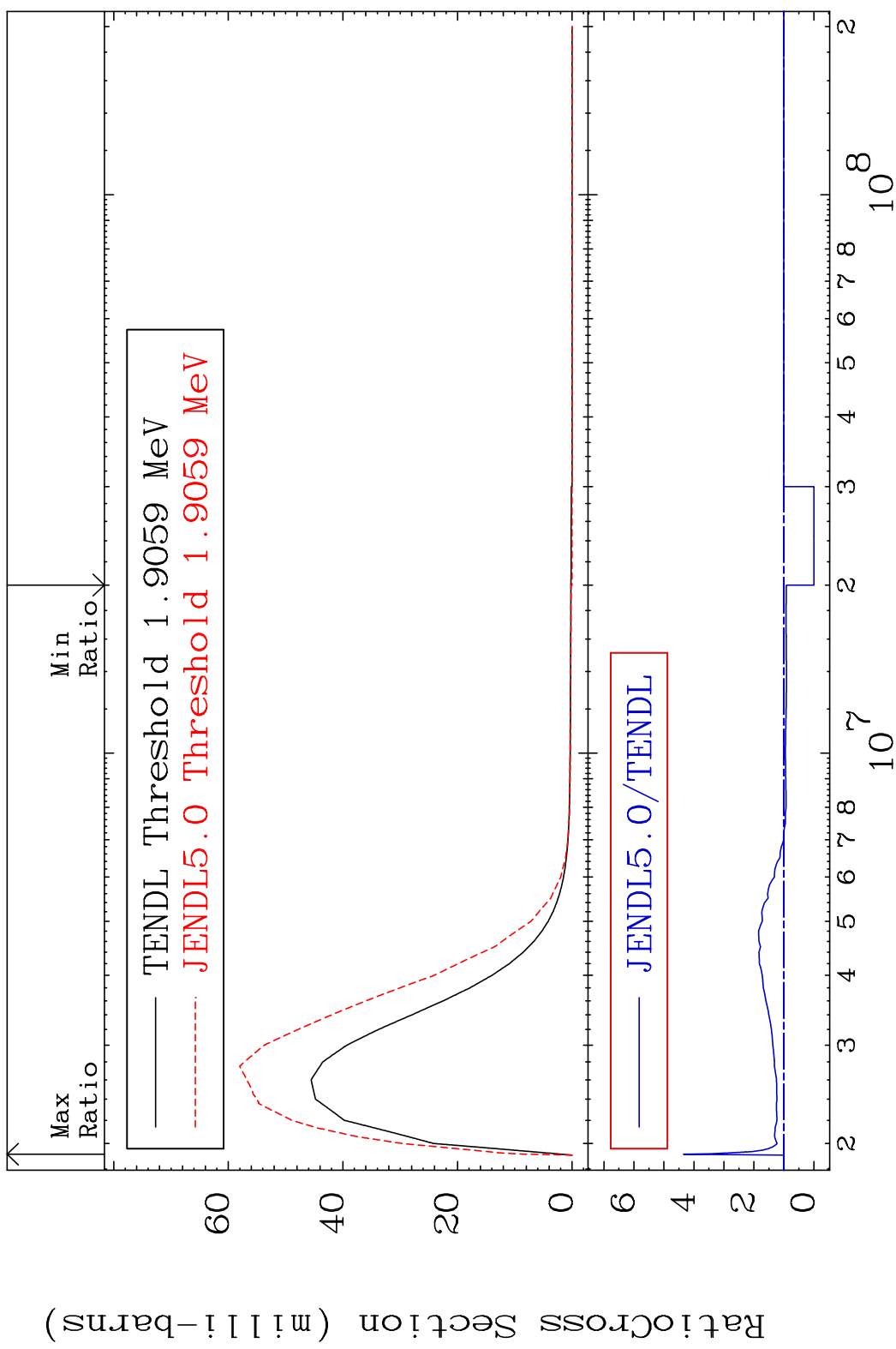
20 20 56-Ba-137

MAT 5646 MT= 61 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 144.0 %



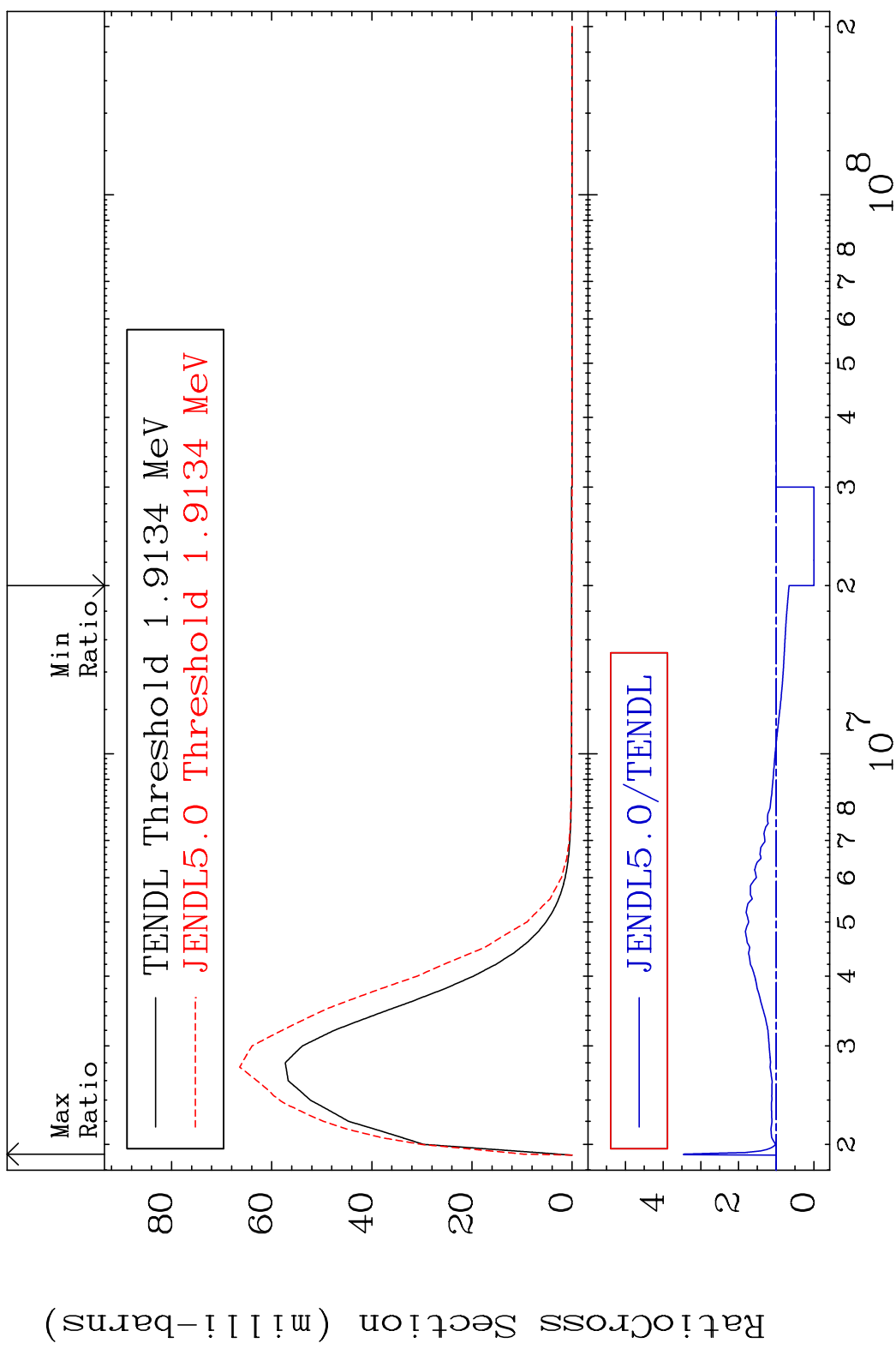
21 Incident Energy (eV) 56-Ba-137

MAT 5646 MT= 62 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 334.9 %



22 56-Ba-137

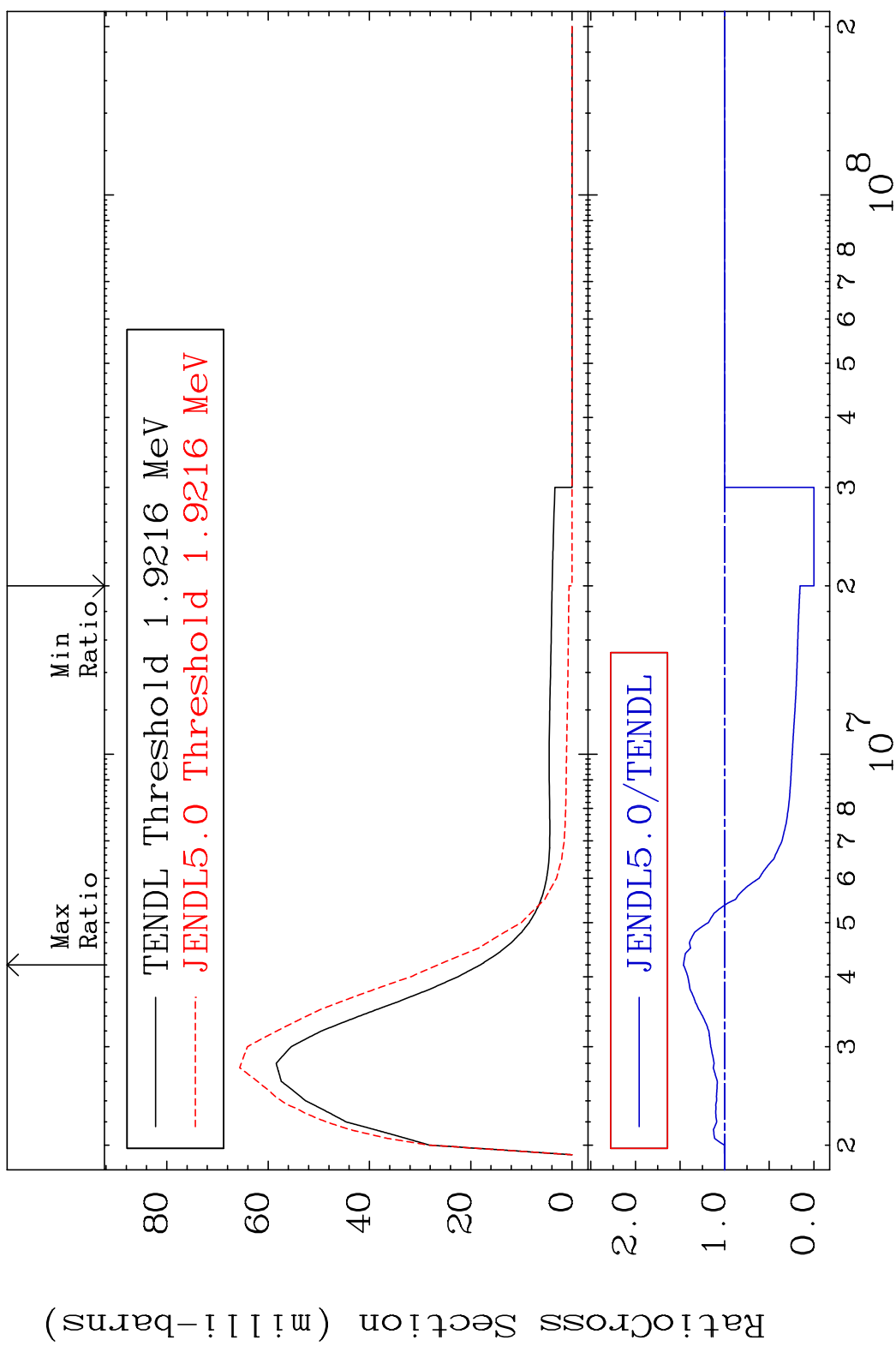
MAT 5646 MT= 63 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 246.1 %



