

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

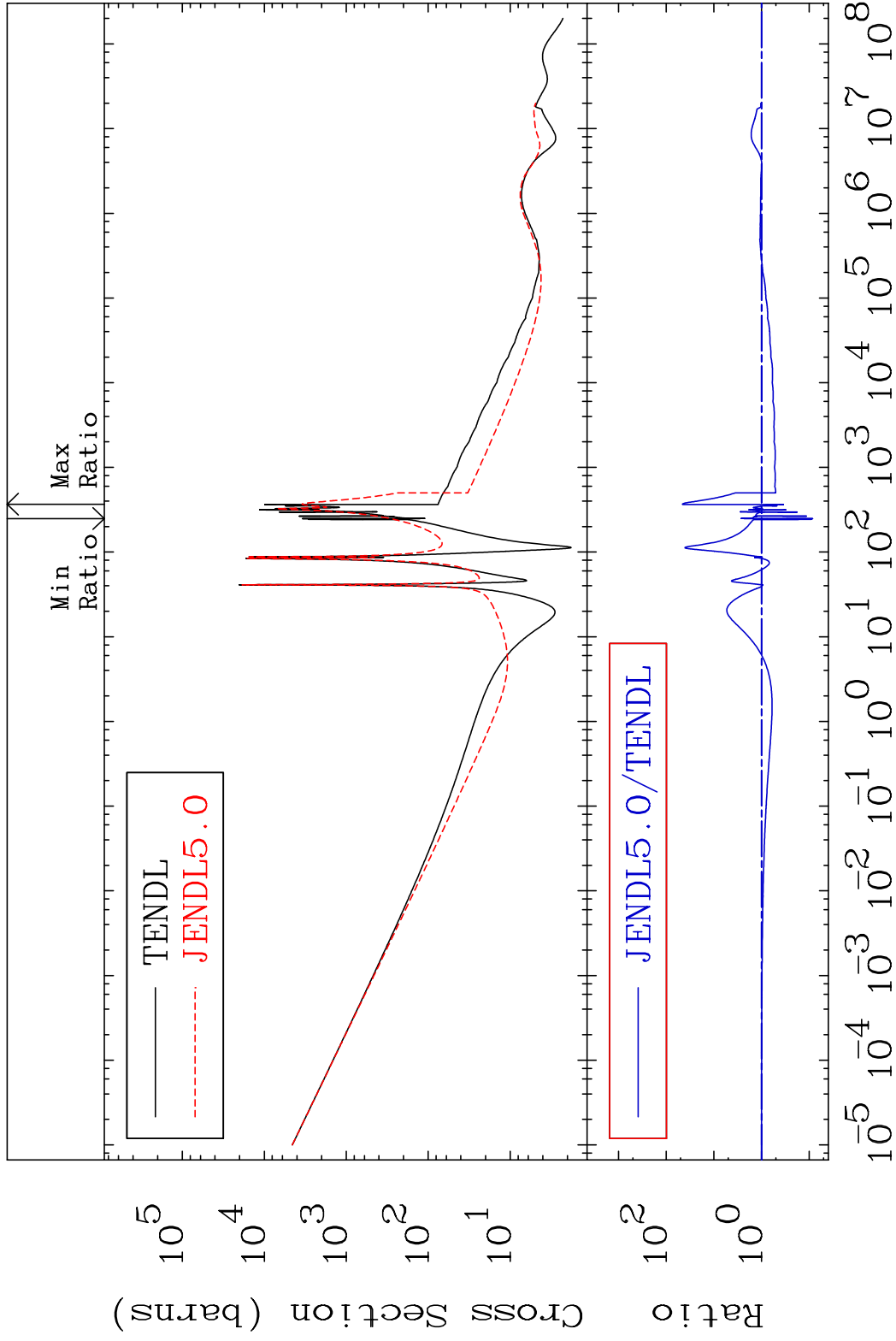
Press Mouse Button to Start

MAT 5931

Total

59-Pr-143

Cross Section -91.50 To 4484. %



1

Incident Energy (eV)

59-Pr-143

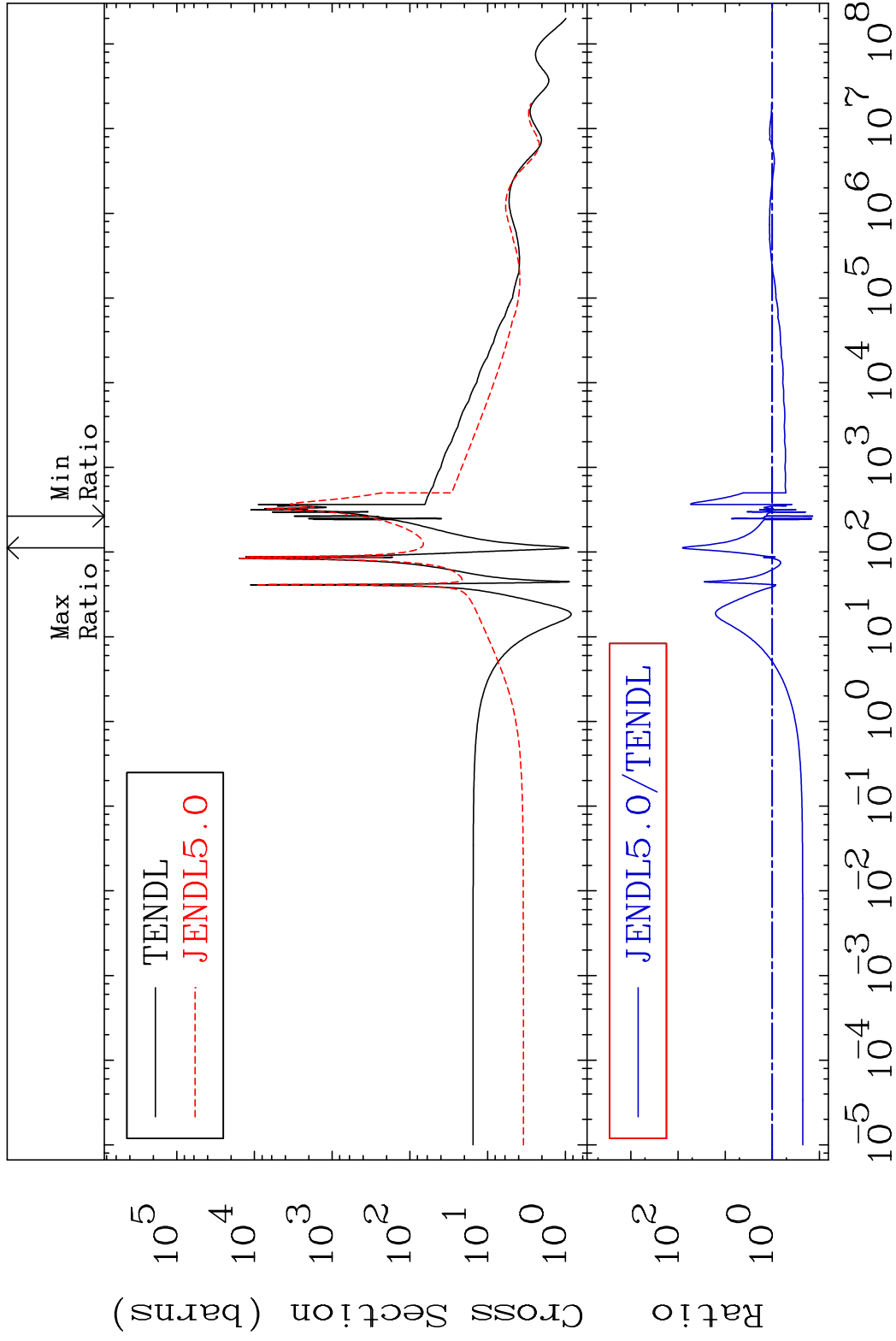
MAT 5931

Elastic

59-Pr-143

Cross Section

-86.01 To 7991. %

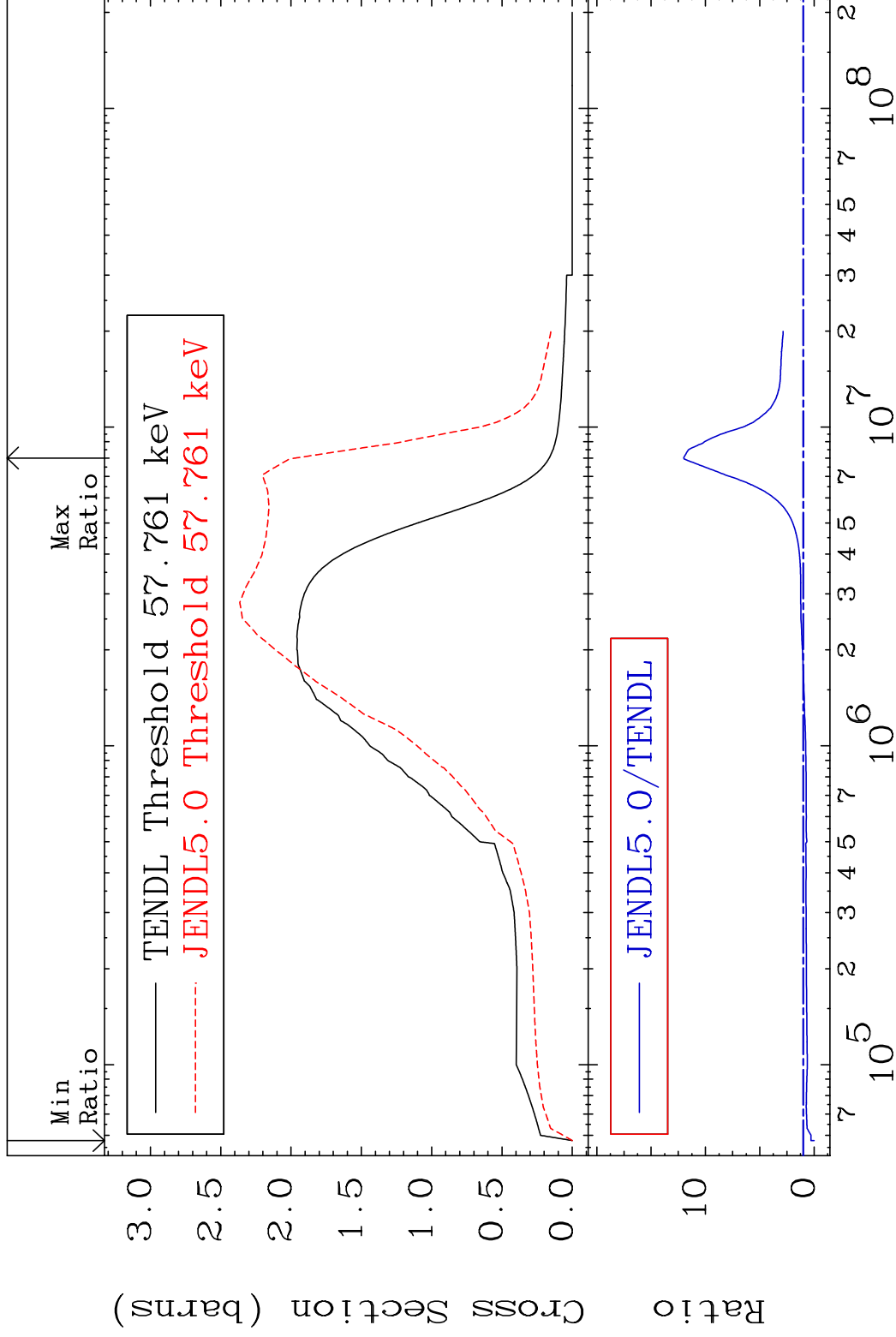


MAT 5931

Inelastic

59-Pr-143

Cross Section -100.0 To 1101. %



3

Incident Energy (eV)