23 Incident Energy (eV) 56-Ba-137

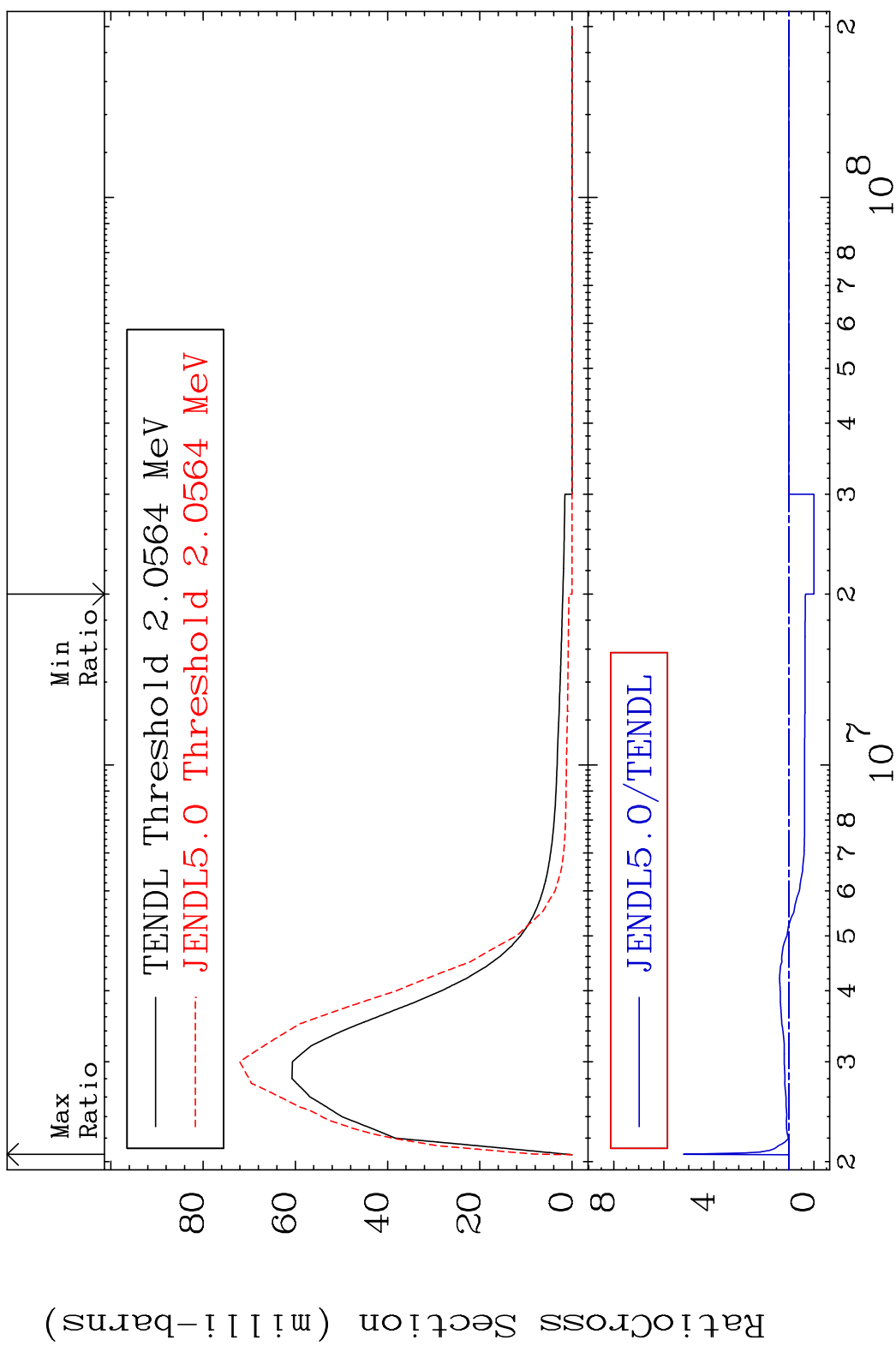


MAT 5646 MT= 64 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 46.16 %



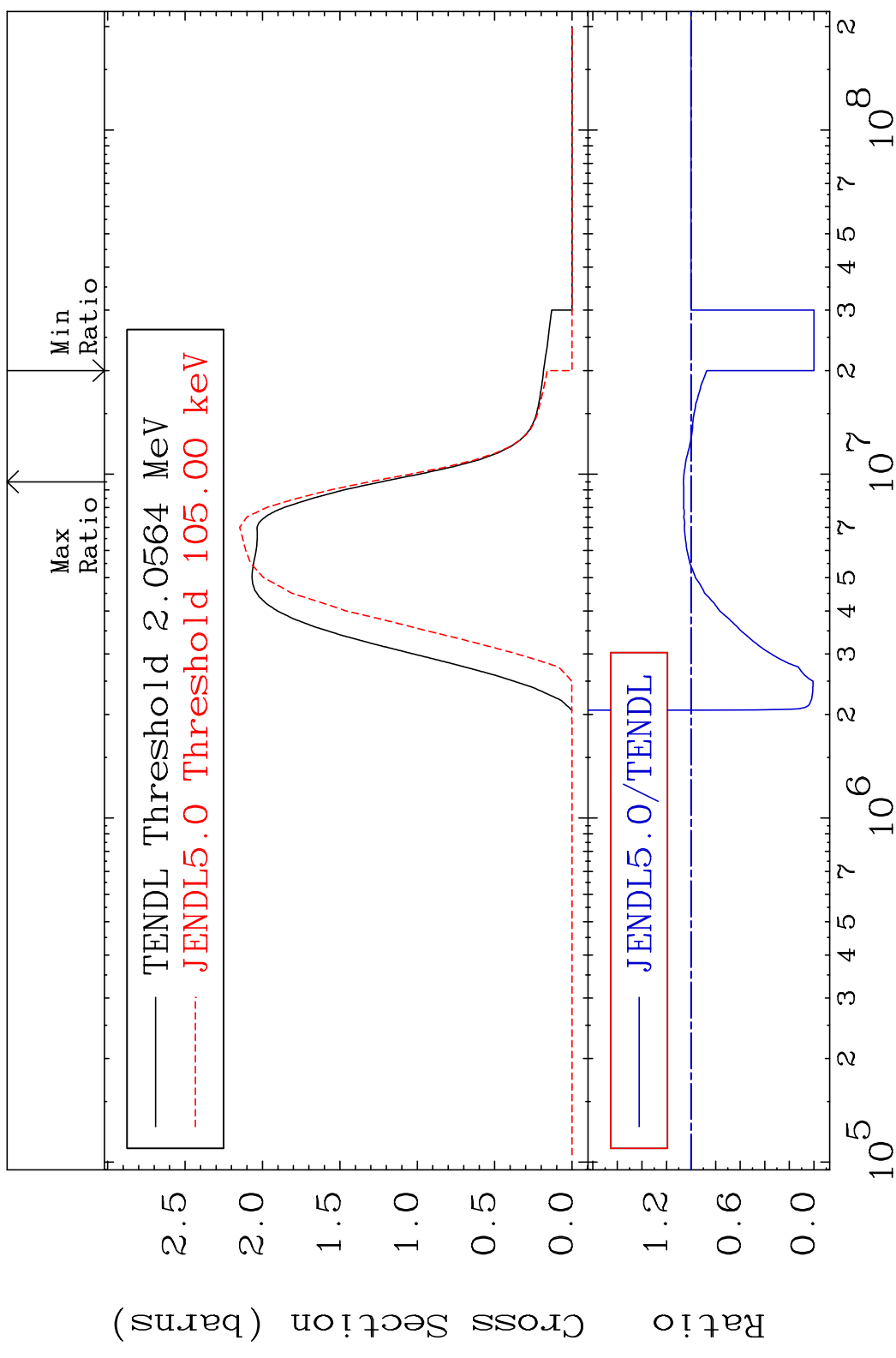
24 Incident Energy (eV) 56-Ba-137

MAT 5646 MT= 65 (n, n') Level 56-Ba-137  
 Cross Section -100.0 To 421.4 %

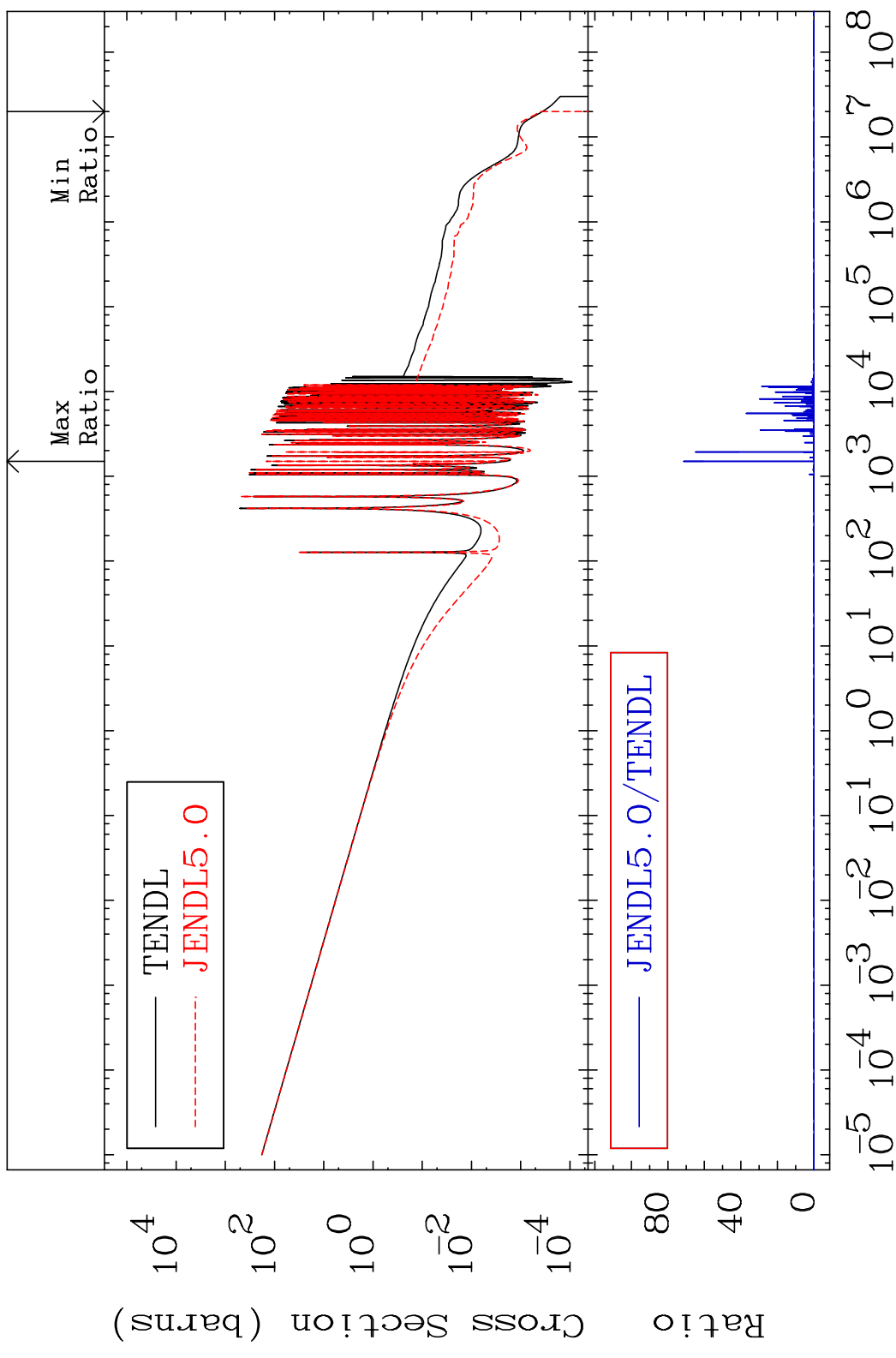


25 56-Ba-137

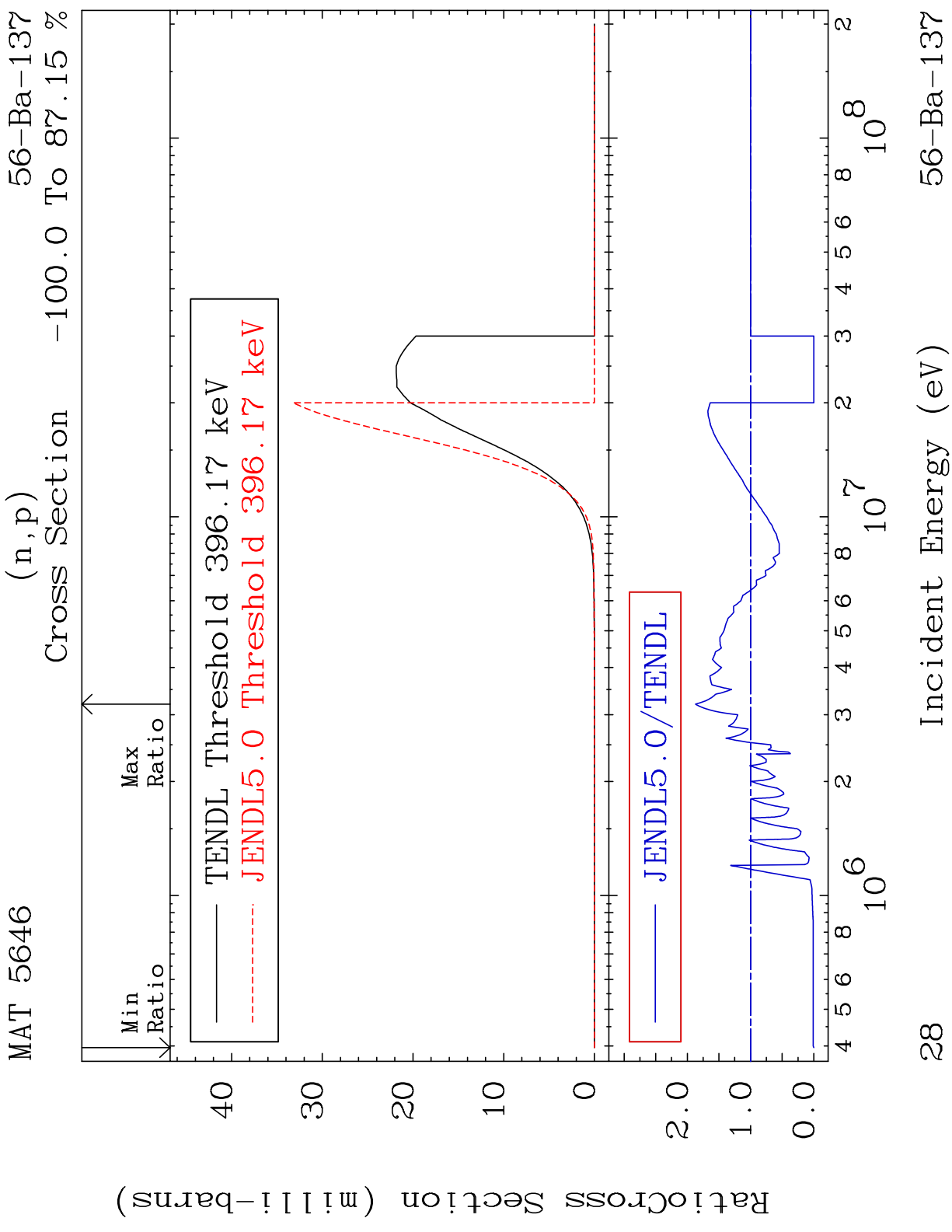
MAT 5646 (n, n') Continuum 56-Ba-137  
 Cross Section -100.0 To 6.177 %



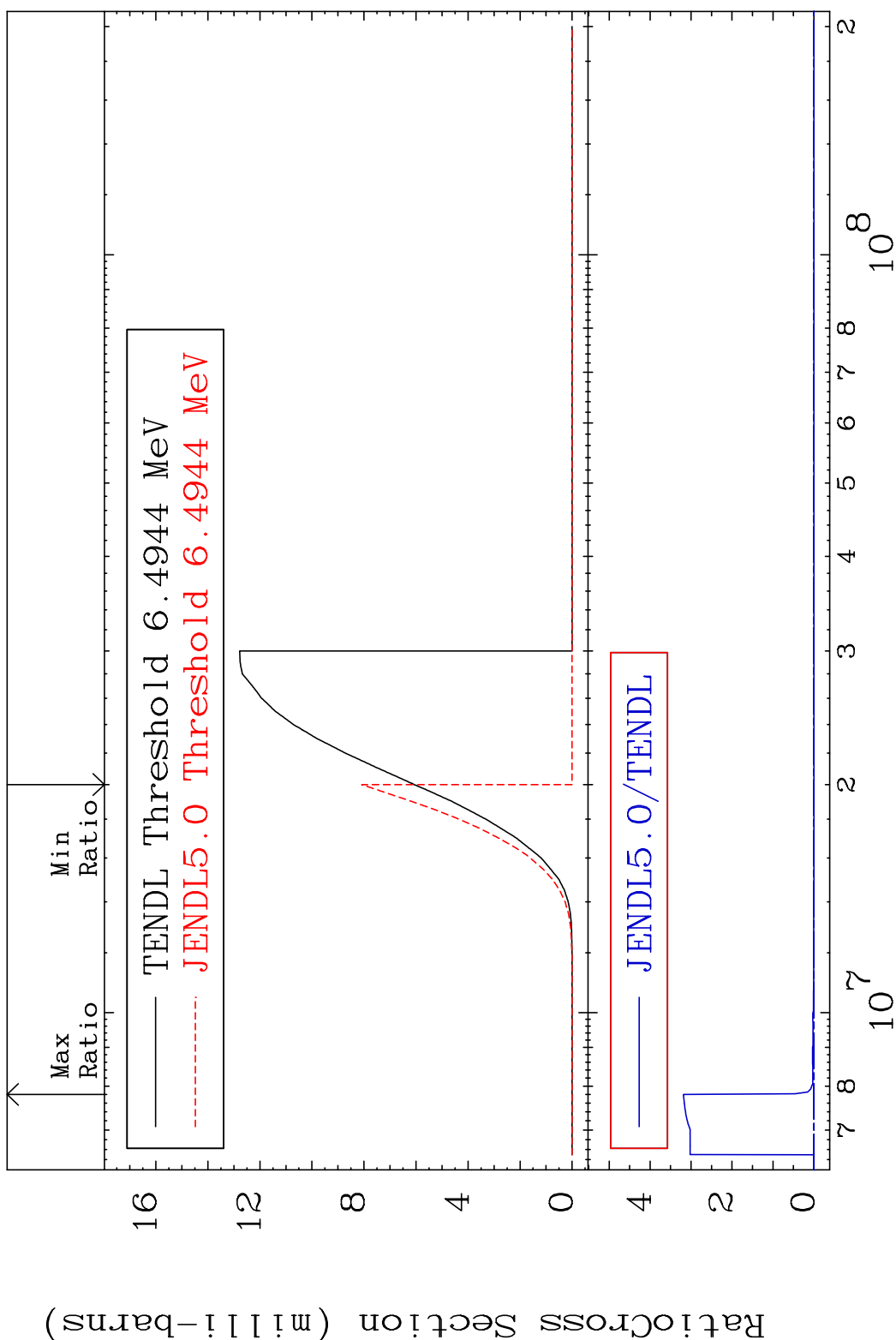
MAT 5646  $(n, \gamma)$  56-Ba-137  
 Cross Section -100.0 To 9999. %