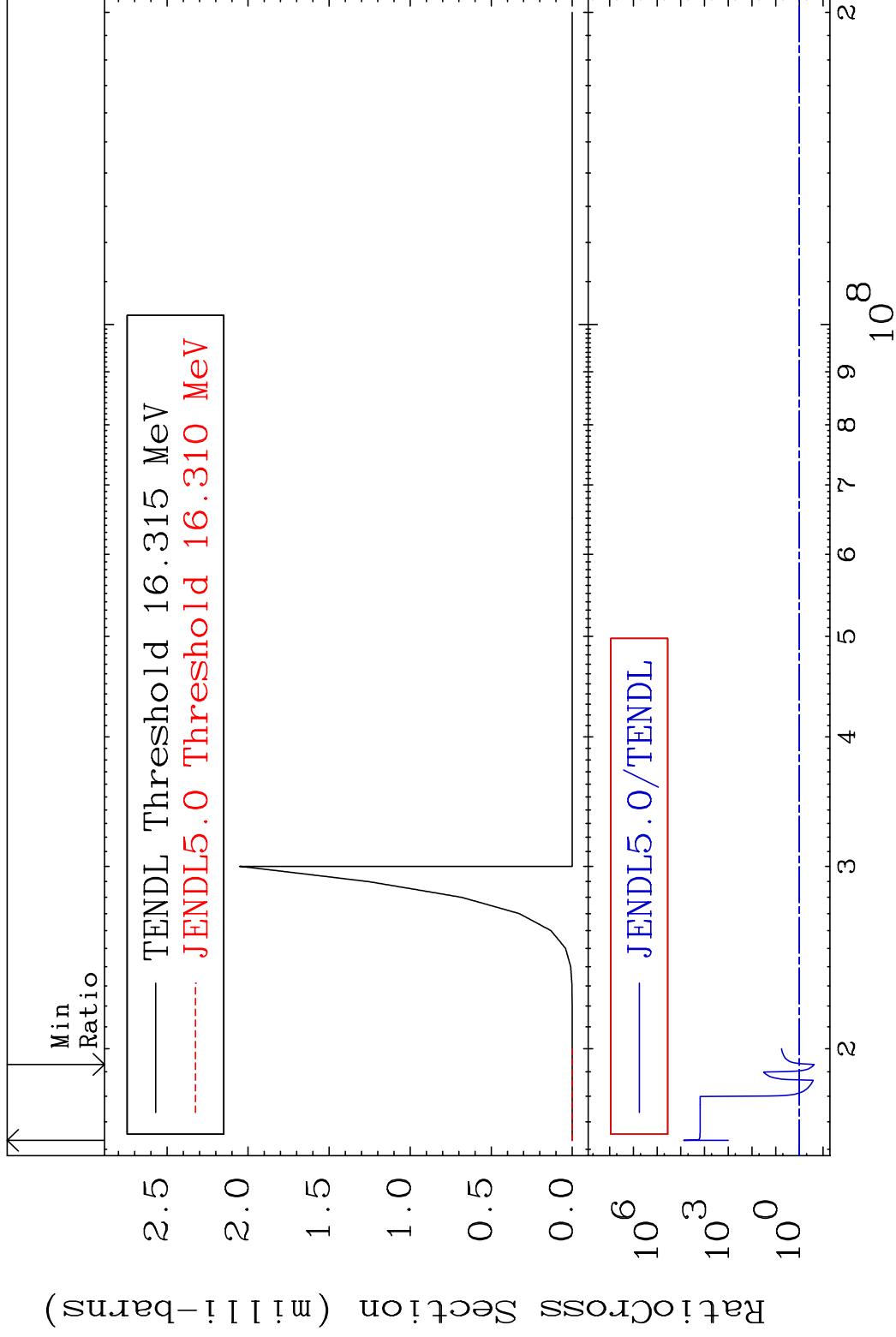
59-Pr-143

MAT 5931

(n,2n) d

59-Pr-143

Cross Section -76.02 To 9999. %

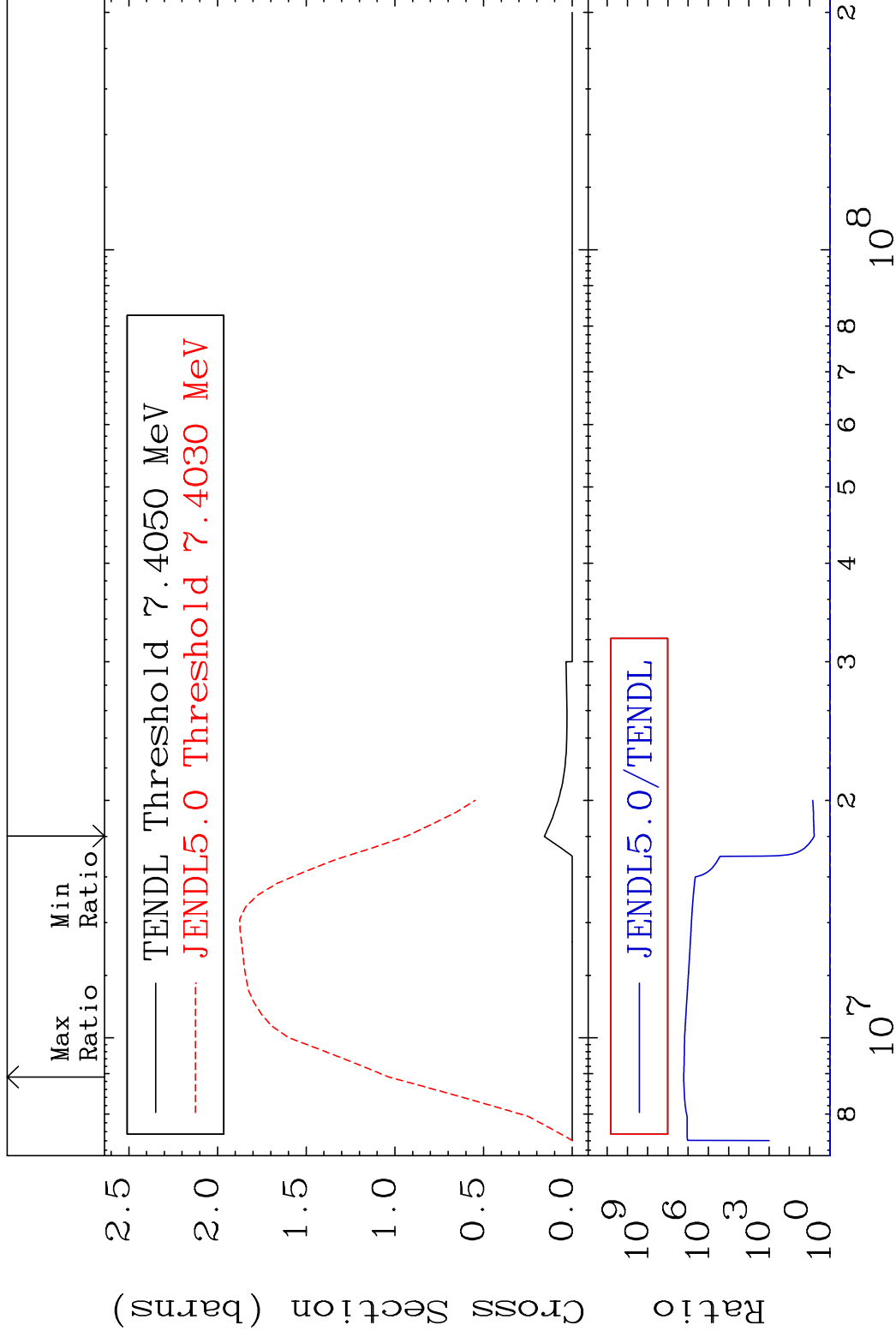


MAT 5931

(n,2n)