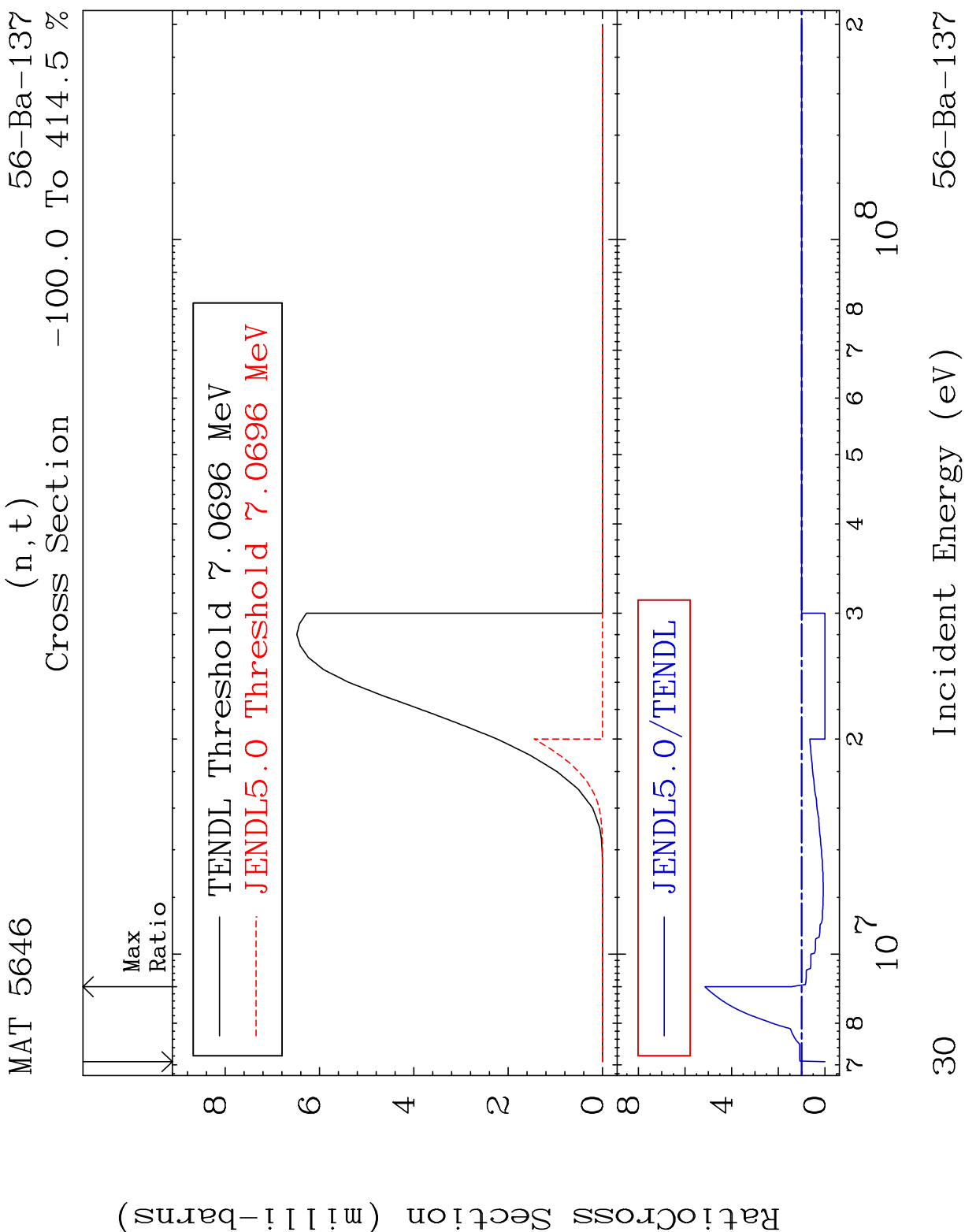


27 Incident Energy (eV) 56-Ba-137

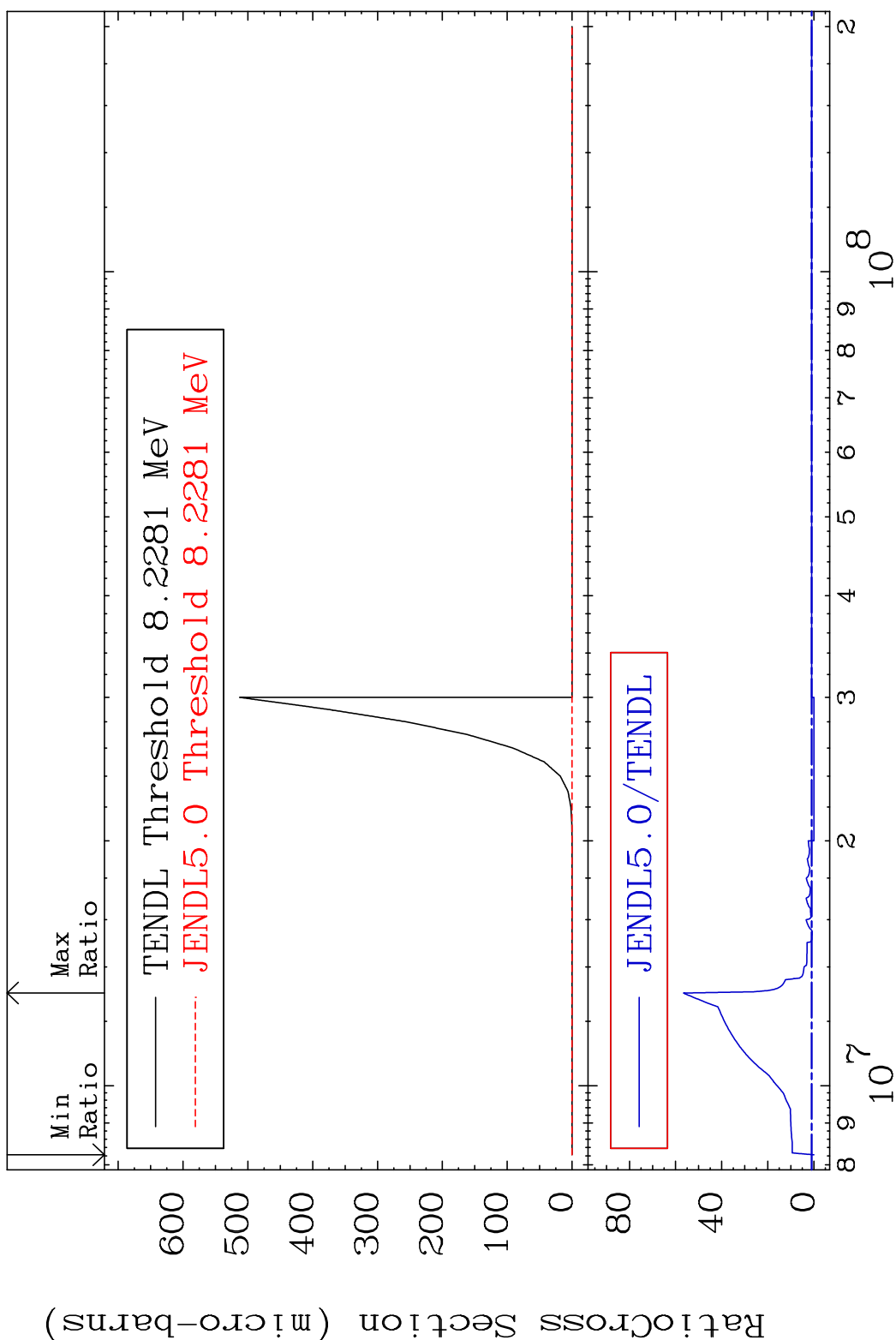


MAT 5646 (n, d) 56-Ba-137  
 Cross Section -100.0 To 9999. %



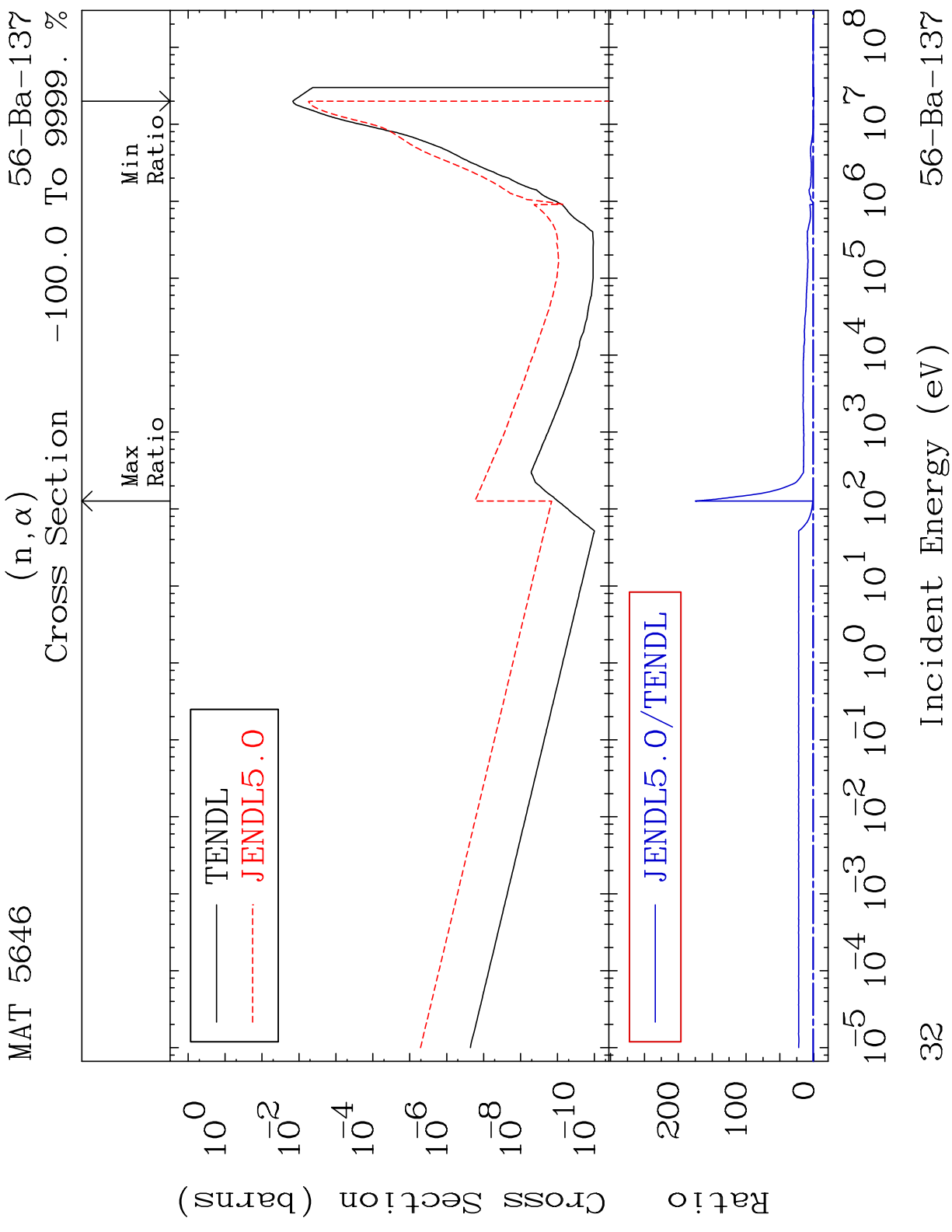


MAT 5646 (n, He-3) 56-Ba-137  
 Cross Section -100.0 To 5559. %

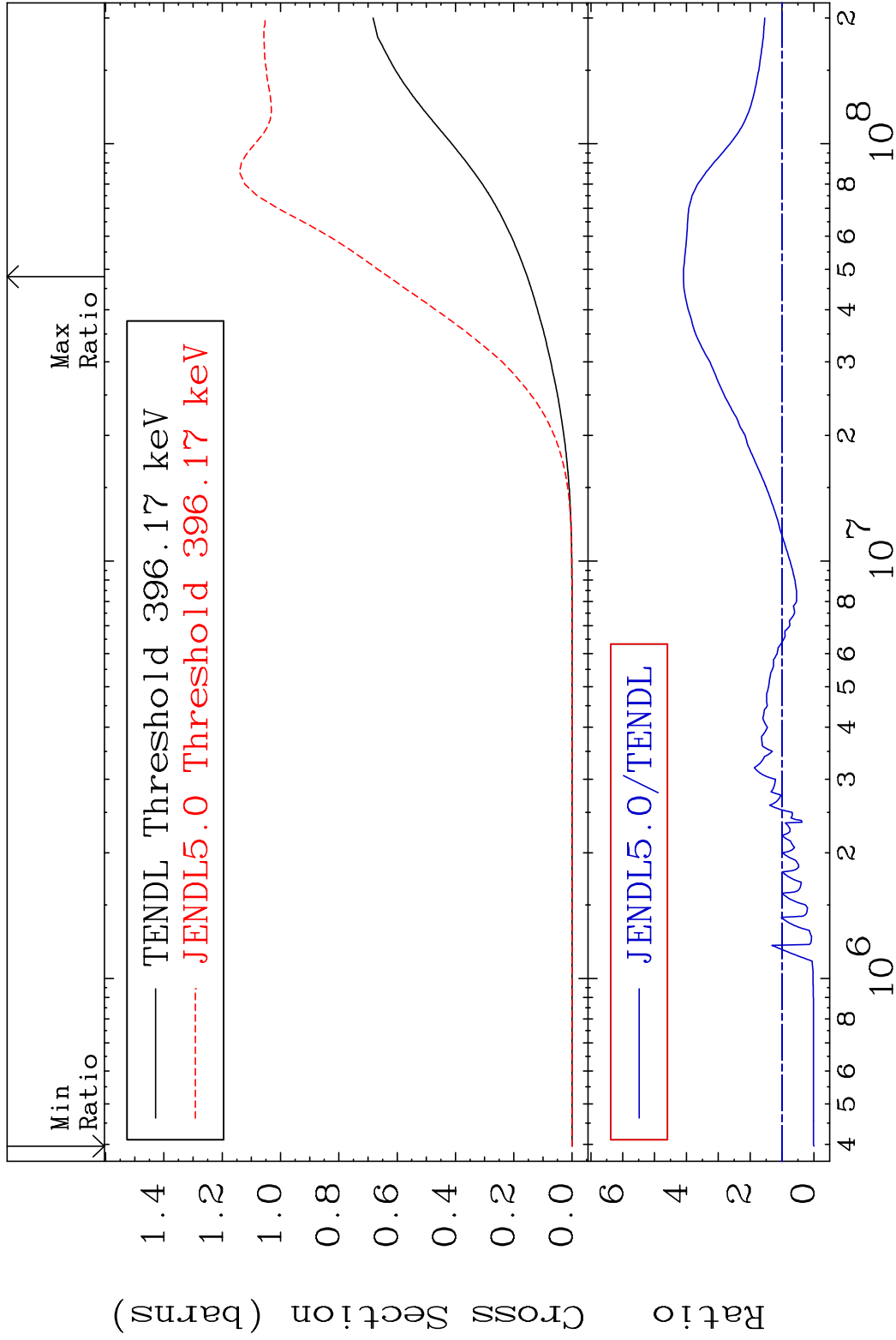


31 56-Ba-137



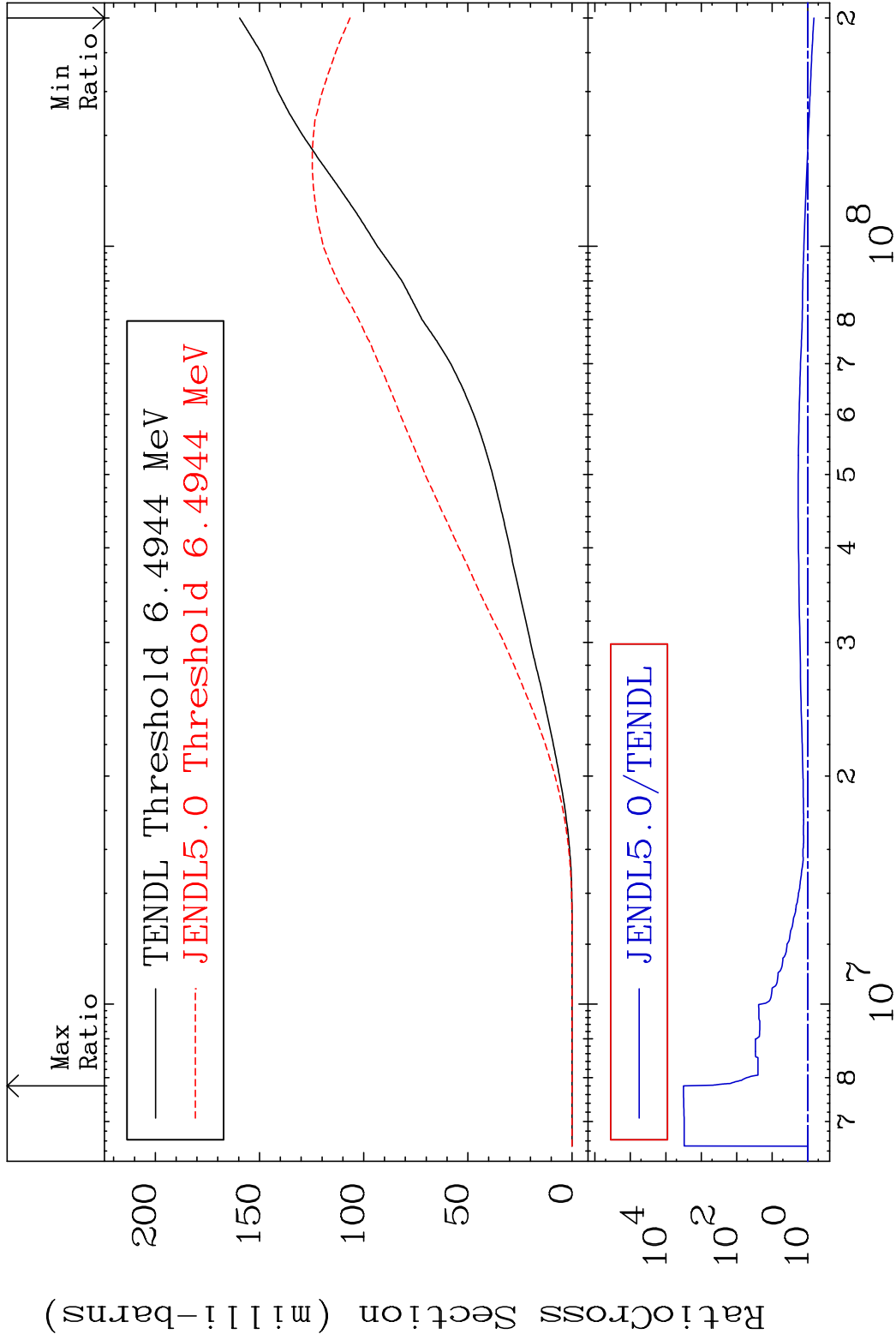


MAT 5646 Hydrogen Production 56-Ba-137  
 Cross Section -100.0 To 309.4 %



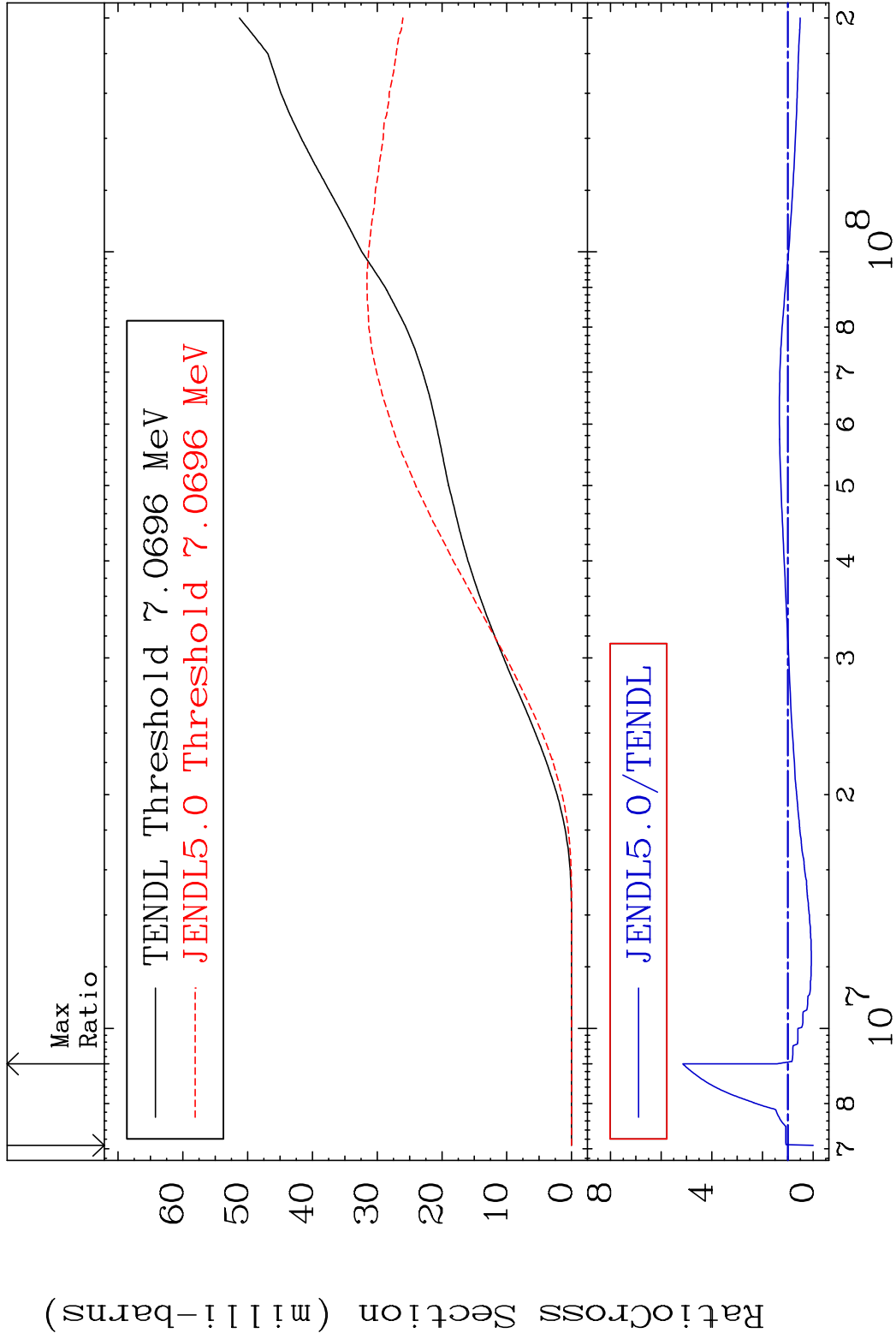
33 Incident Energy (eV) 56-Ba-137

MAT 5646 Deuterium Production 56-Ba-137  
 Cross Section -33.16 To 9999. %



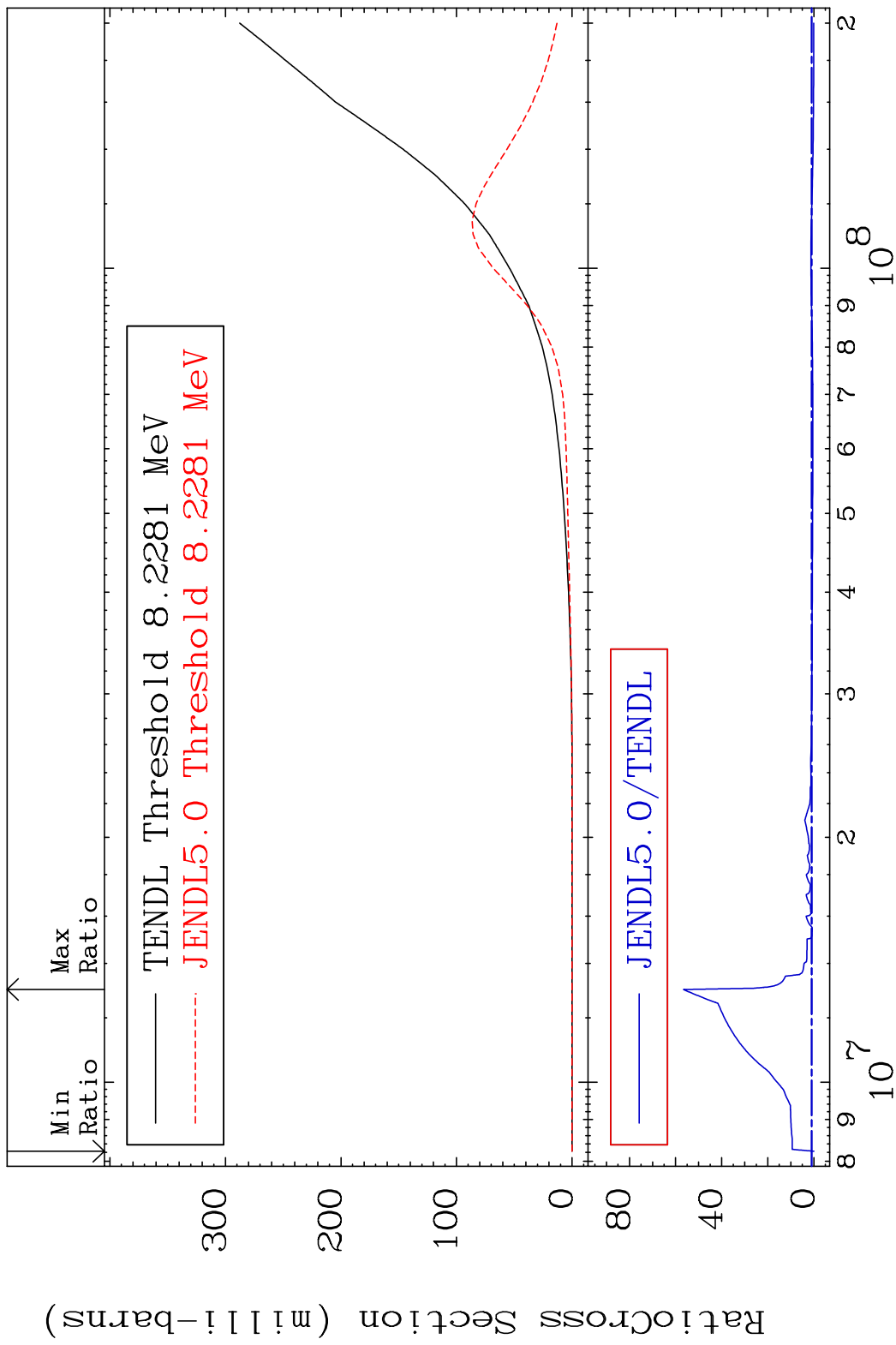
34 Incident Energy (eV) 56-Ba-137

MAT 5646 Tritium Production 56-Ba-137  
 Cross Section -100.0 To 414.5 %



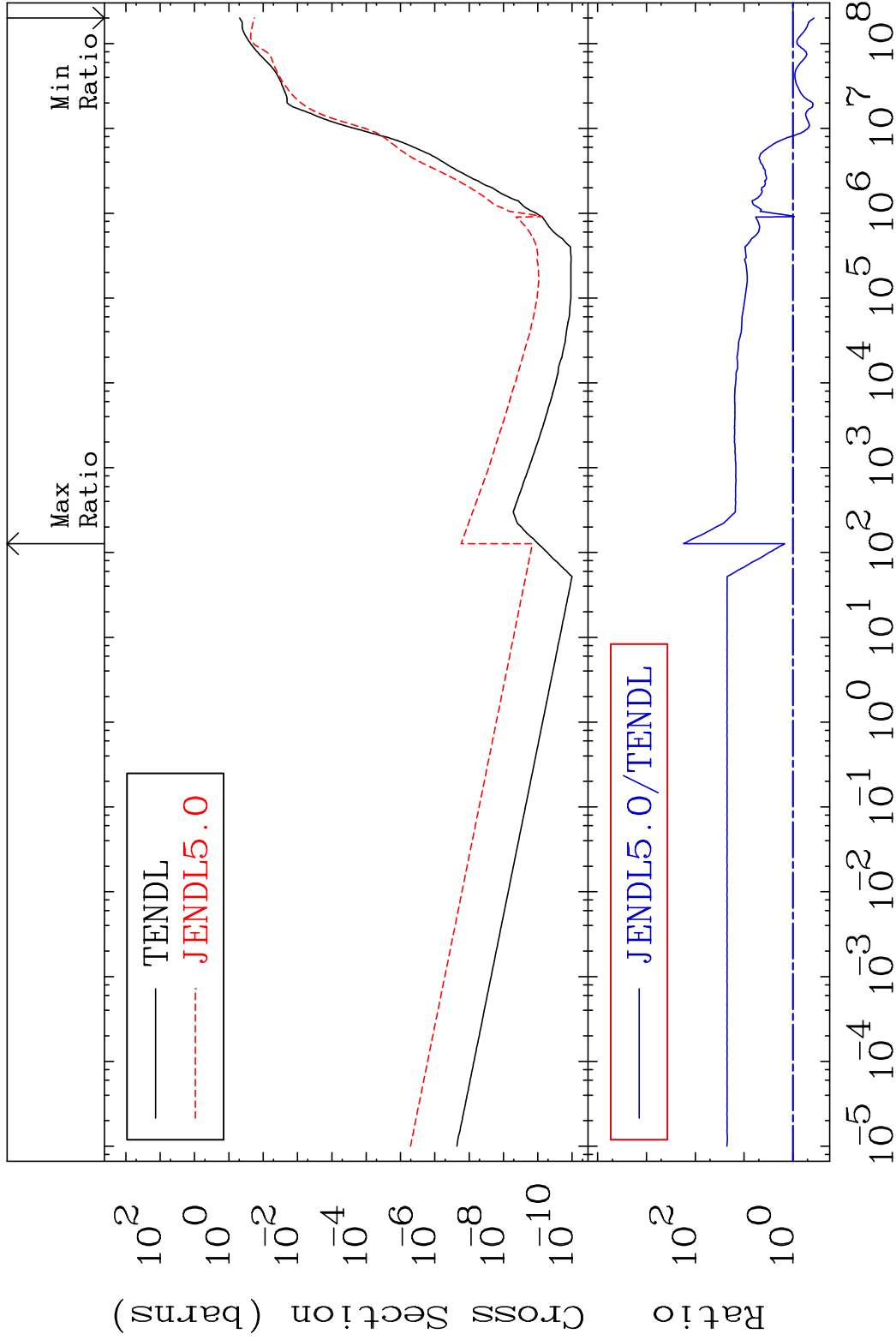
35 56-Ba-137

MAT 5646 He-3 Production 56-Ba-137  
Cross Section -100.0 To 5559. %



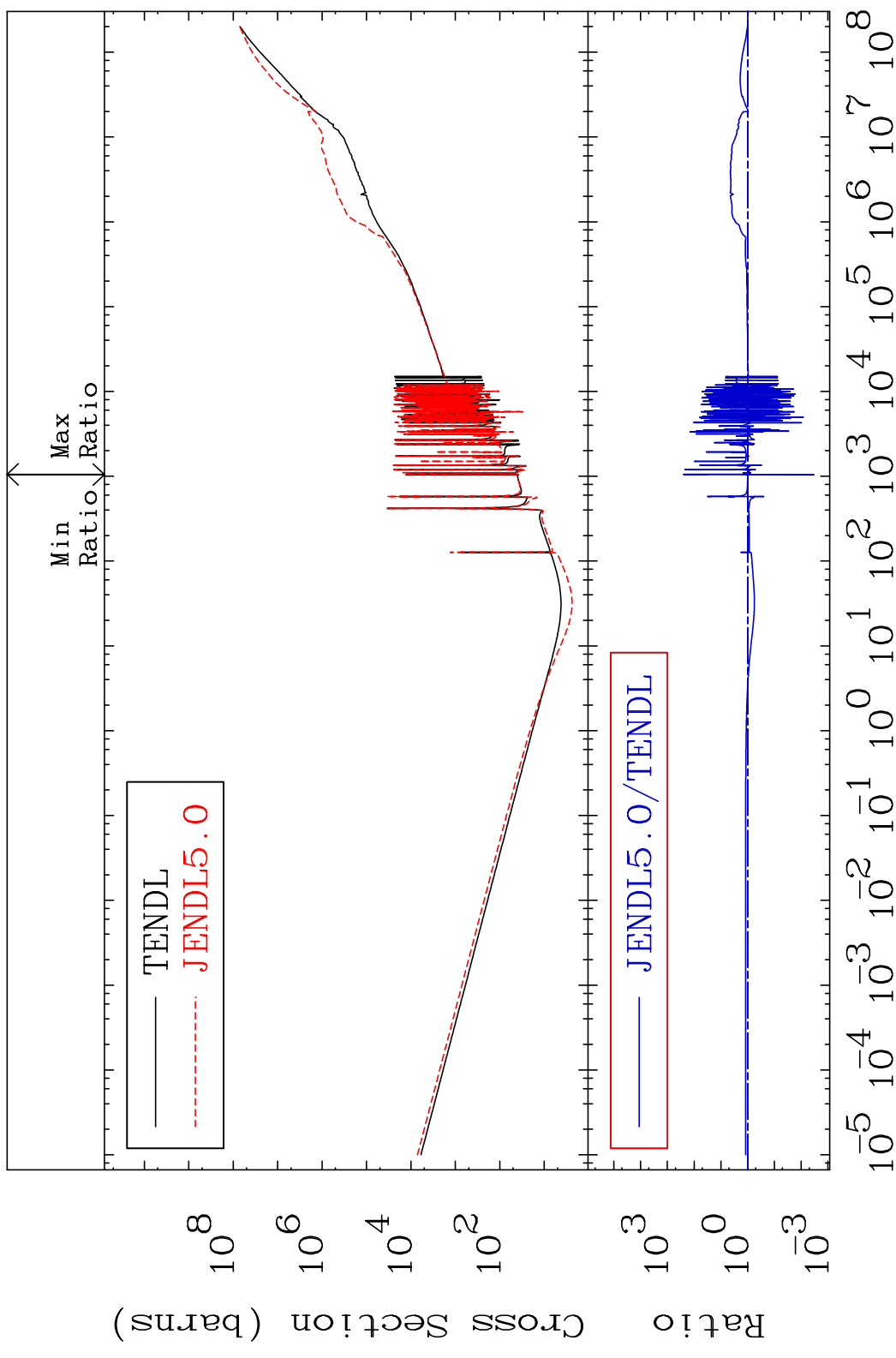
36 56-Ba-137

MAT 5646 He-4 Production 56-Ba-137  
 Cross Section -62.77 To 9999. %



37 Incident Energy (eV) 56-Ba-137

MAT 5646 Kerma total (eV-barns) 56-Ba-137  
 Cross Section -99.66 To 9999. %

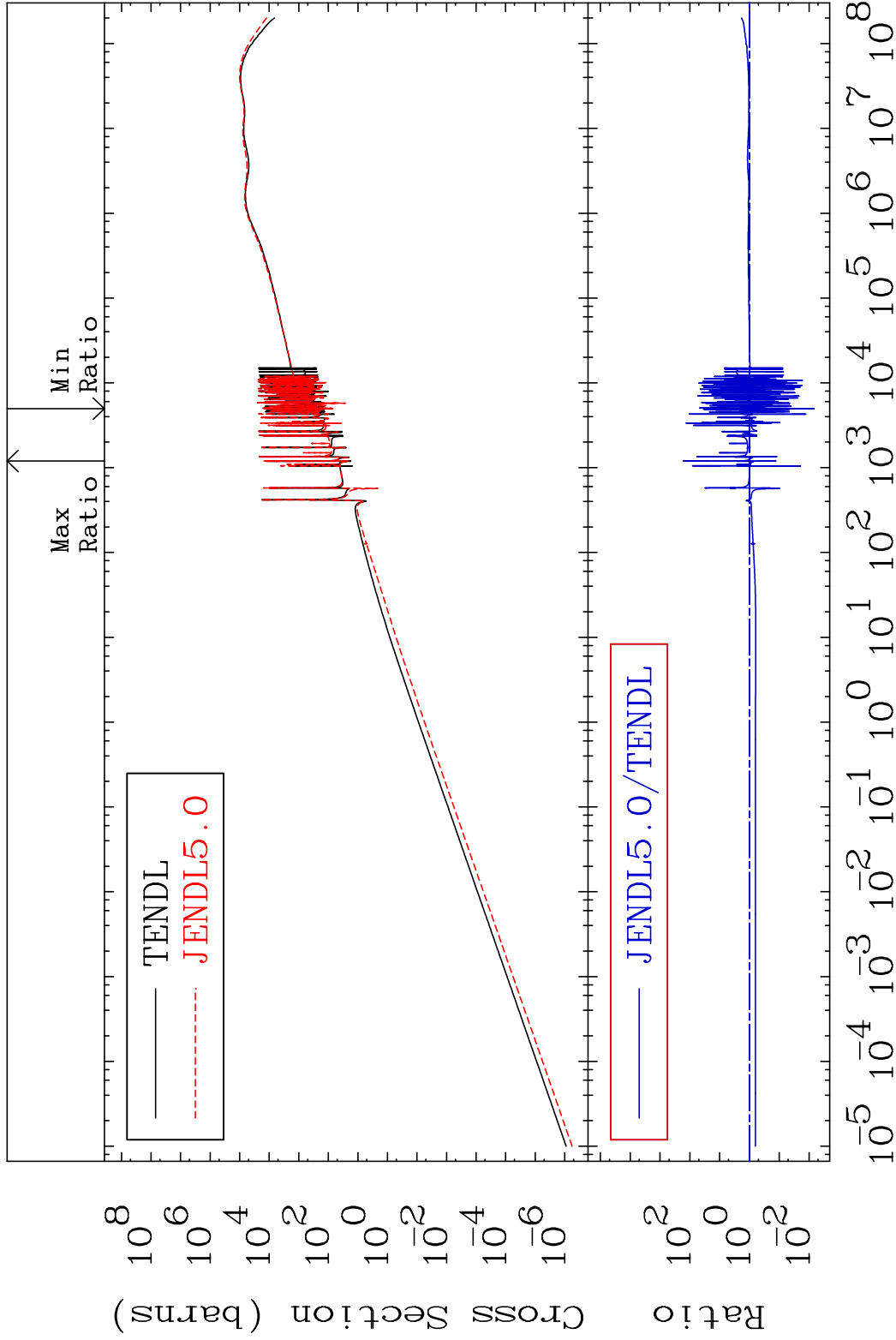


38 Incident Energy (eV) 56-Ba-137

MAT 5646

Kerma elastic  
Cross Section

56-Ba-137  
-99.31 To 9999. %



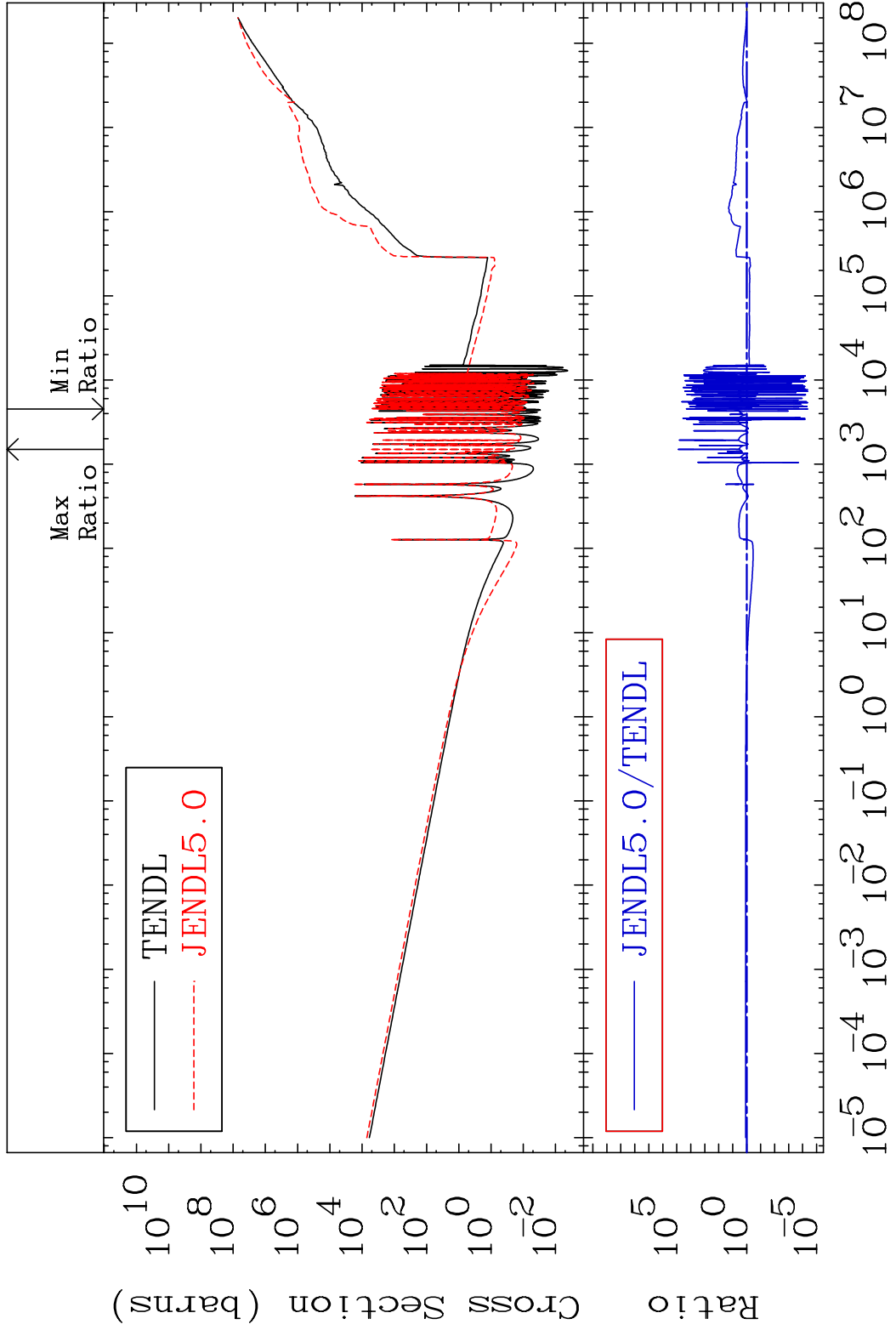
39

Incident Energy (eV)

56-Ba-137

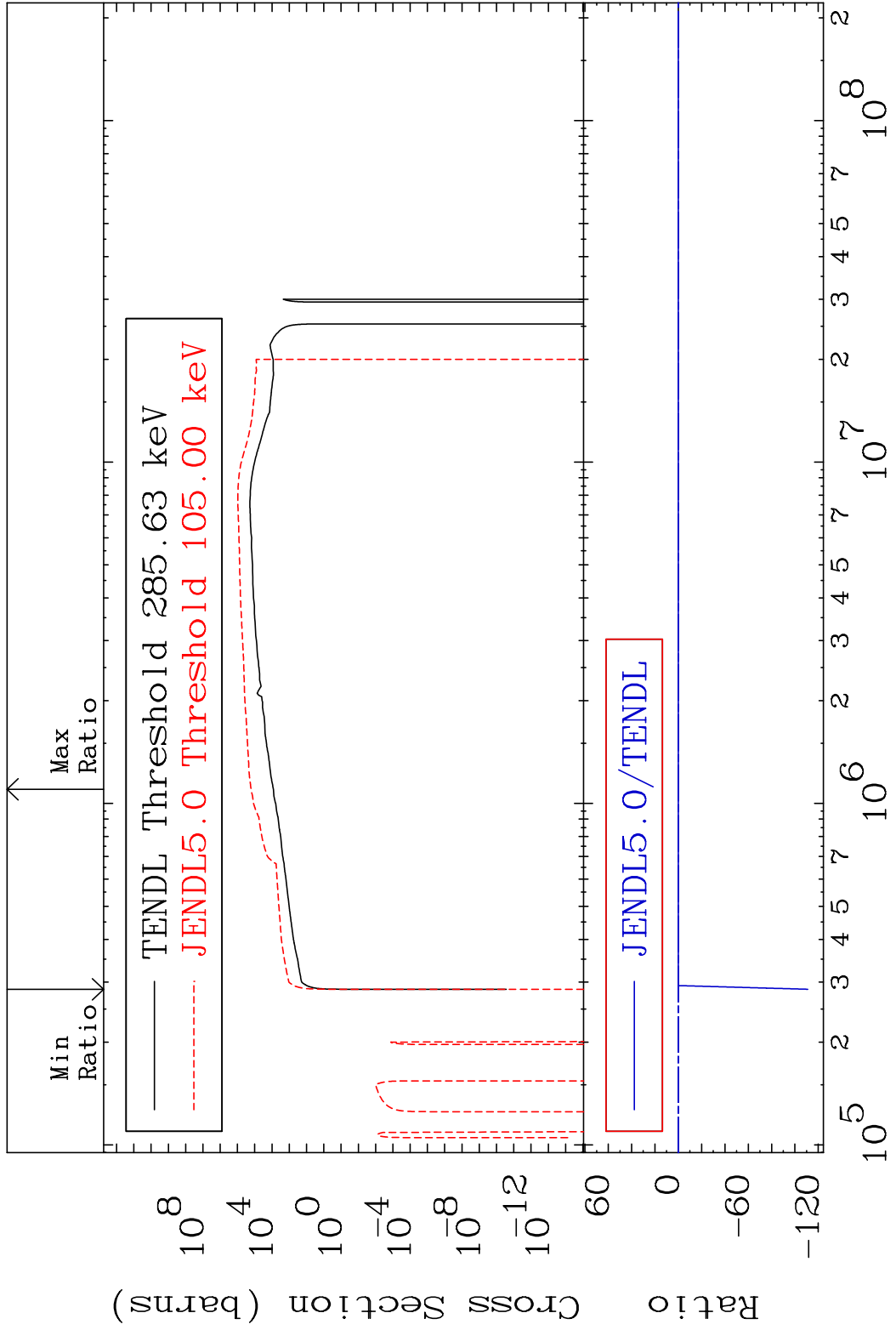


MAT 5646 Kerma non-elastic (all but mt2) 56-Ba-137  
 Cross Section -100.0 To 9999. %



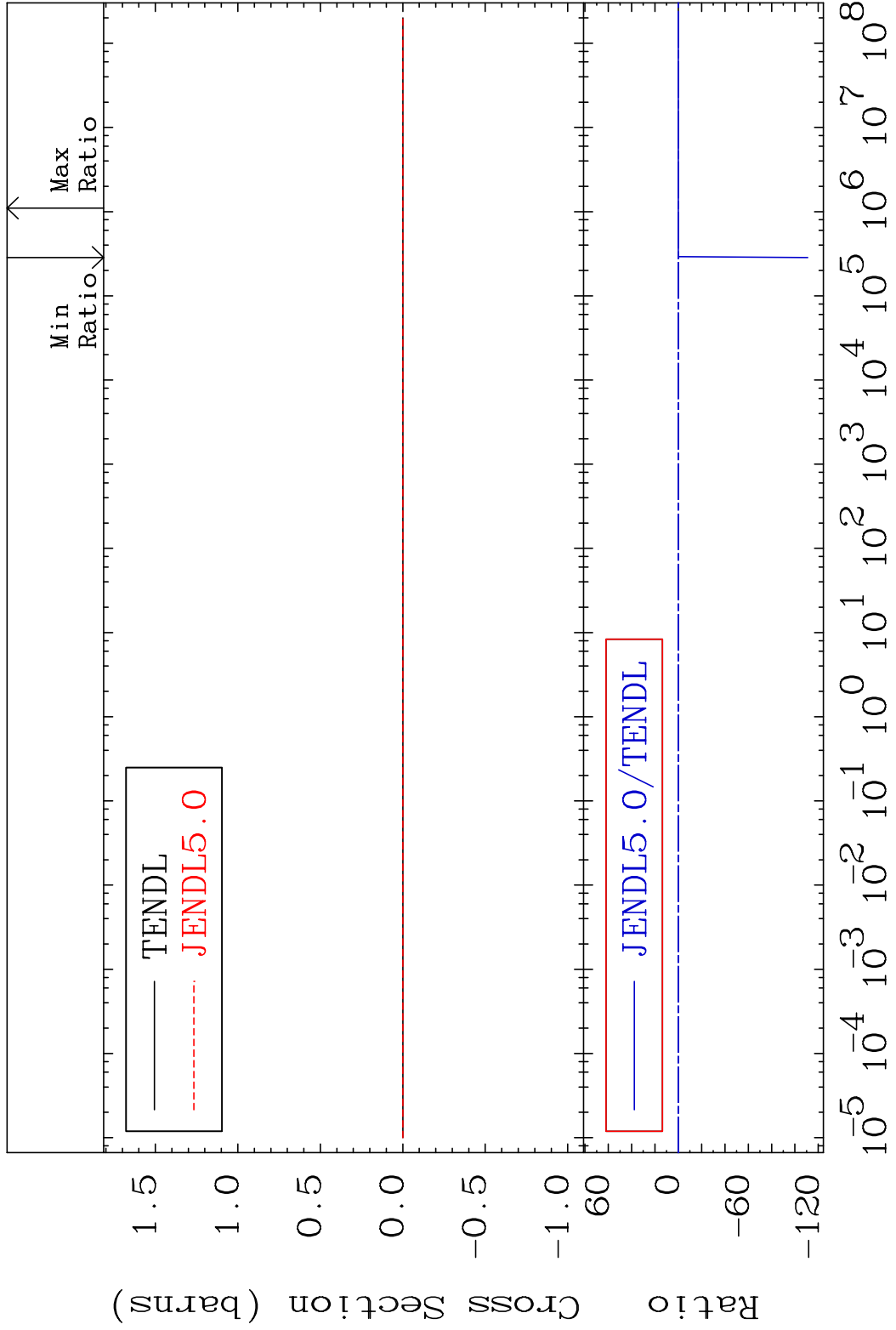
40 Incident Energy (eV) 56-Ba-137

MAT 5646 Kerma inelastic (mt51-91) 56-Ba-137  
 Cross Section -9999. To 1889. %



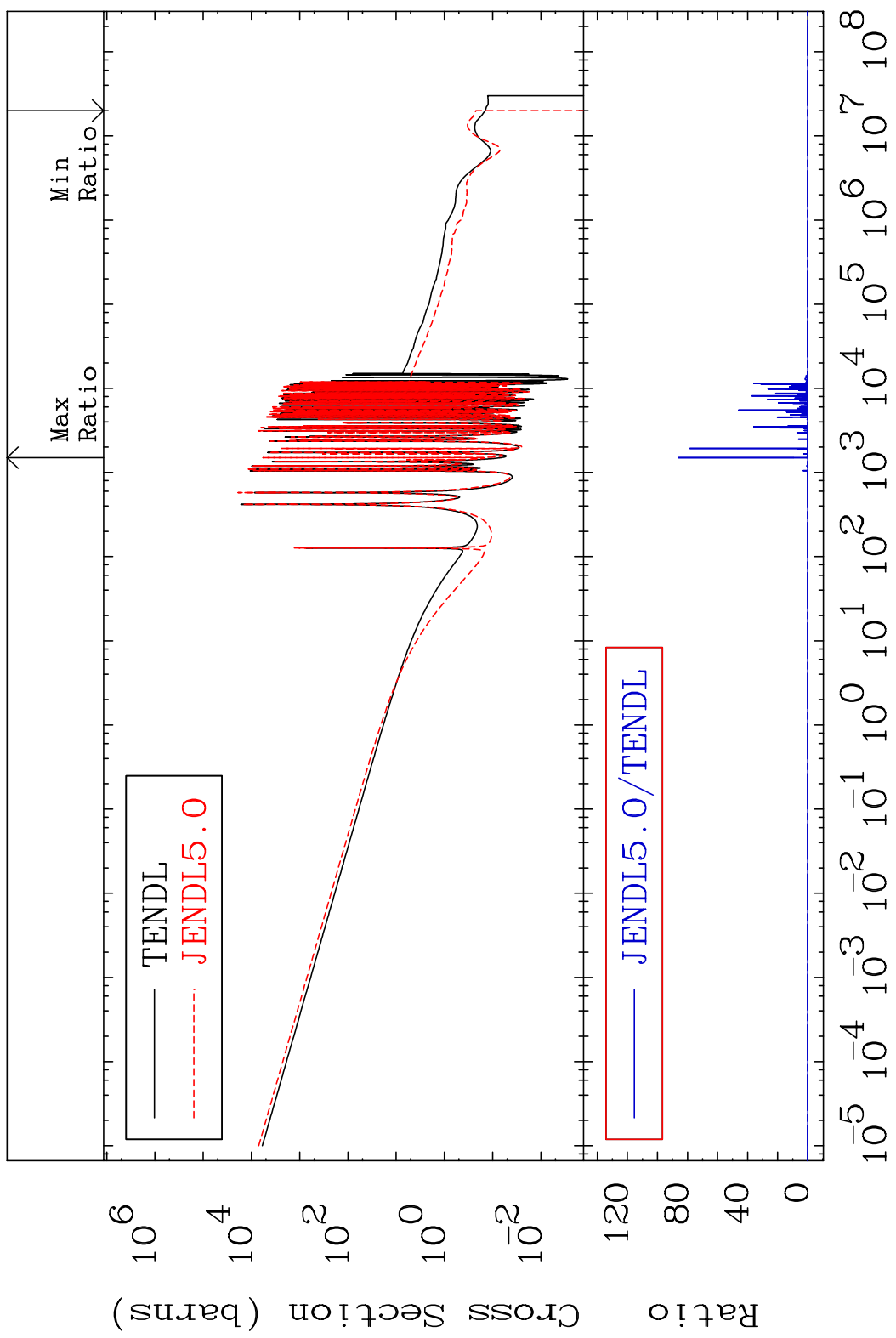
41 Incident Energy (eV) 56-Ba-137

MAT 5646 Kerma fission (mt18 or mt19-20-21-38) 56-Ba-137  
 Cross Section -9999. To 1889. %