59-Pr-143

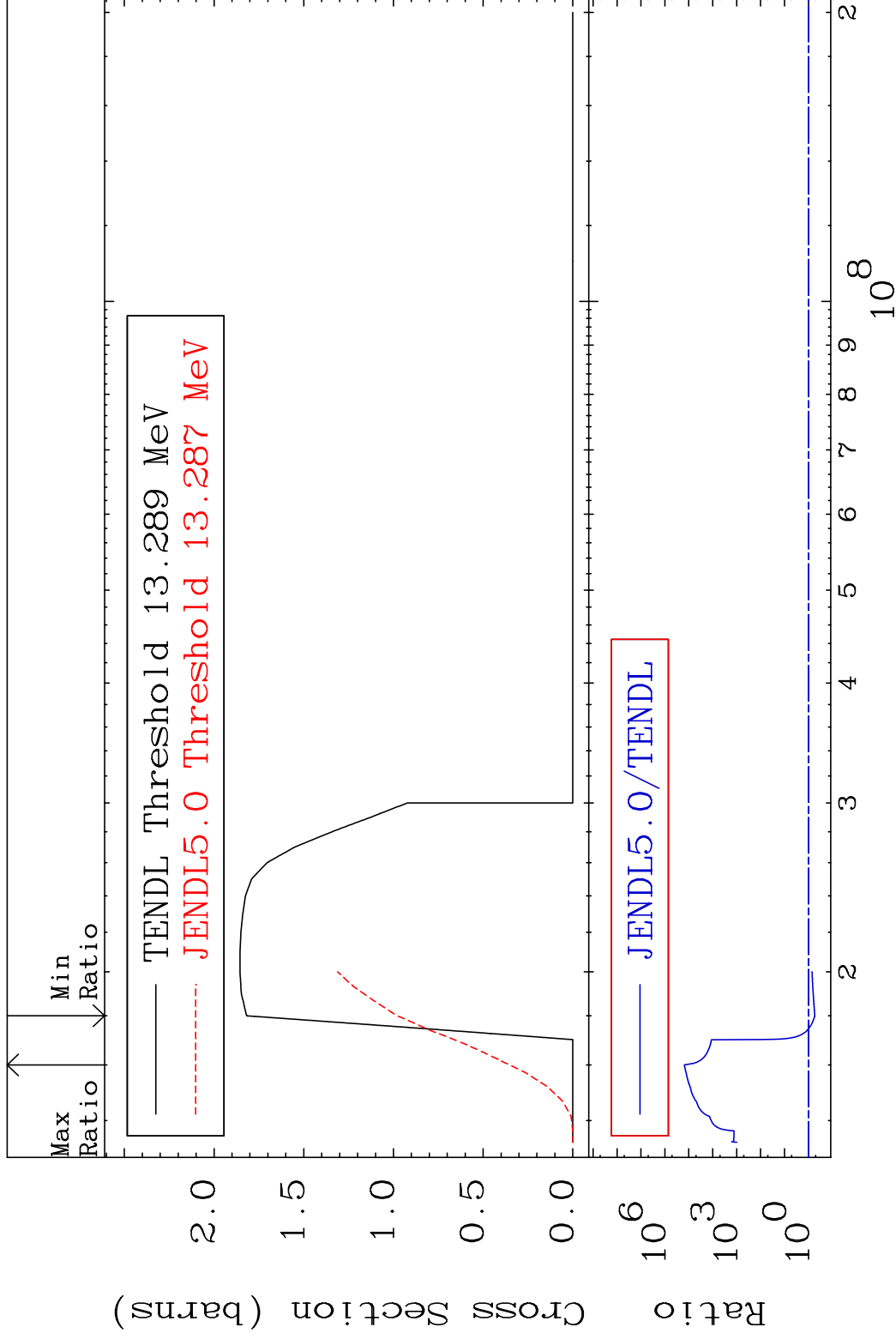
Cross Section 496.7 To 9999. %



5

Incident Energy (eV)

59-Pr-143

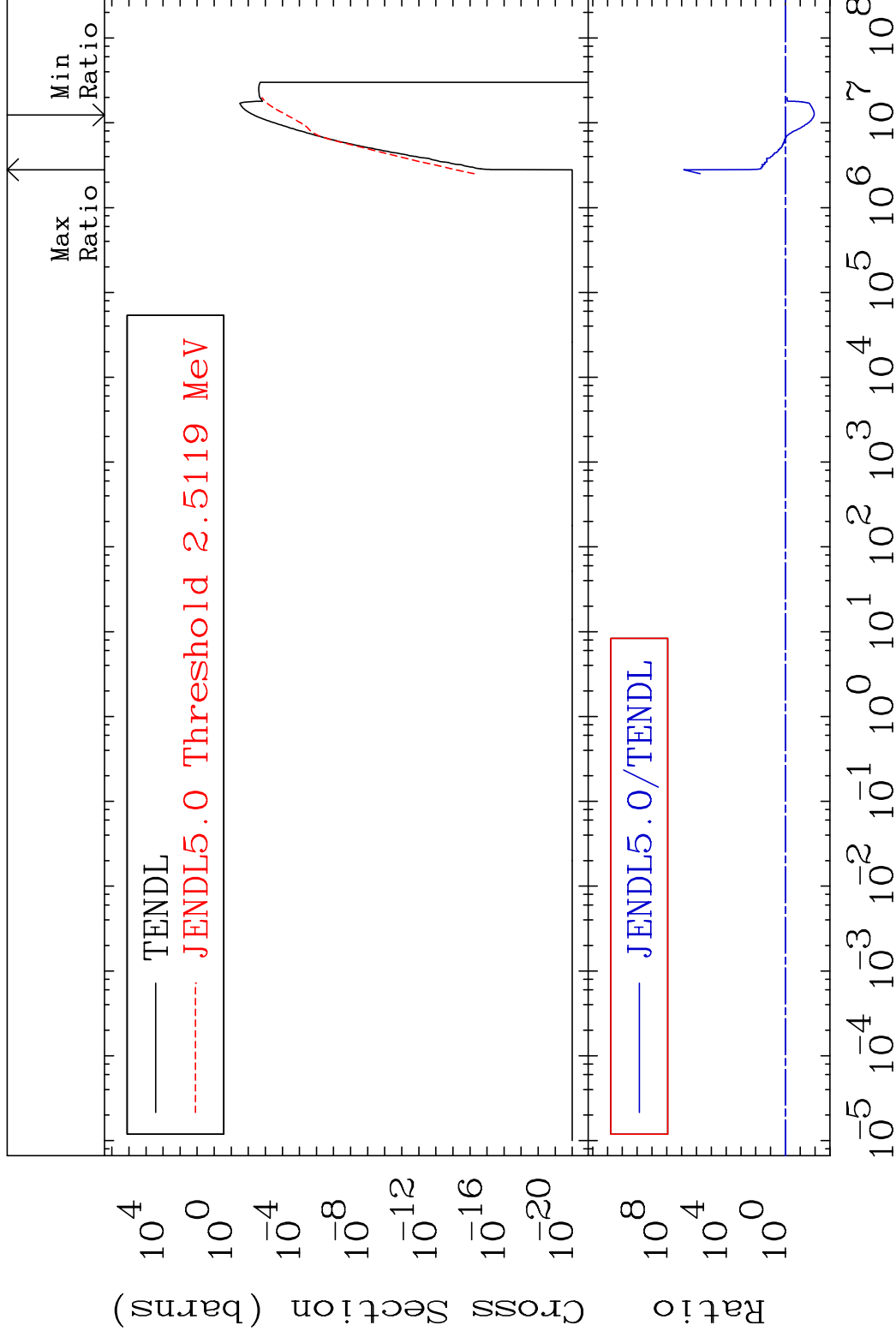


MAT 5931

(n, n') α

59-Pr-143

Cross Section -98.84 To 9999. %



7

Incident Energy (eV)