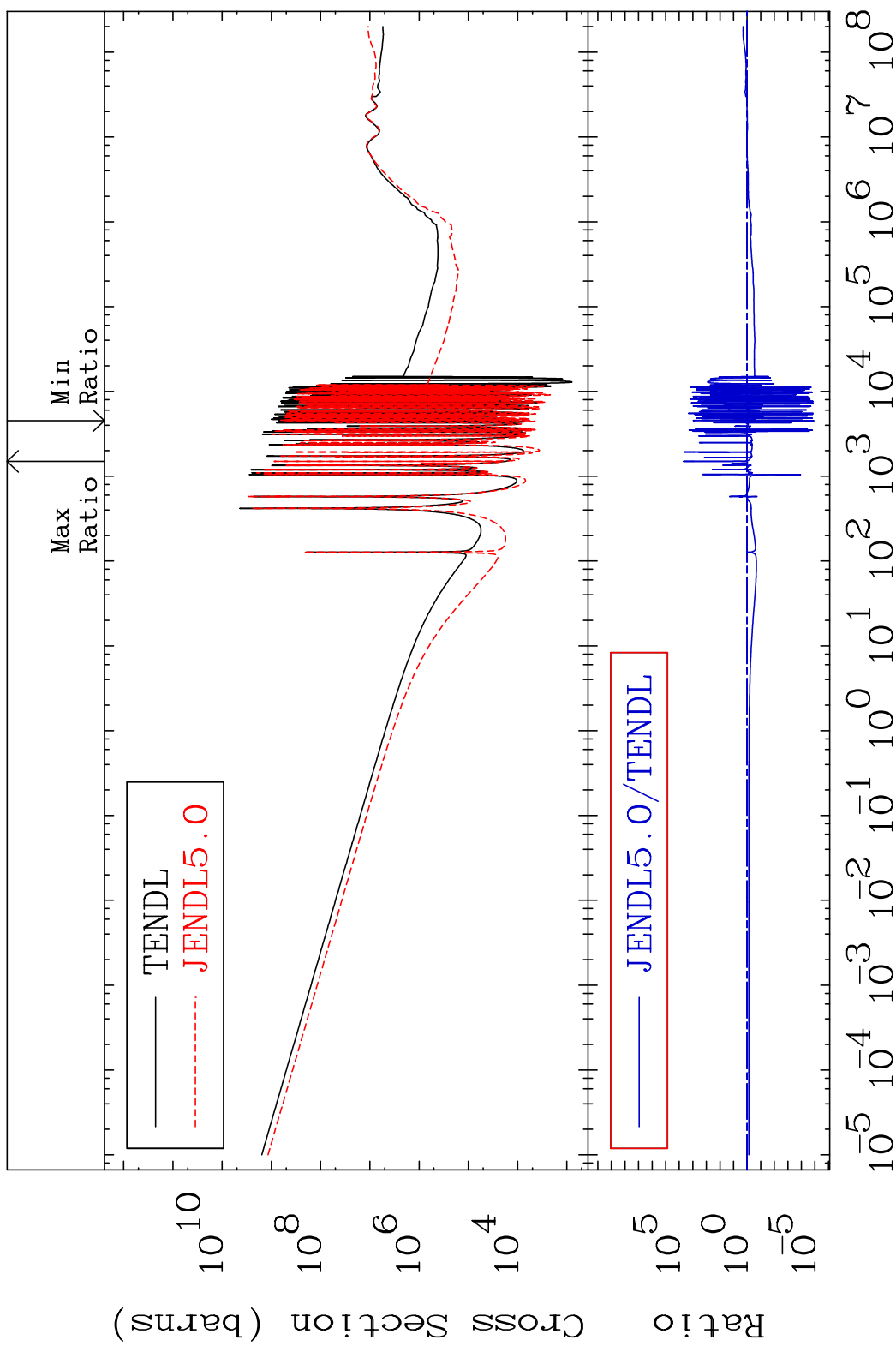
42 Incident Energy (eV) 56-Ba-137

MAT 5646 Kerma capture (mt102) 56-Ba-137  
 Cross Section -100.0 To 9999. %



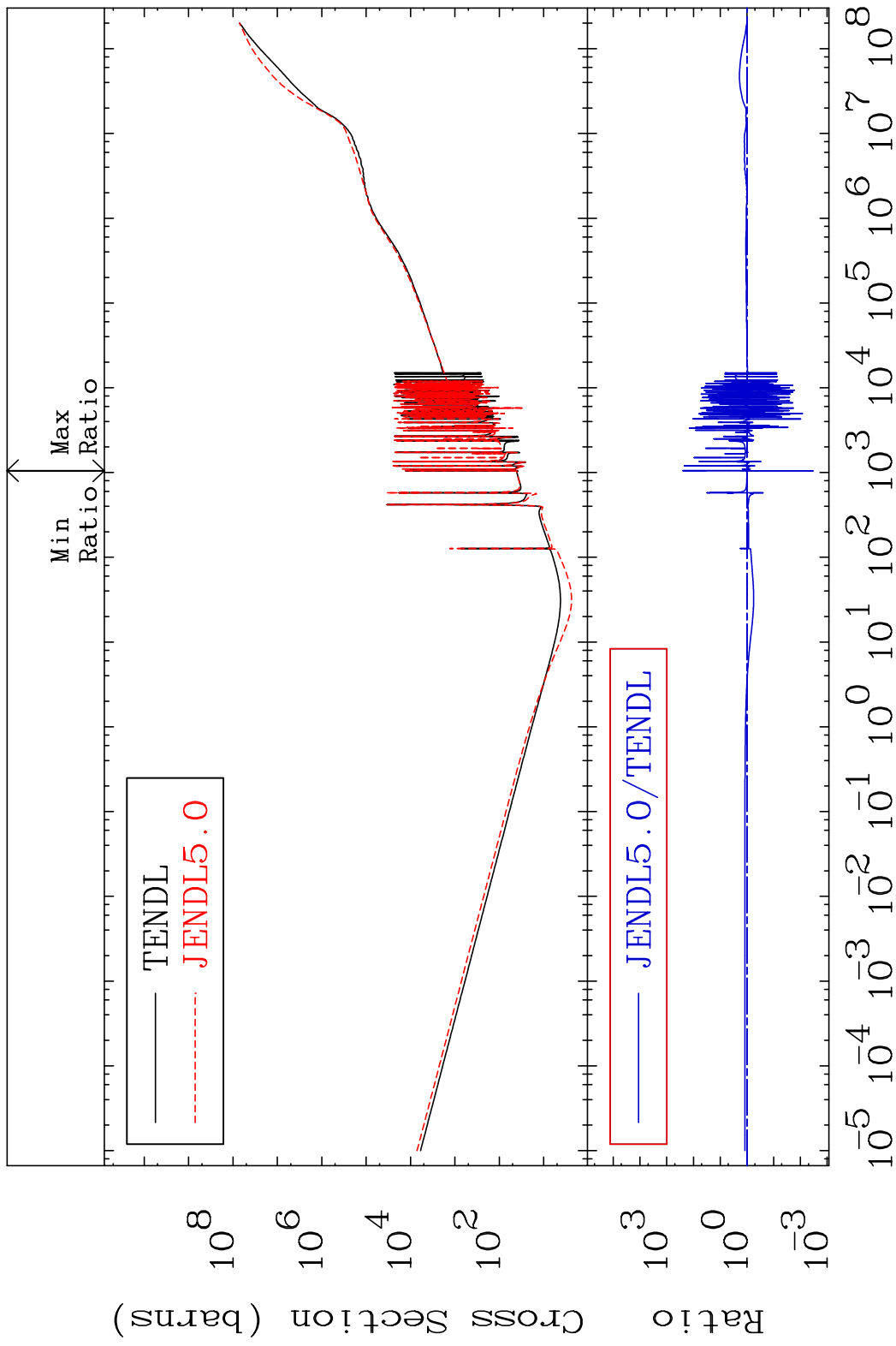
43 Incident Energy (eV) 56-Ba-137

MAT 5646 Total photon (eV-barns) 56-Ba-137  
 Cross Section -100.0 To 9999. %

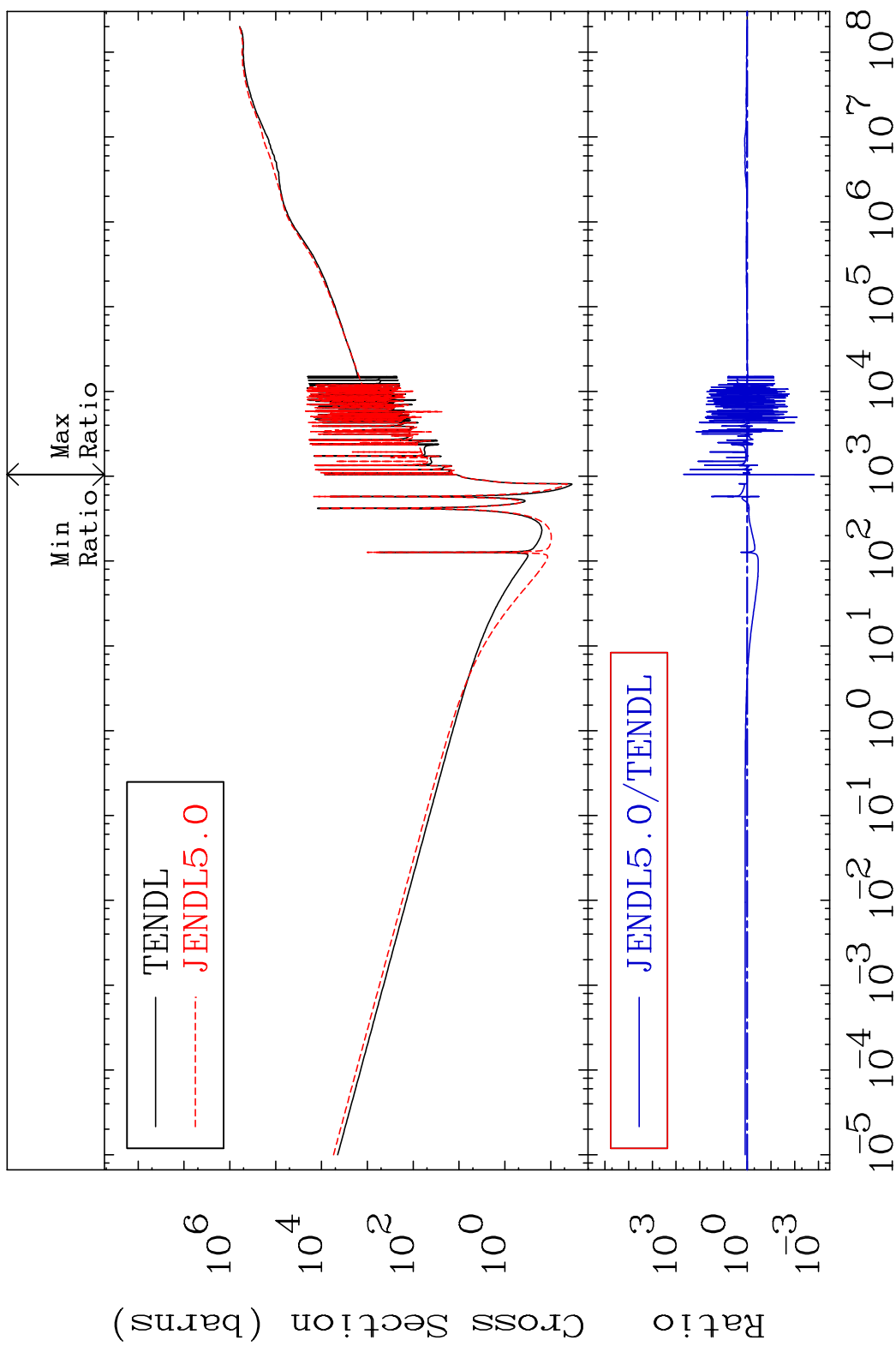


44 Incident Energy (eV) 56-Ba-137

MAT 5646 Total kinematic kerma (high limit) 56-Ba-137  
Cross Section -99.66 To 9999. %

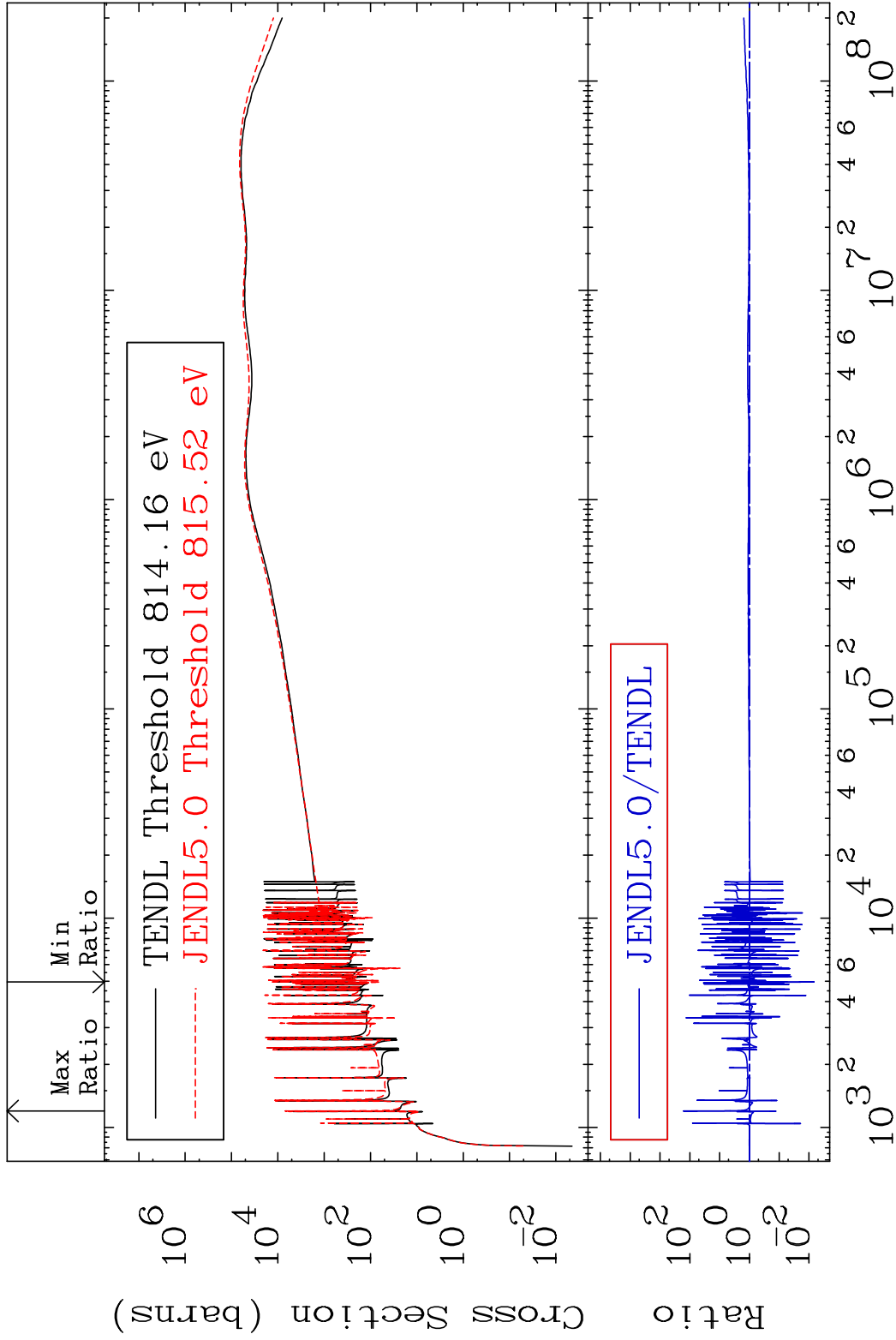


MAT 5646      Dpa total (eV-barns)      56-Ba-137  
 Cross Section      -99.84 To 9999. %



46      Incident Energy (eV)      56-Ba-137

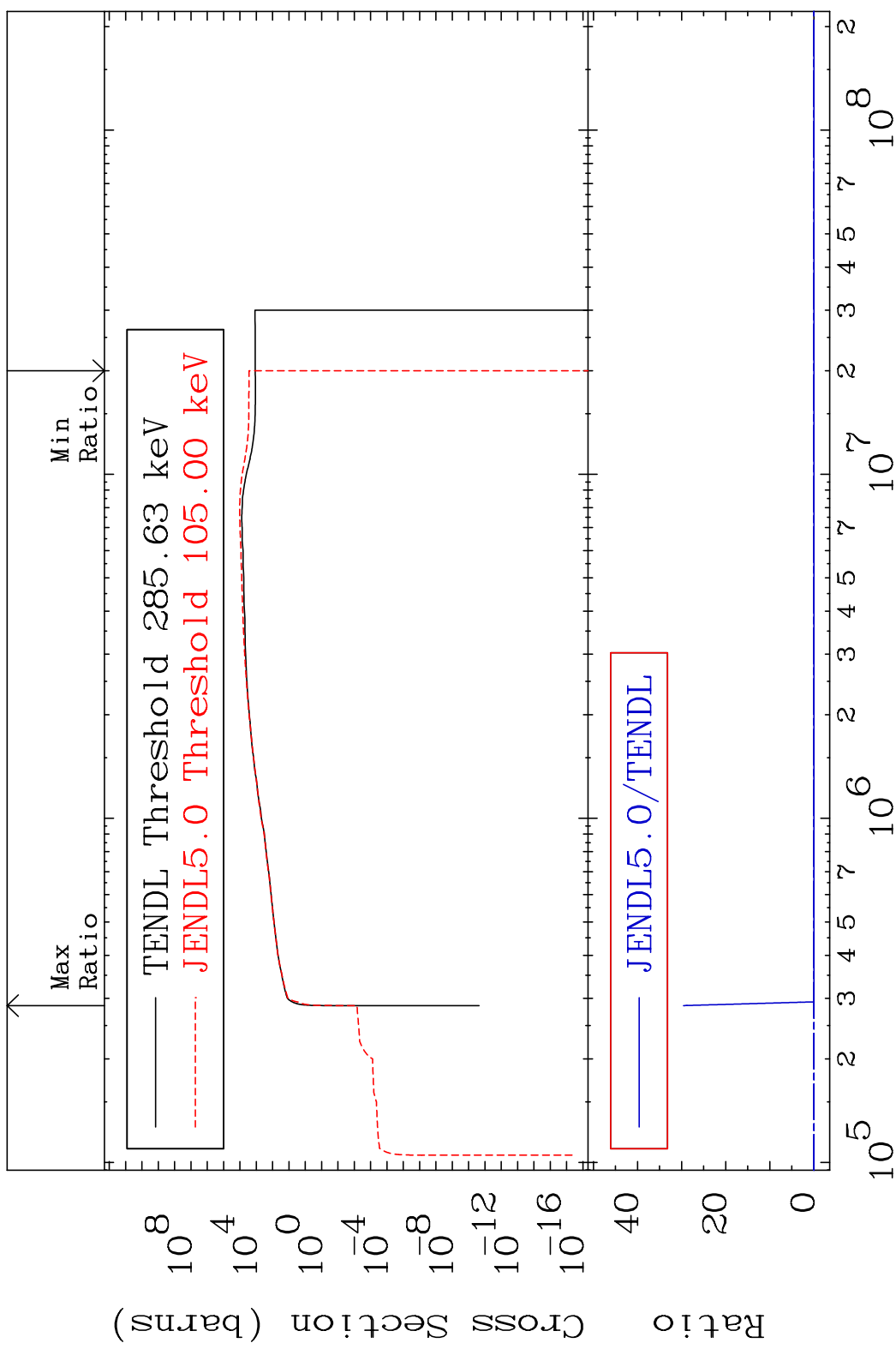
MAT 5646 Dpa elastic (mt2) 56-Ba-137  
 Cross Section -99.31 To 9999. %