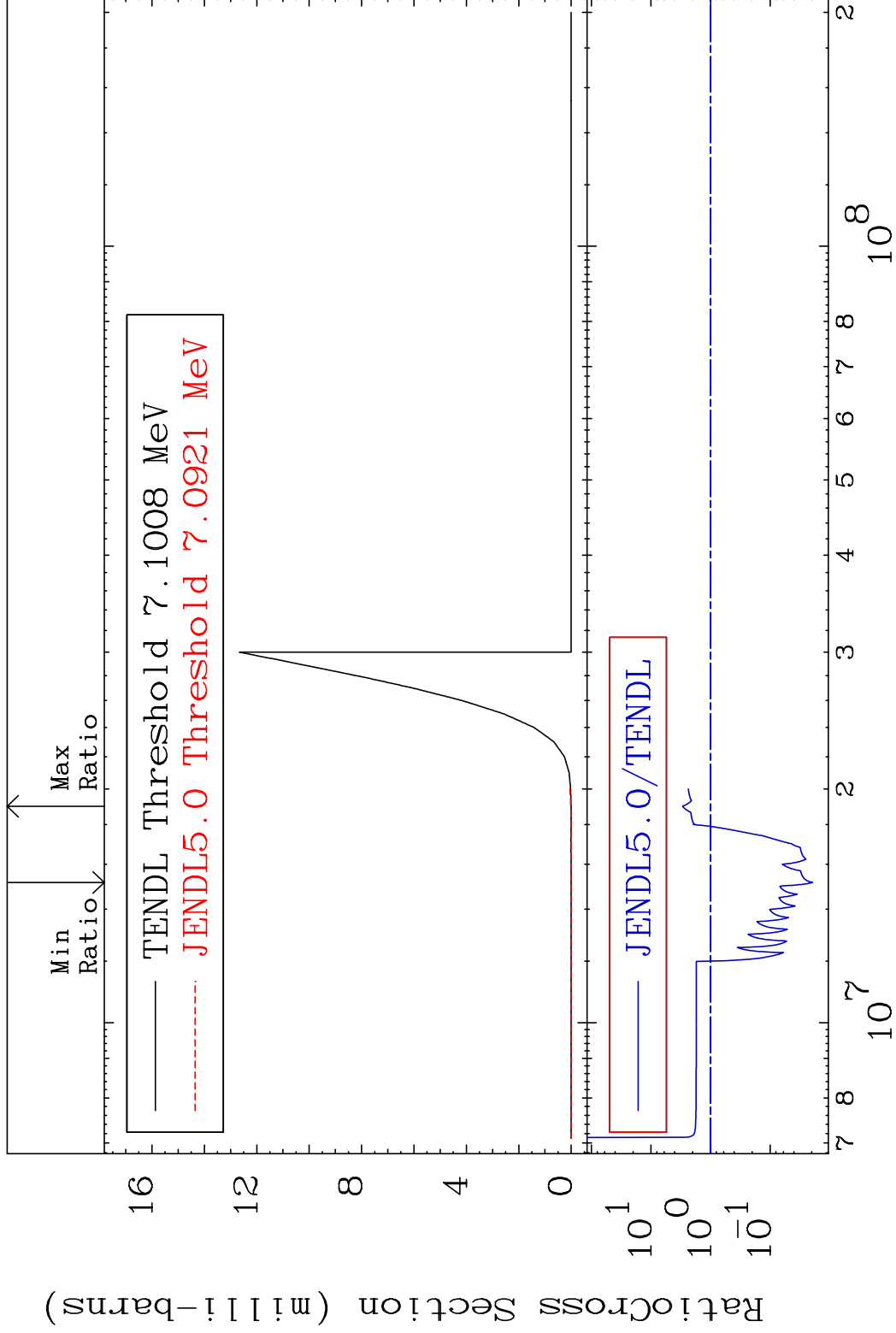
59-Pr-143

MAT 5931

(n,2n) α

59-Pr-143

Cross Section -98.06 To 197.8 %



8

Incident Energy (eV)