47 Incident Energy (eV) 56-Ba-137

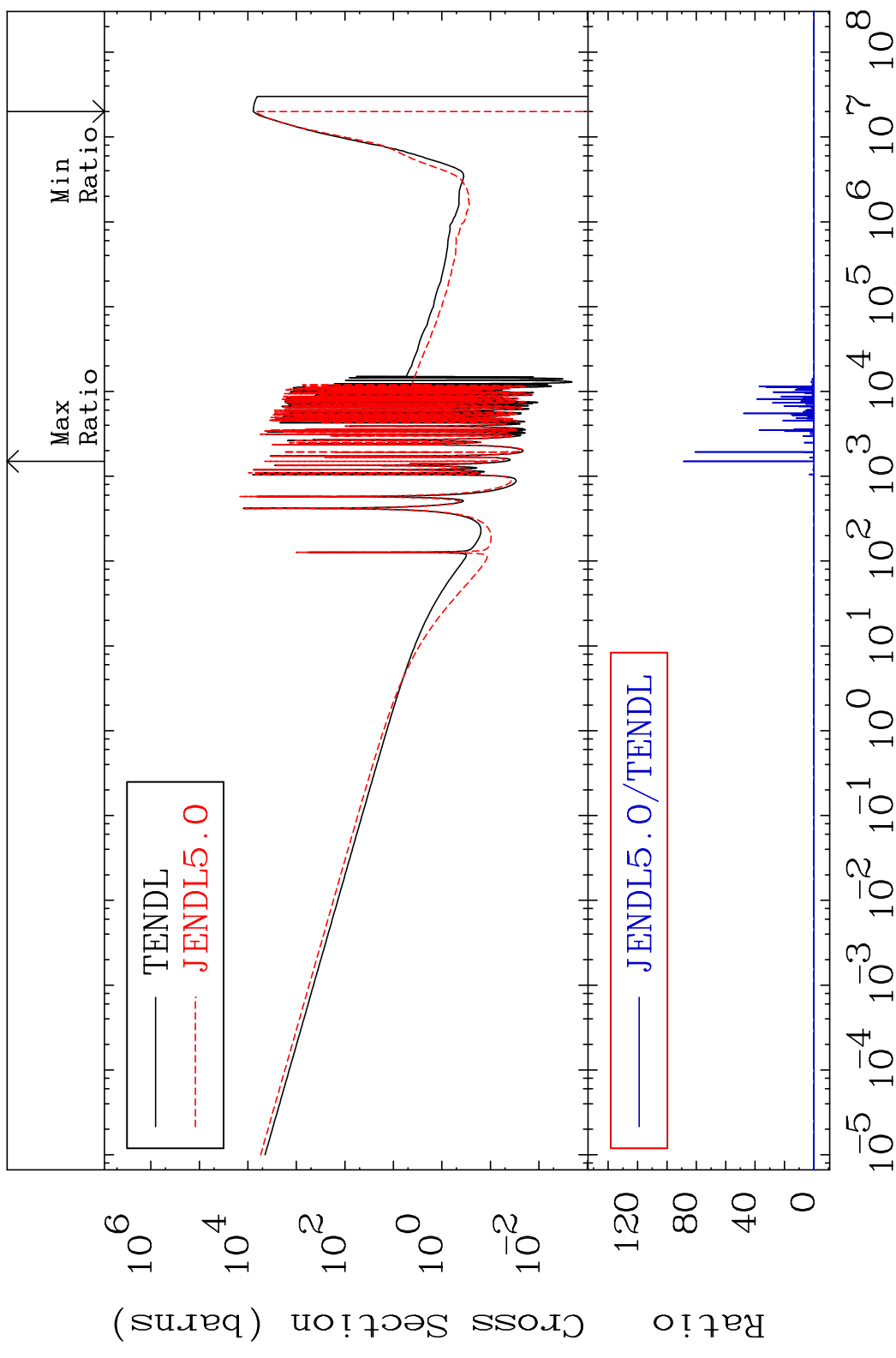


MAT 5646 Dpa inelastic (mt51-91) 56-Ba-137  
 Cross Section -100.0 To 9999. %

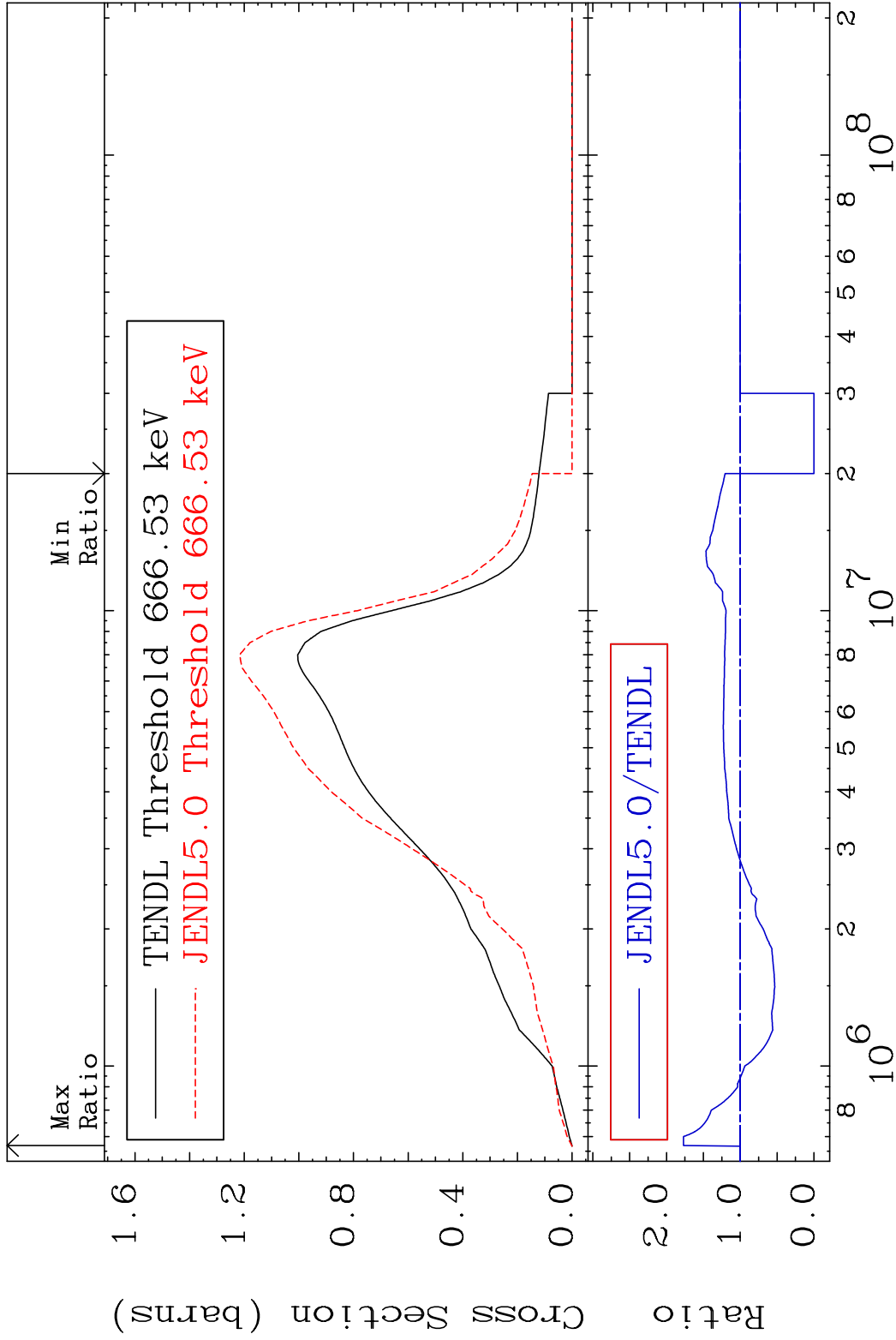


48 Incident Energy (eV) 56-Ba-137

MAT 5646 Dpa disappearance (mt102 -120) 56-Ba-137  
 Cross Section -100.0 To 9999. %

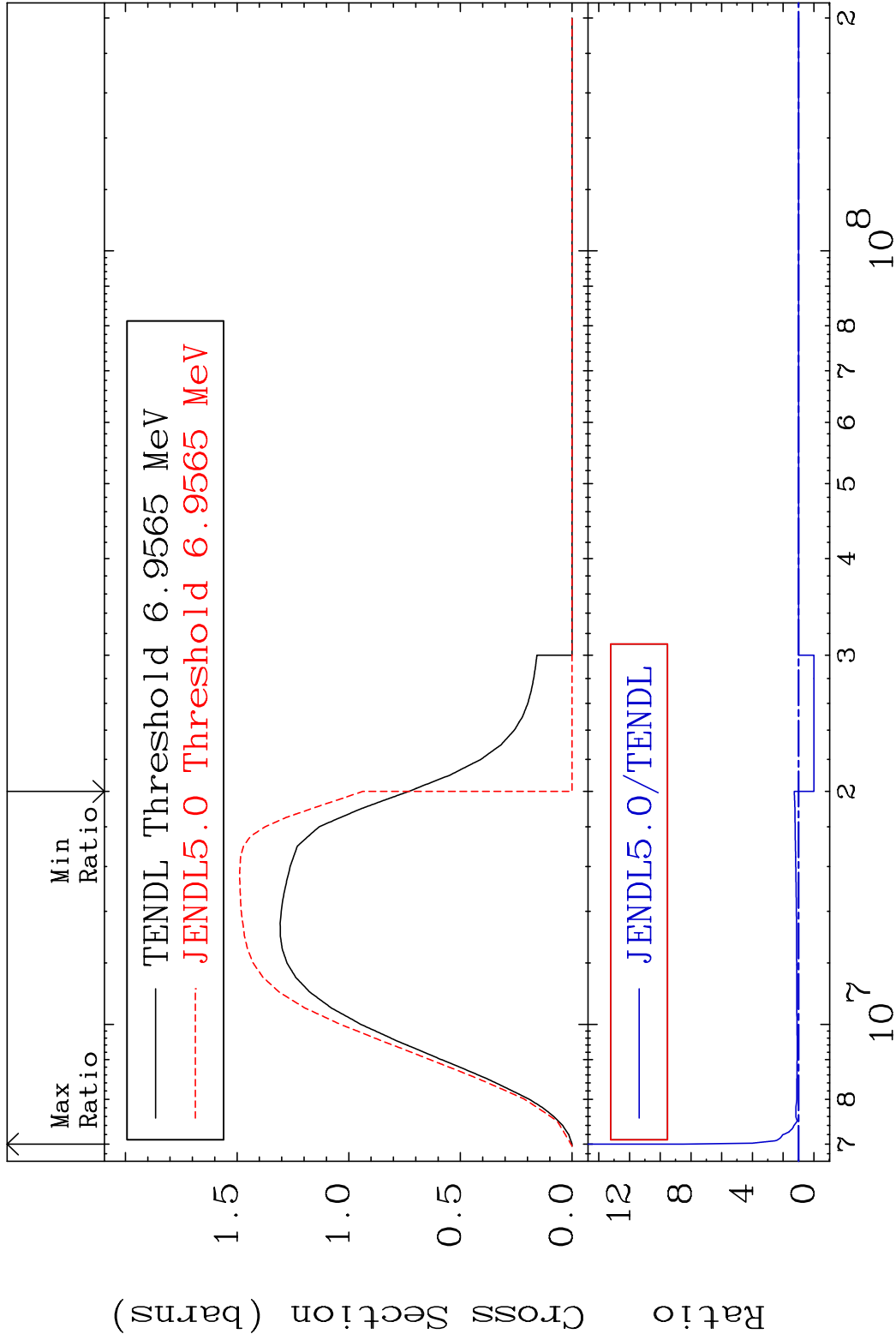


MAT 5646 Inelastic:56-Ba-137m2 56-Ba-137  
 Radionuclide Production Cross Section 1800.0 dpo 77.02 %



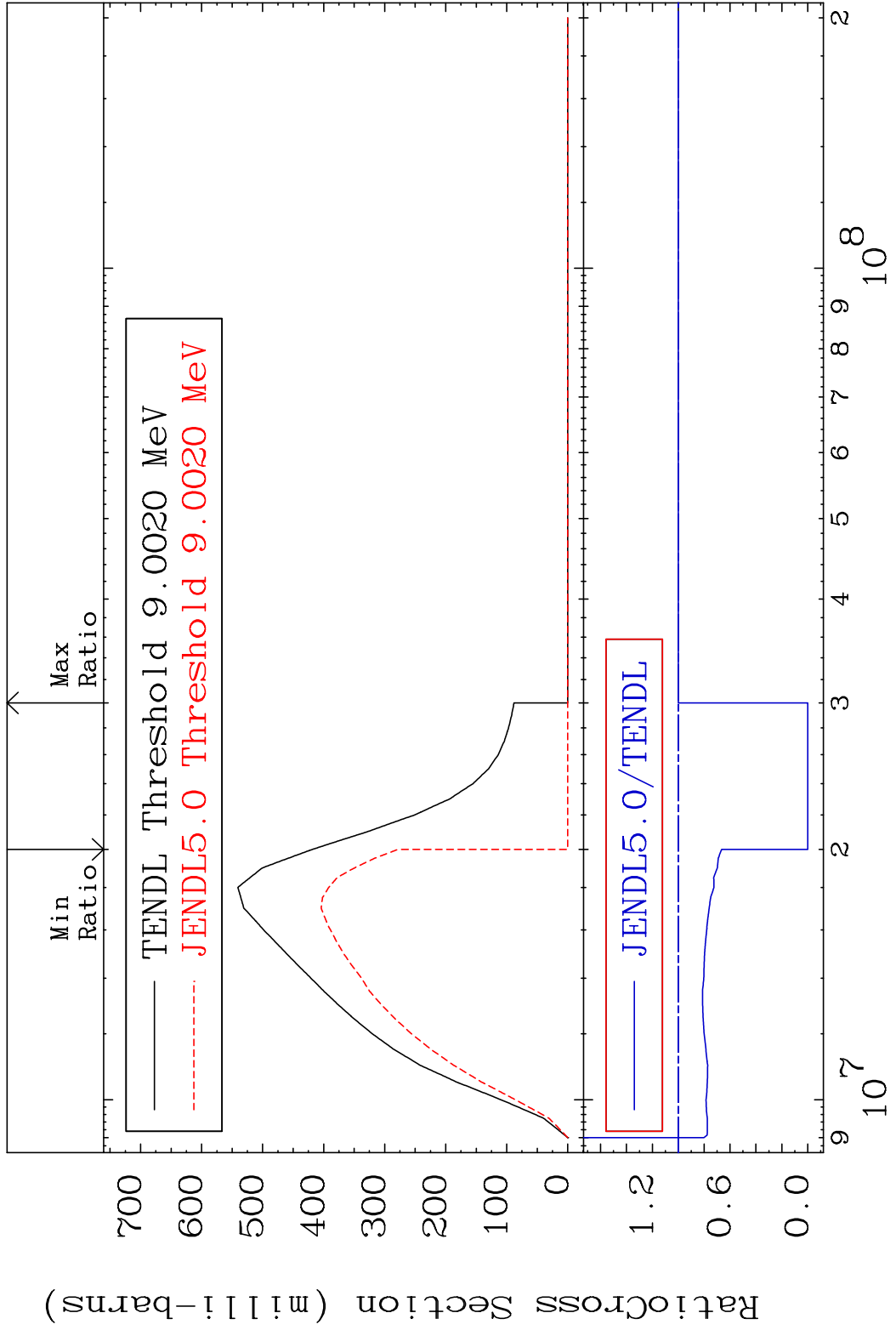
50 56-Ba-137

MAT 5646 (n,2n):56-Ba-136g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 748.7 %



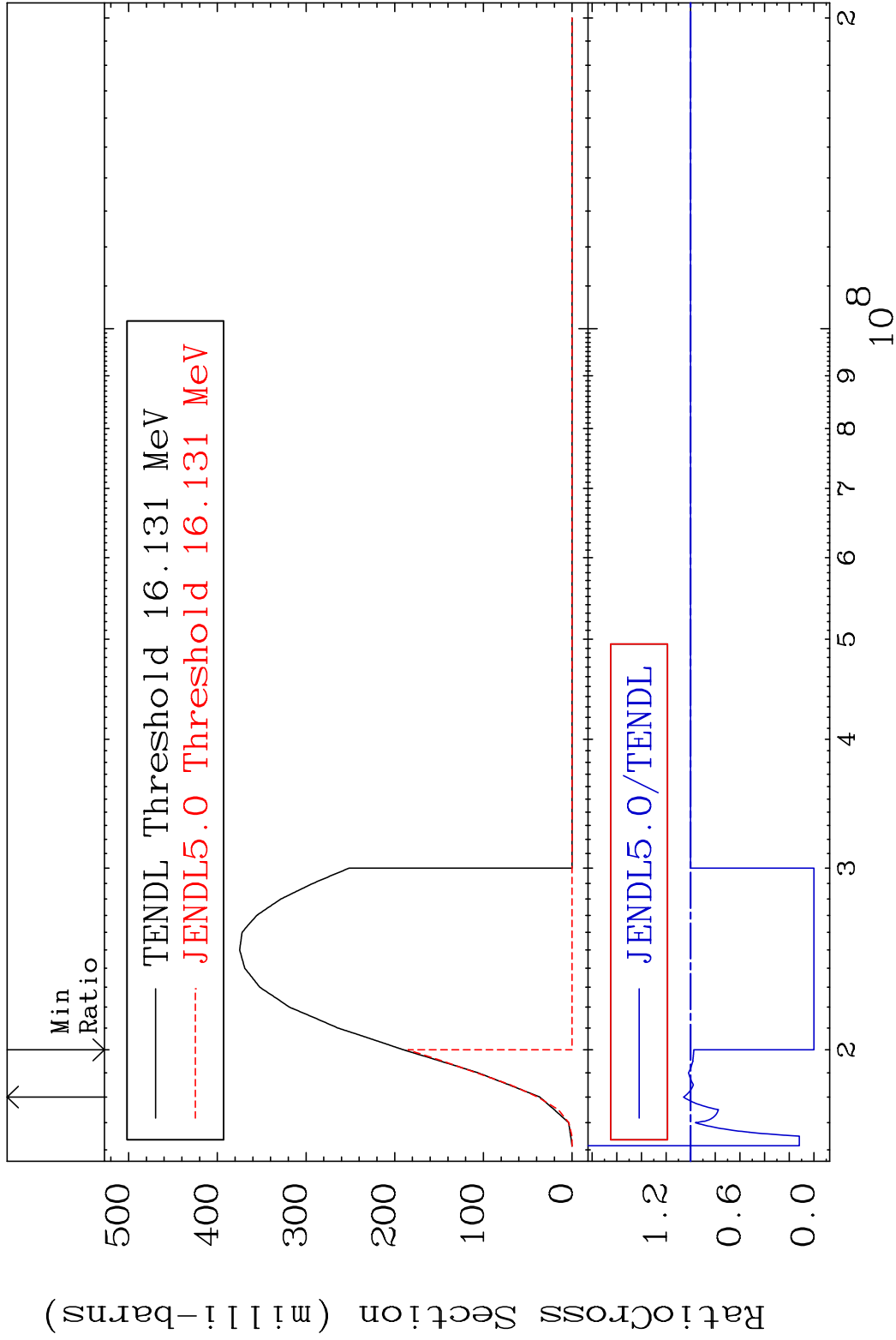
51 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, 2n):56-Ba-136m5 56-Ba-137  
 Radionuclide Production Cross Section 18000000 0.000 %



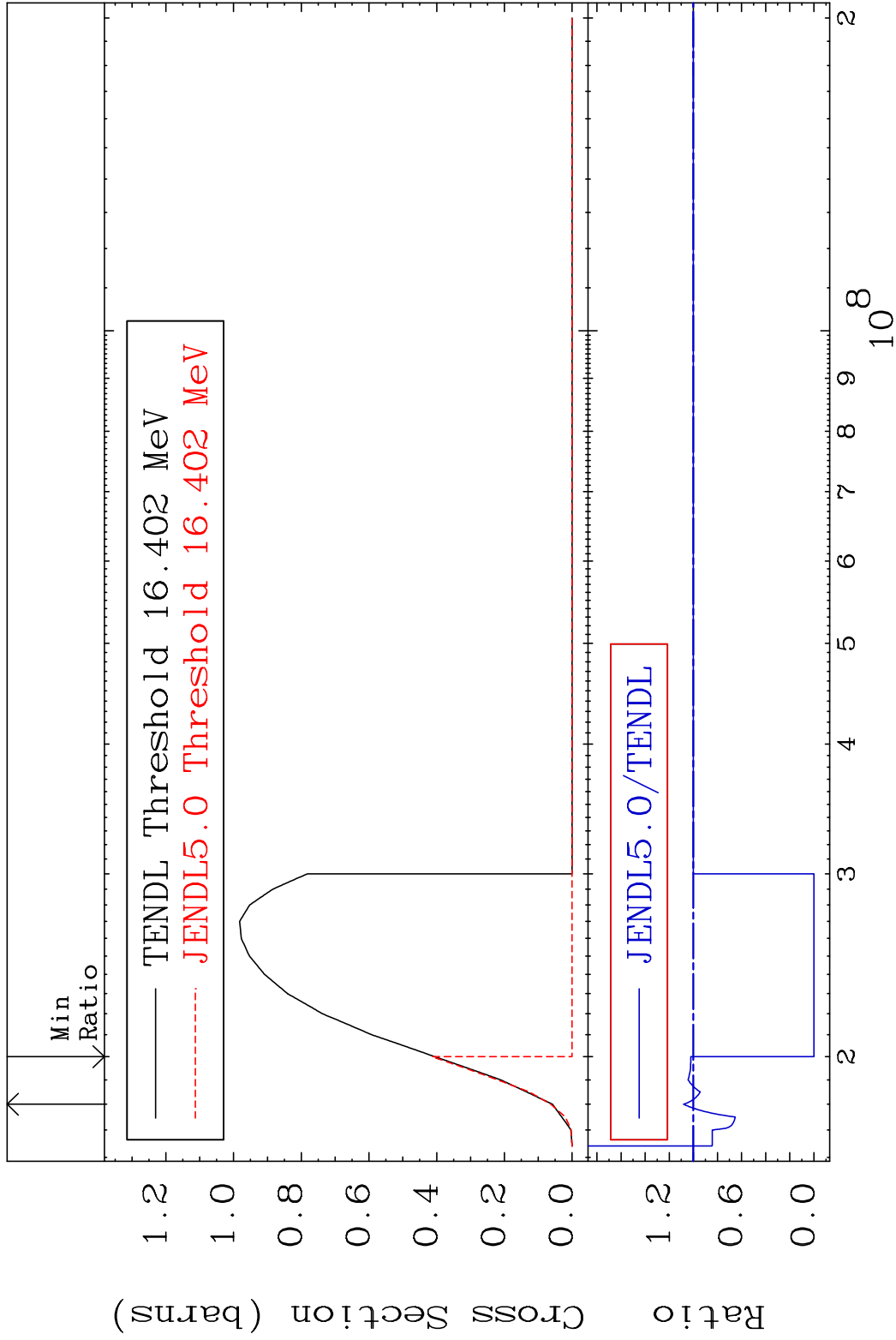
52 Incident Energy (eV) 56-Ba-137

MAT 5646 (n,3n):56-Ba-135g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 5.862 %

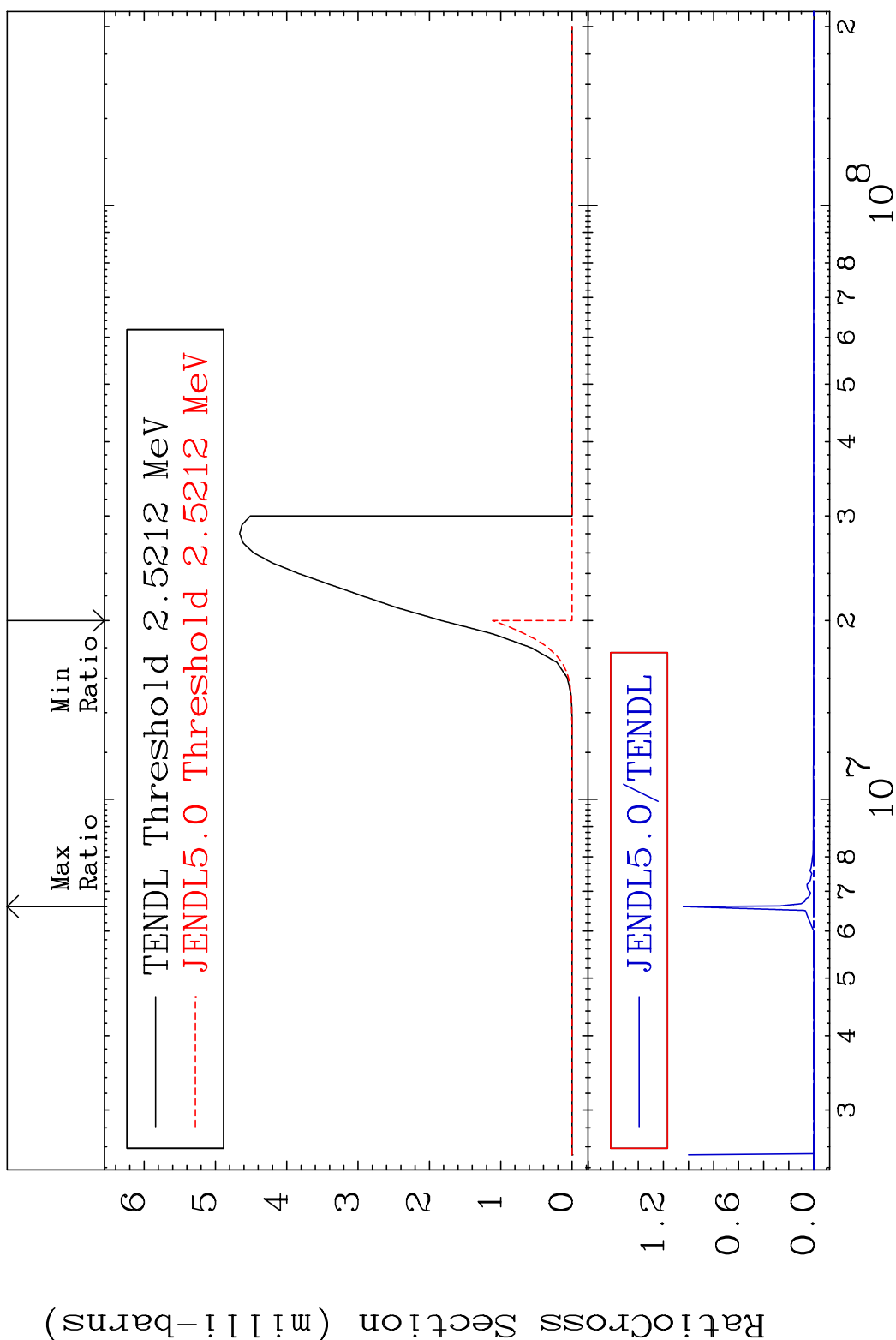


53 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, 3n): 56-Ba-135m2 56-Ba-137  
 Radionuclide Production Cross Section 8.205 %