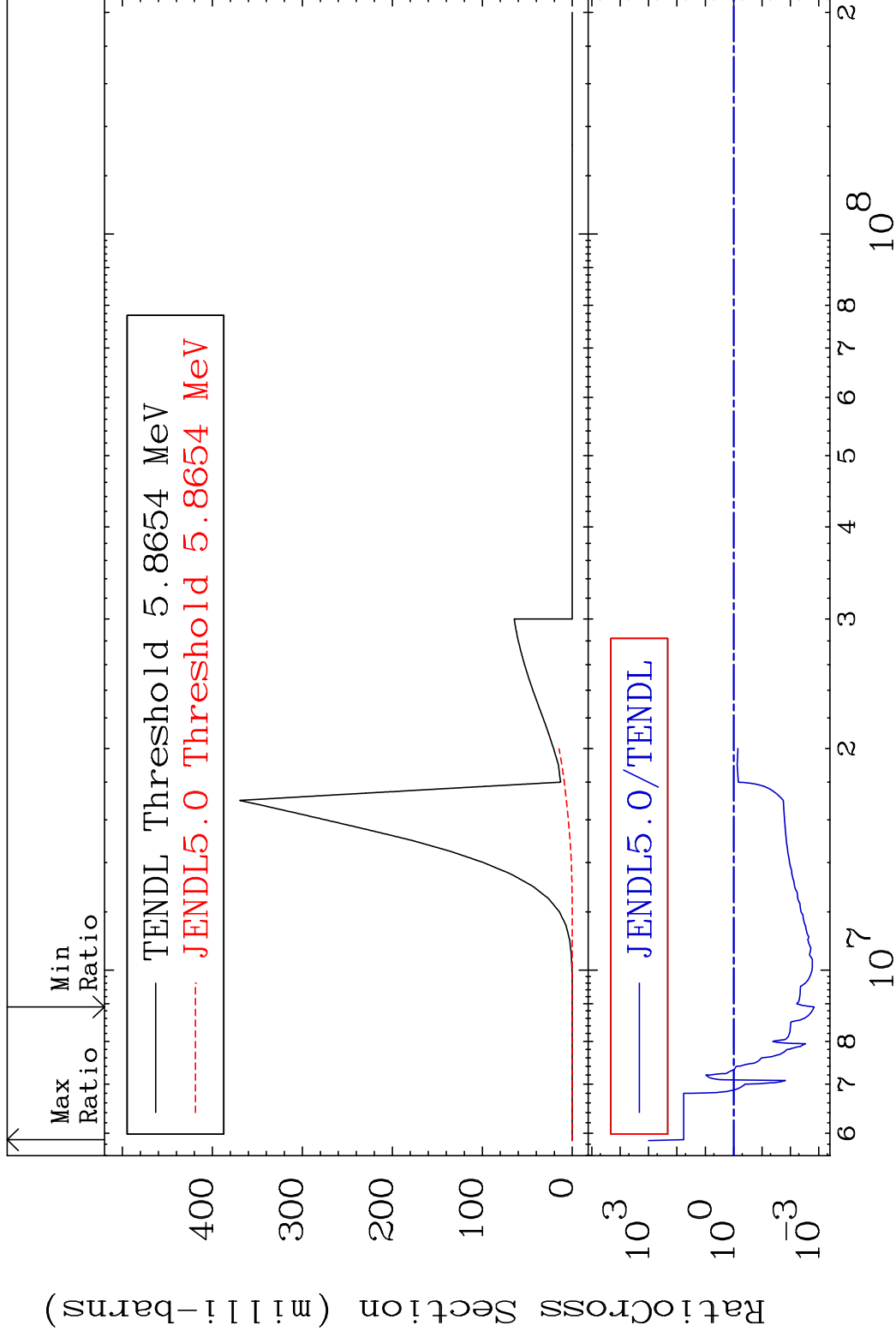
59-Pr-143

MAT 5931

(n, n') p

59-Pr-143

Cross Section -99.85 To 5700. %



9

Incident Energy (eV)

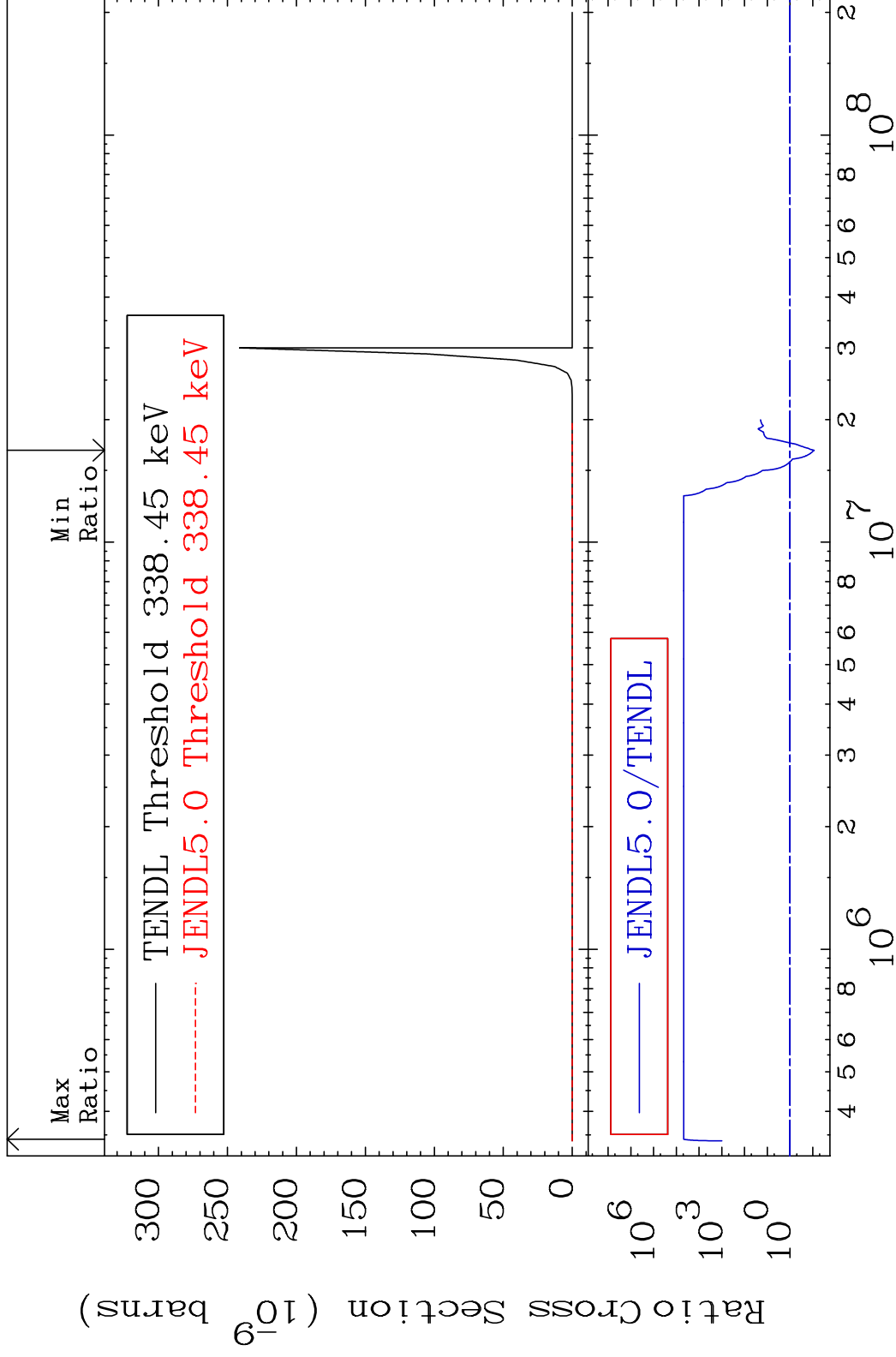
59-Pr-143

MAT 5931

(n, n') 2α

59-Pr-143