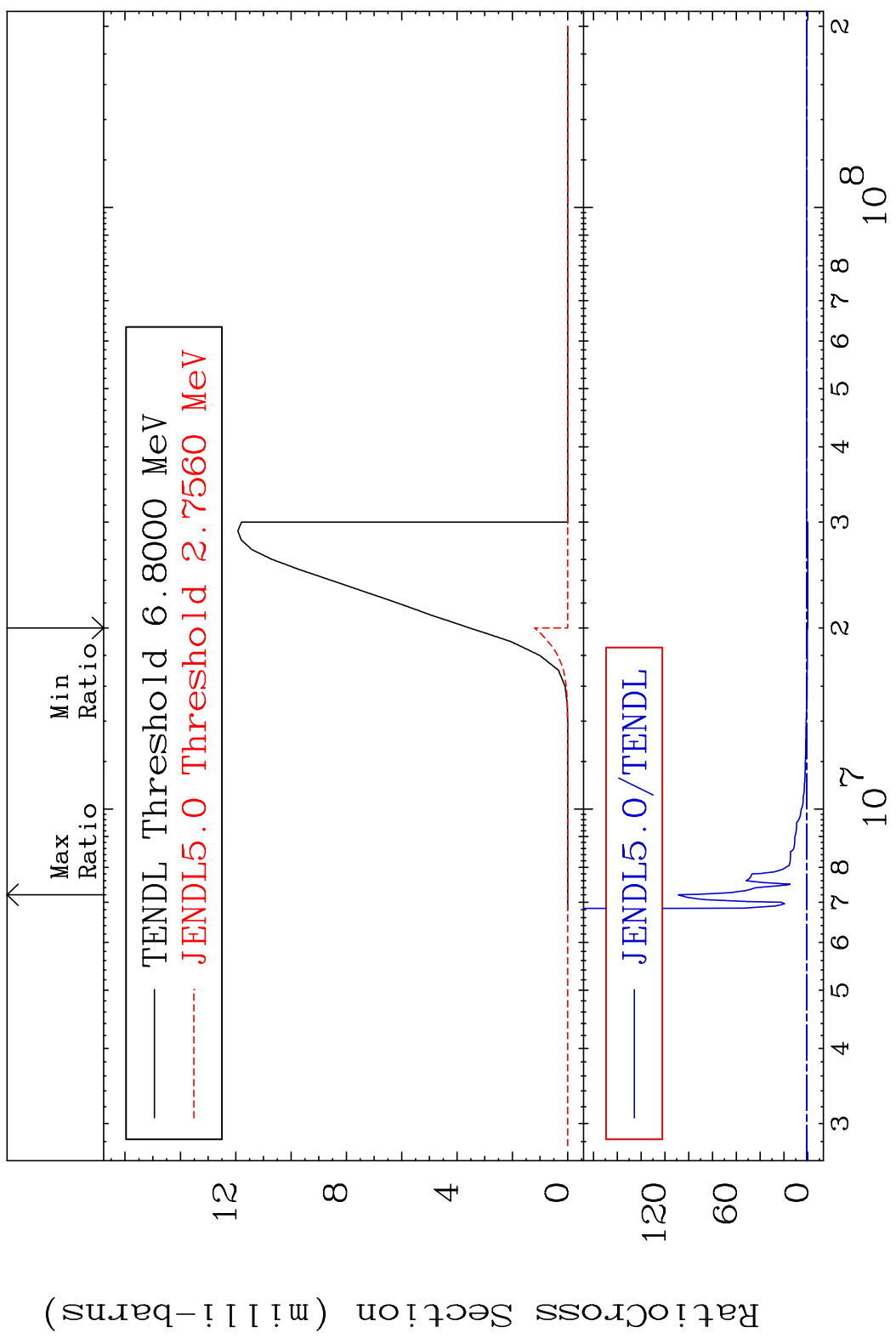
MAT 5646 (n, n')  $\alpha$ :54-Xe-133g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 9999. %



55 Incident Energy (eV) 56-Ba-137

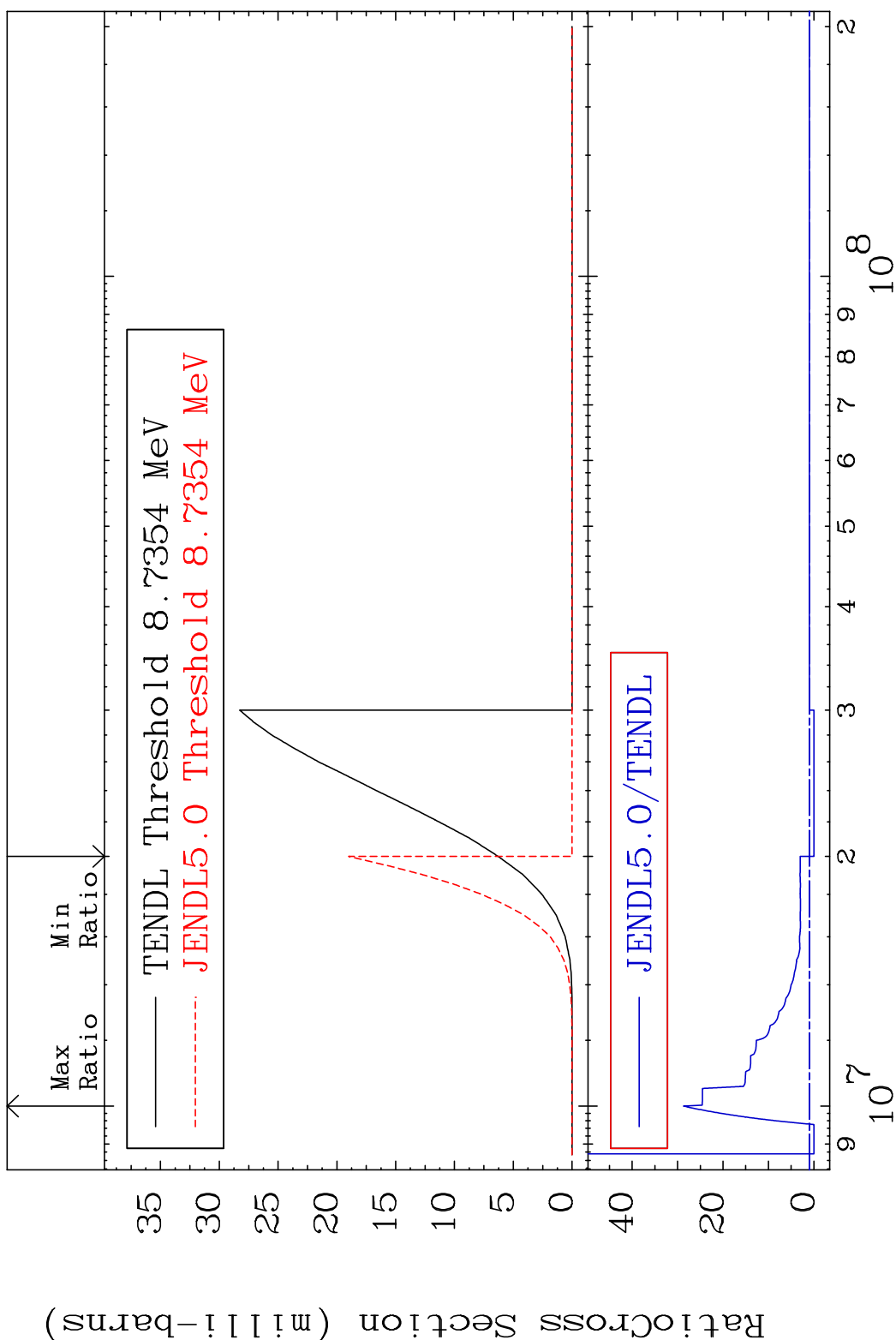


MAT 5646 (n, n')  $\alpha$ :54-Xe-133m1 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 9999. %



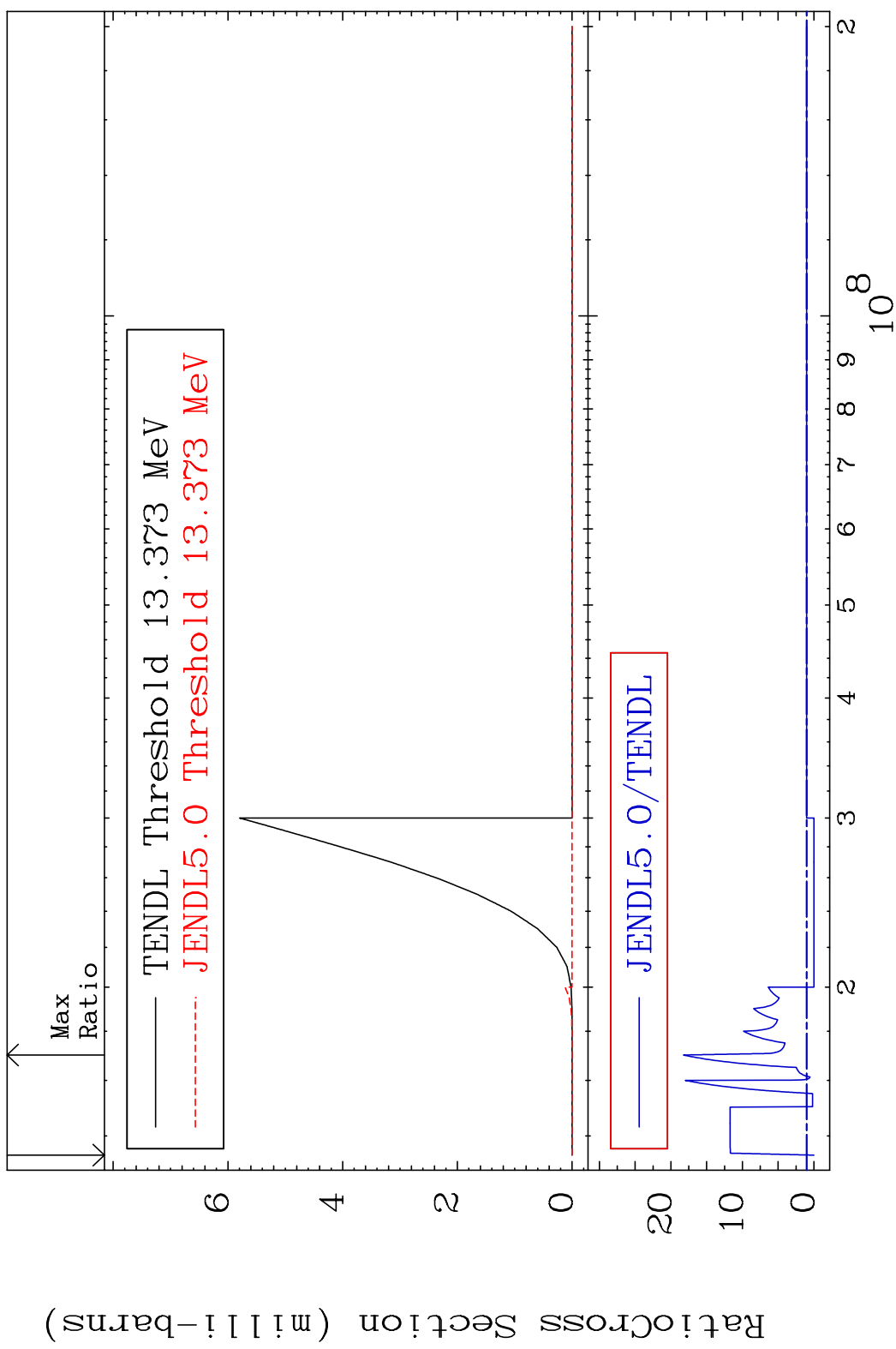
56 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, n') p:55-Cs-136g 56-Ba-137  
 Radionuclide Production Cross Section to 2770. %

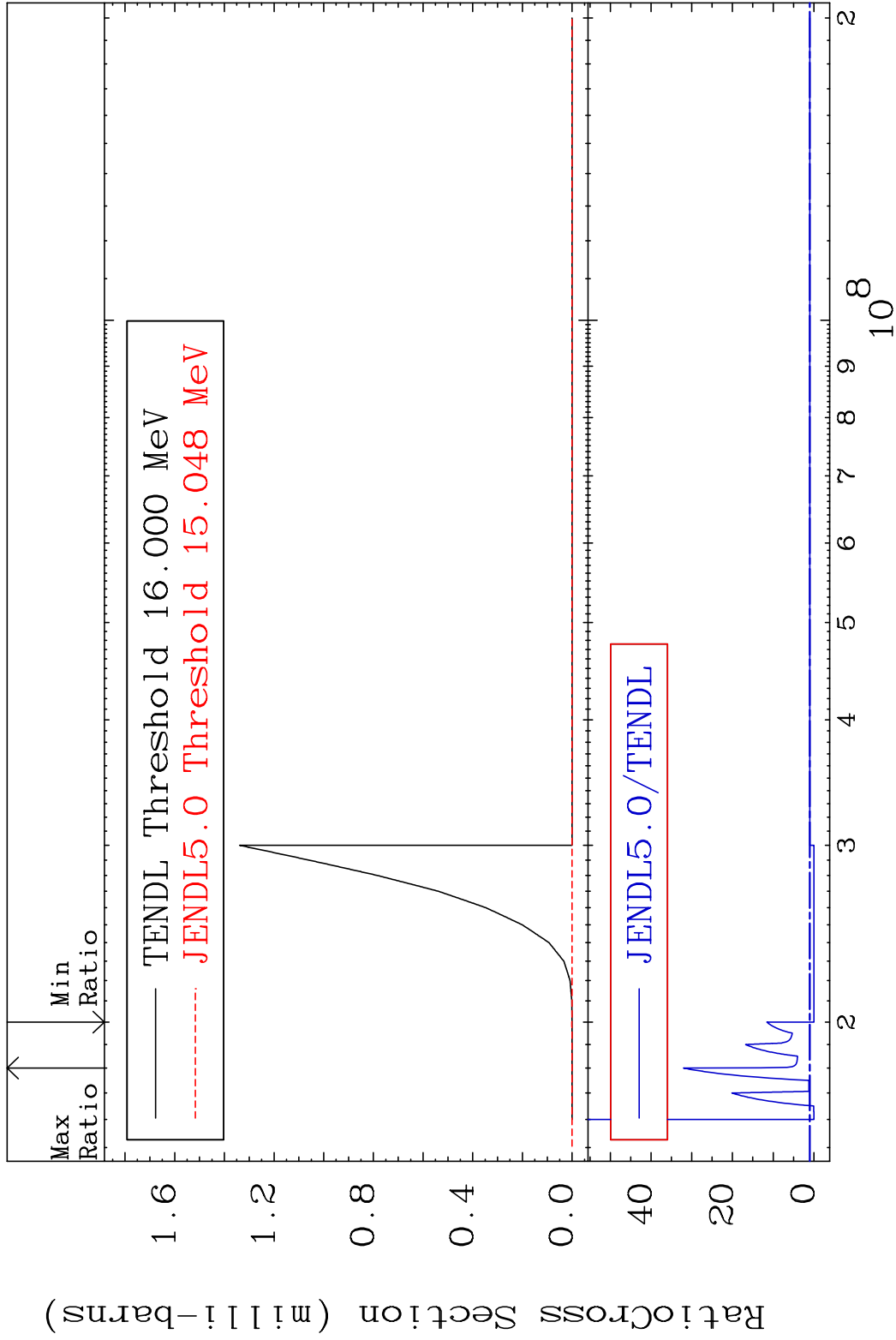


57 56-Ba-137

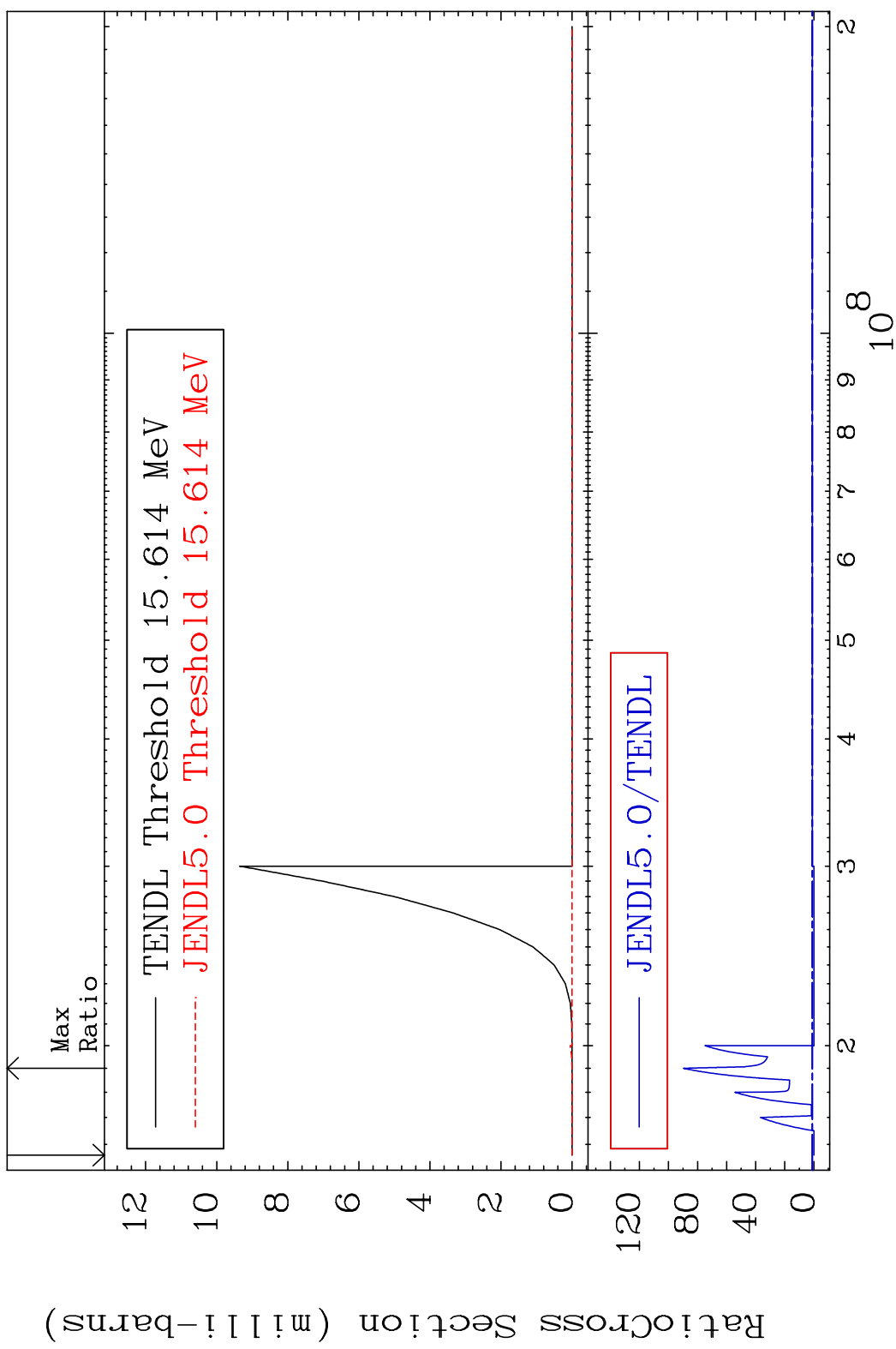
MAT 5646 (n, n') d:55-Cs-135g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 1724. %



58 Incident Energy (eV) 56-Ba-137

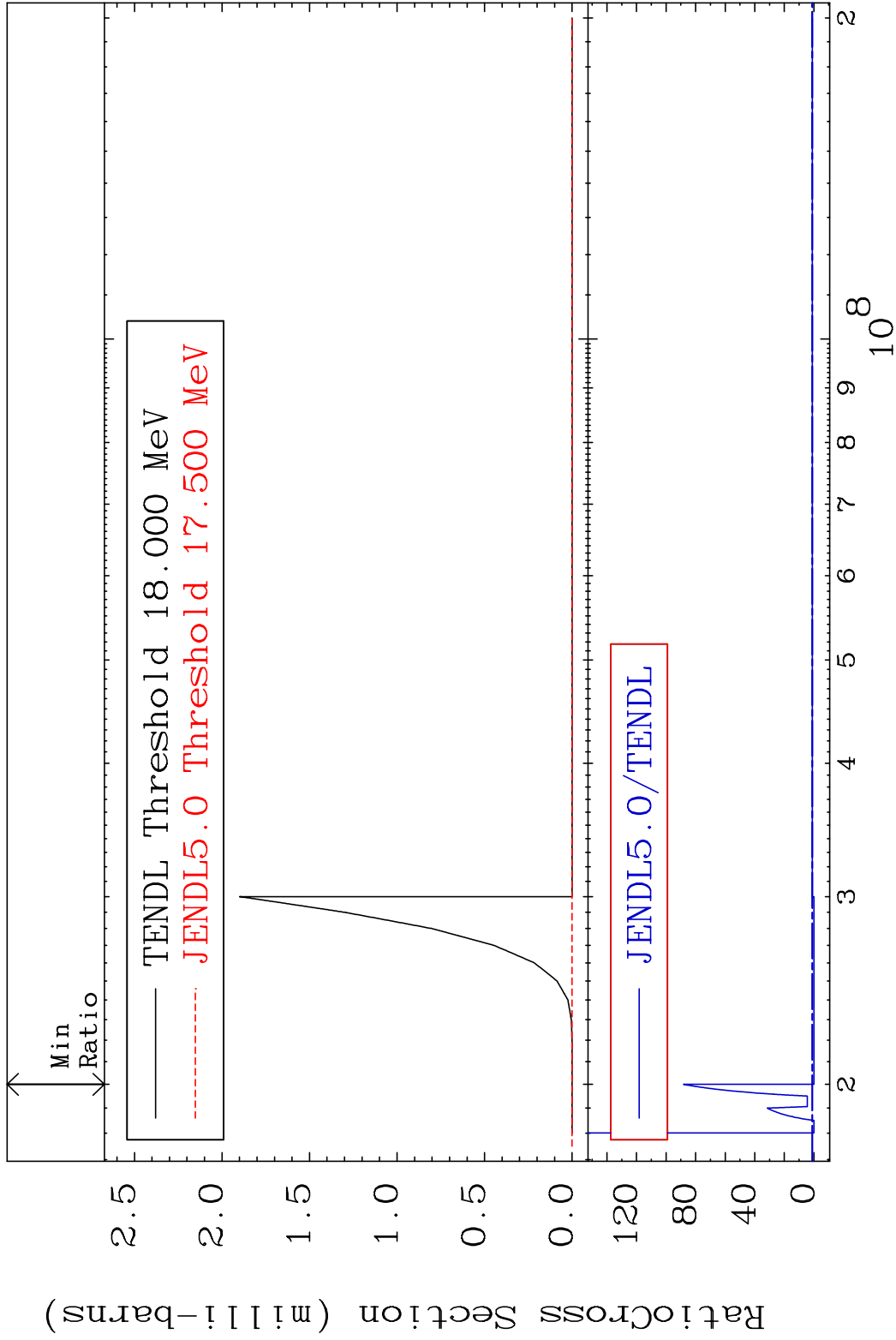


MAT 5646 (n,2n) p:55-Cs-135g 56-Ba-137  
 Radionuclide Production Cross Section 180000 to 8869. %



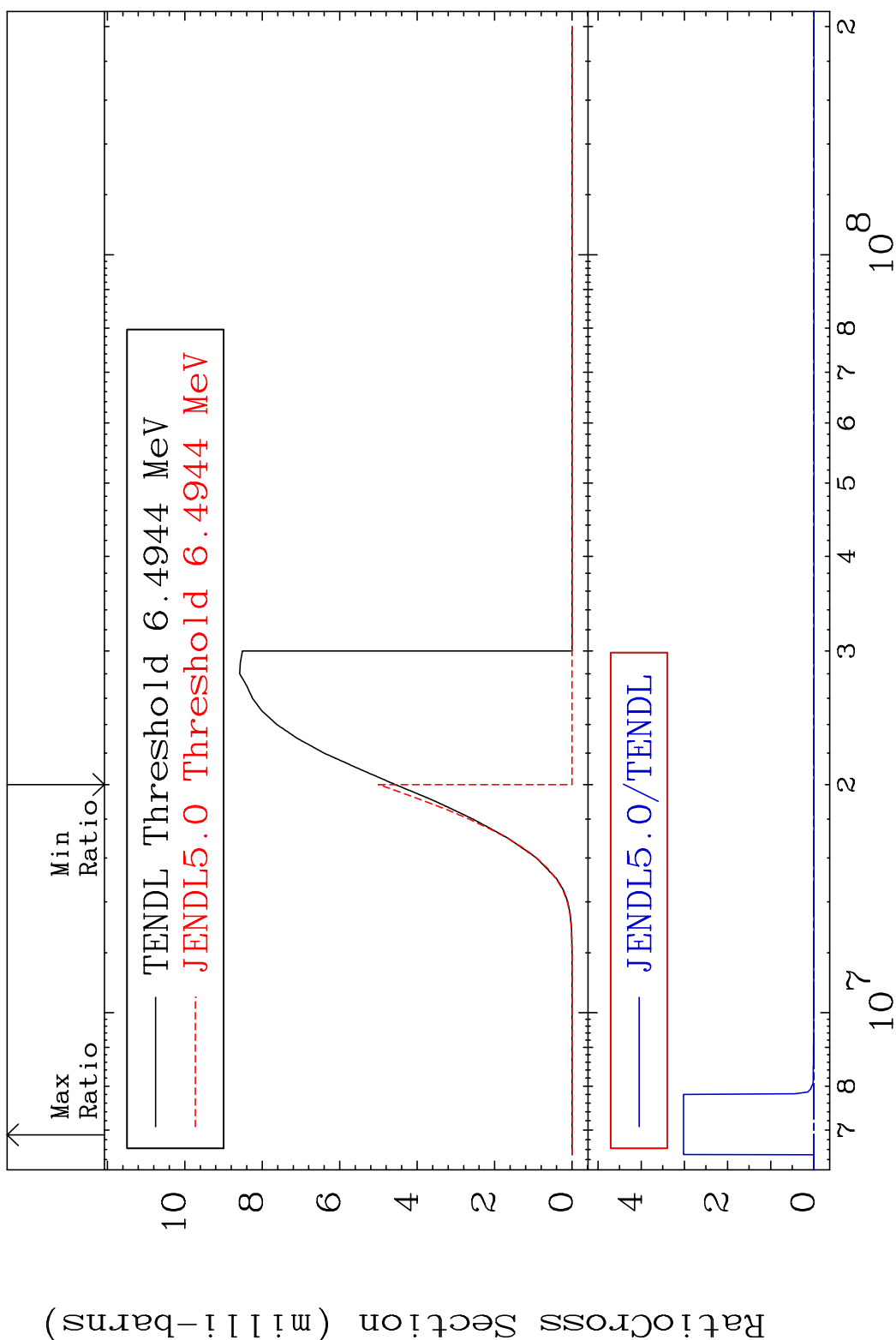
60 Incident Energy (eV) 56-Ba-137

MAT 5646 (n,2n) p:55-Cs-135m10 56-Ba-137  
 Radionuclide Production Cross Section 18000 to 8723. %



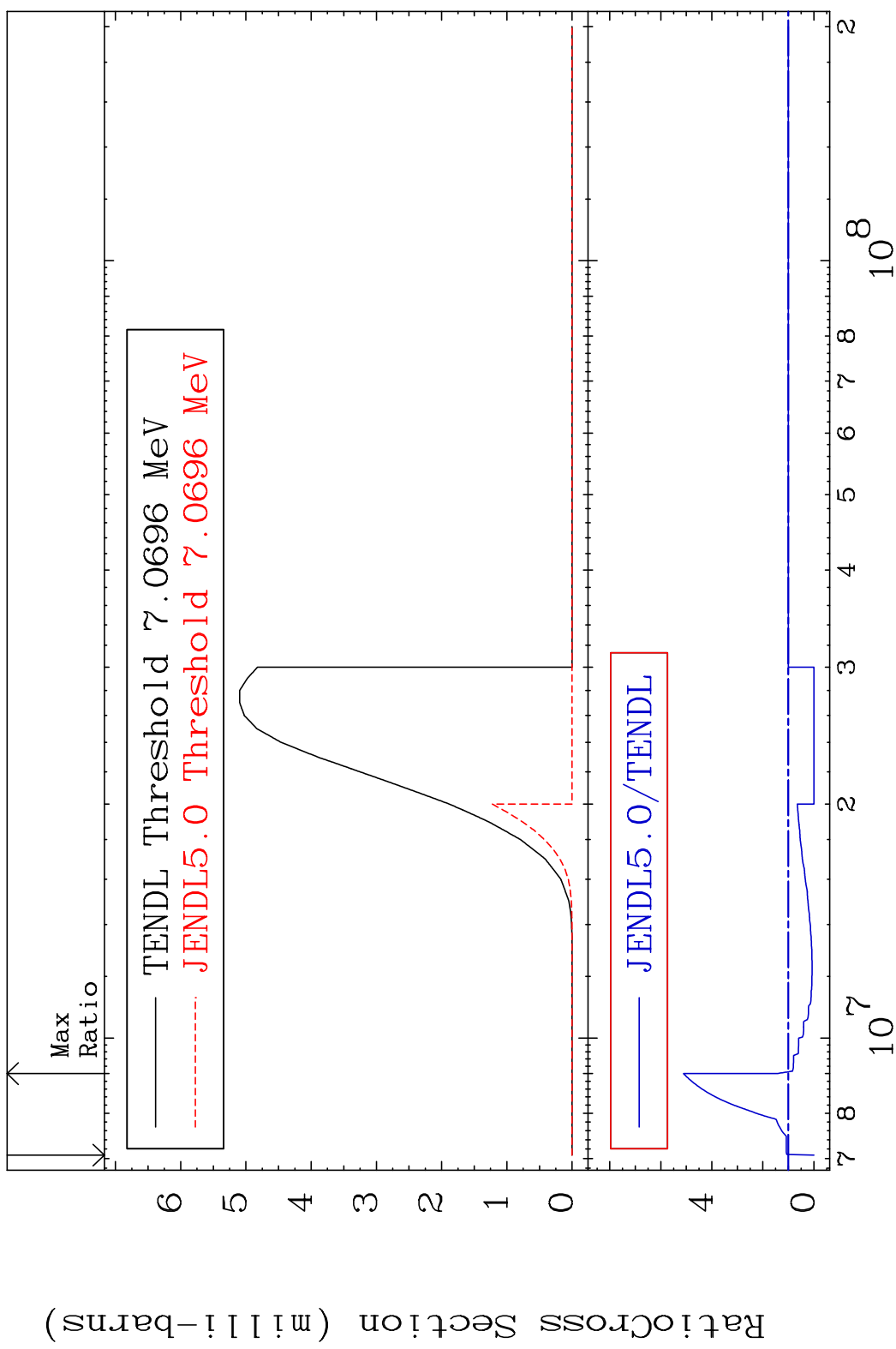
61 Incident Energy (eV) 56-Ba-137

MAT 5646 (n,d):55-Cs-136g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dth 9999. %



62 Incident Energy (eV) 56-Ba-137

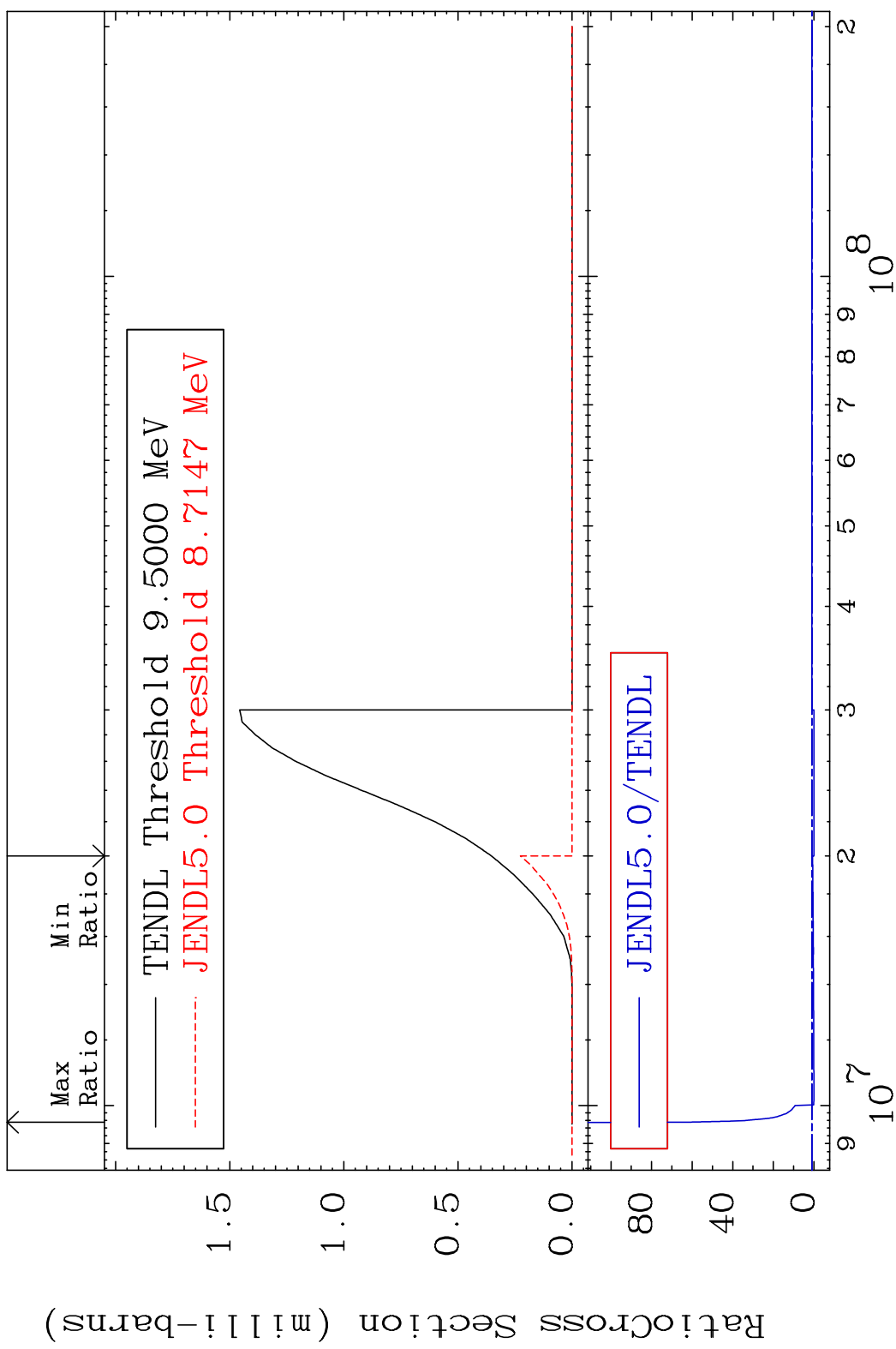
MAT 5646 (n, t):55-Cs-135g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 411.3 %



63 Incident Energy (eV) 56-Ba-137

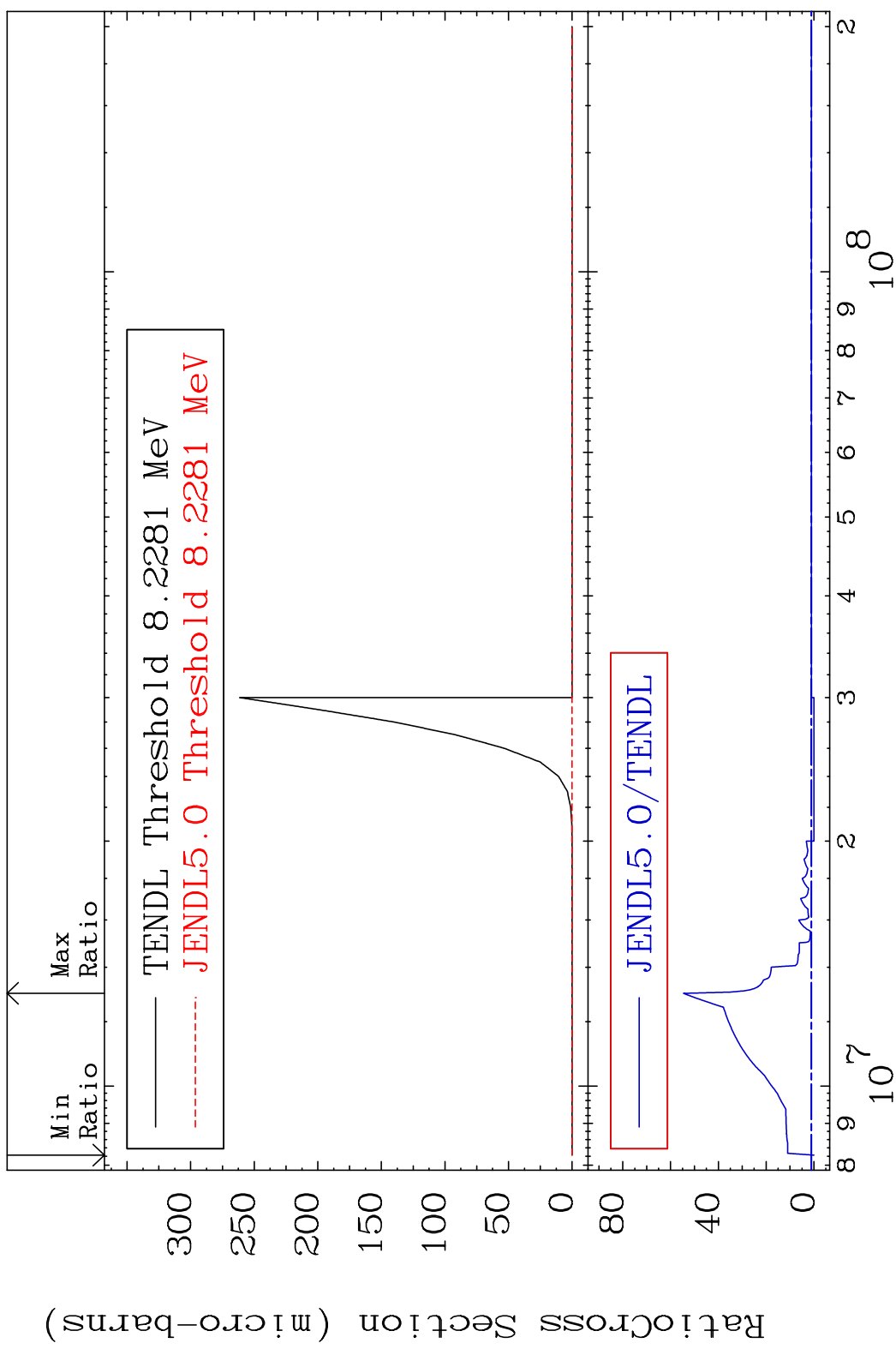


MAT 5646 (n, t):55-Cs-135m10 56-Ba-137  
 Radionuclide Production Cross Section to 6329. %



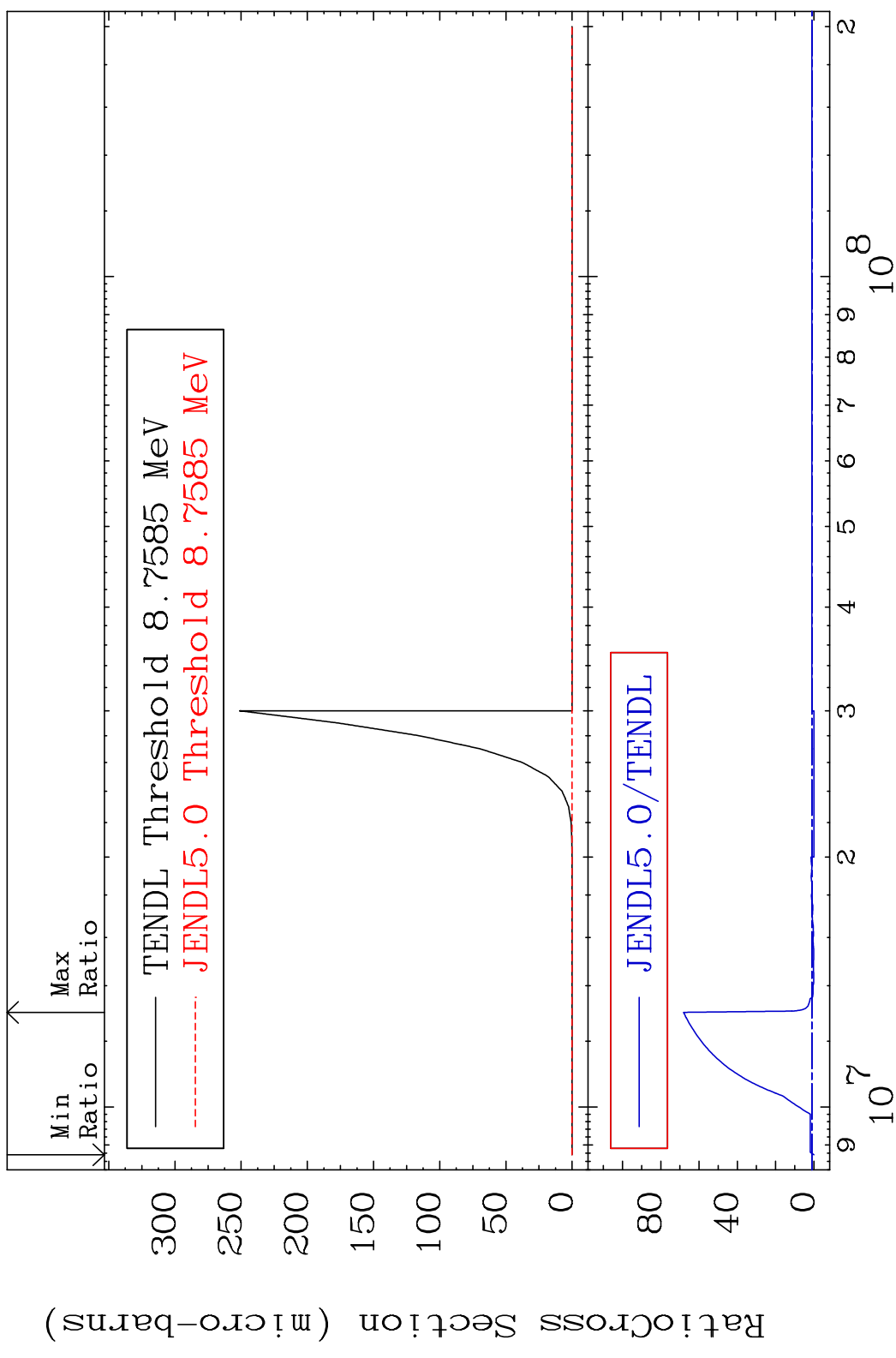
64 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, He-3) : 54-Xe-135g 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 5361. %



65 Incident Energy (eV) 56-Ba-137

MAT 5646 (n, He-3) : 54-Xe-135m2 56-Ba-137  
 Radionuclide Production Cross Section 180000 dpo 6714. %



66 Incident Energy (eV) 56-Ba-137