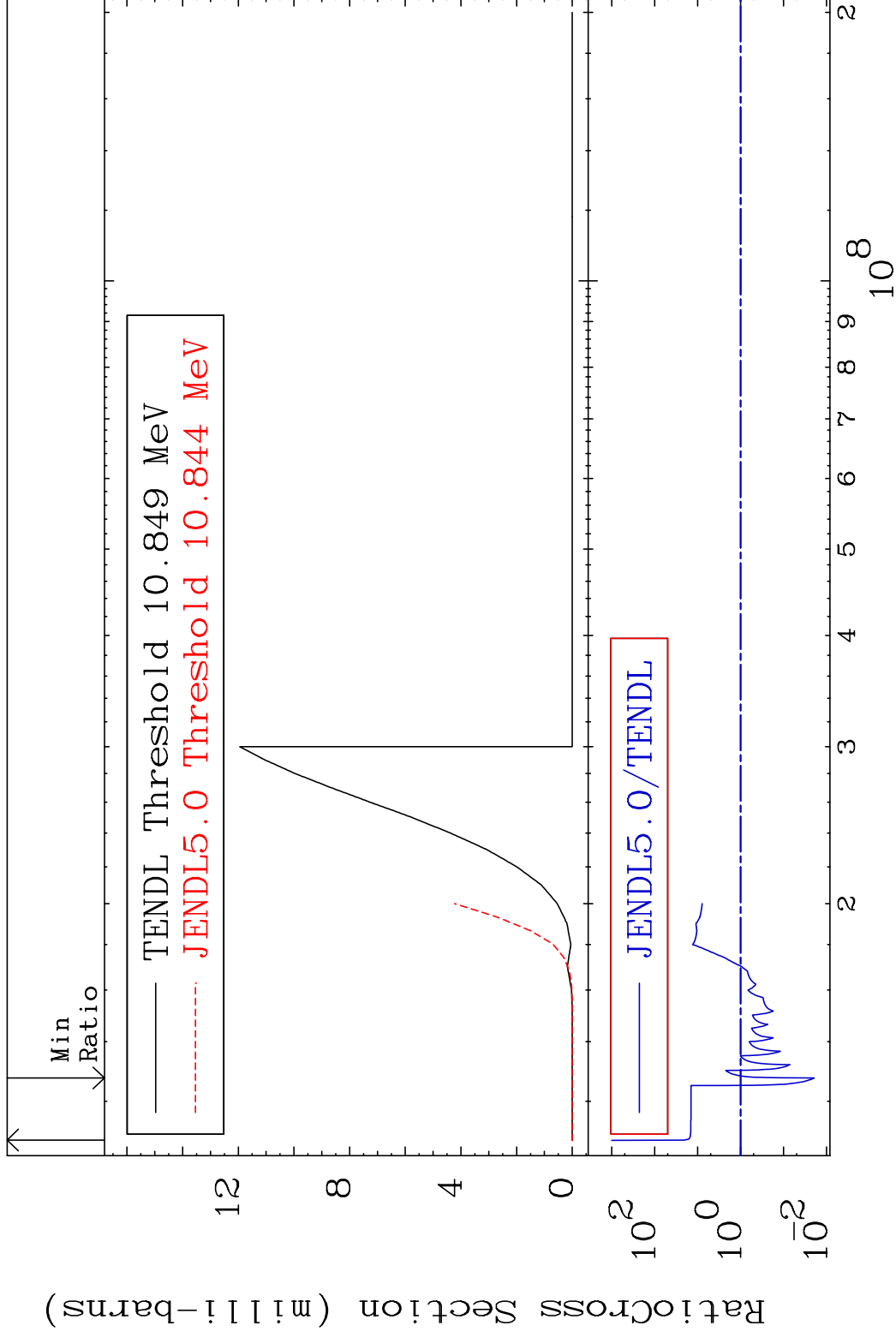
Cross Section -91.26 To 9999. %



10

Incident Energy (eV)

59-Pr-143

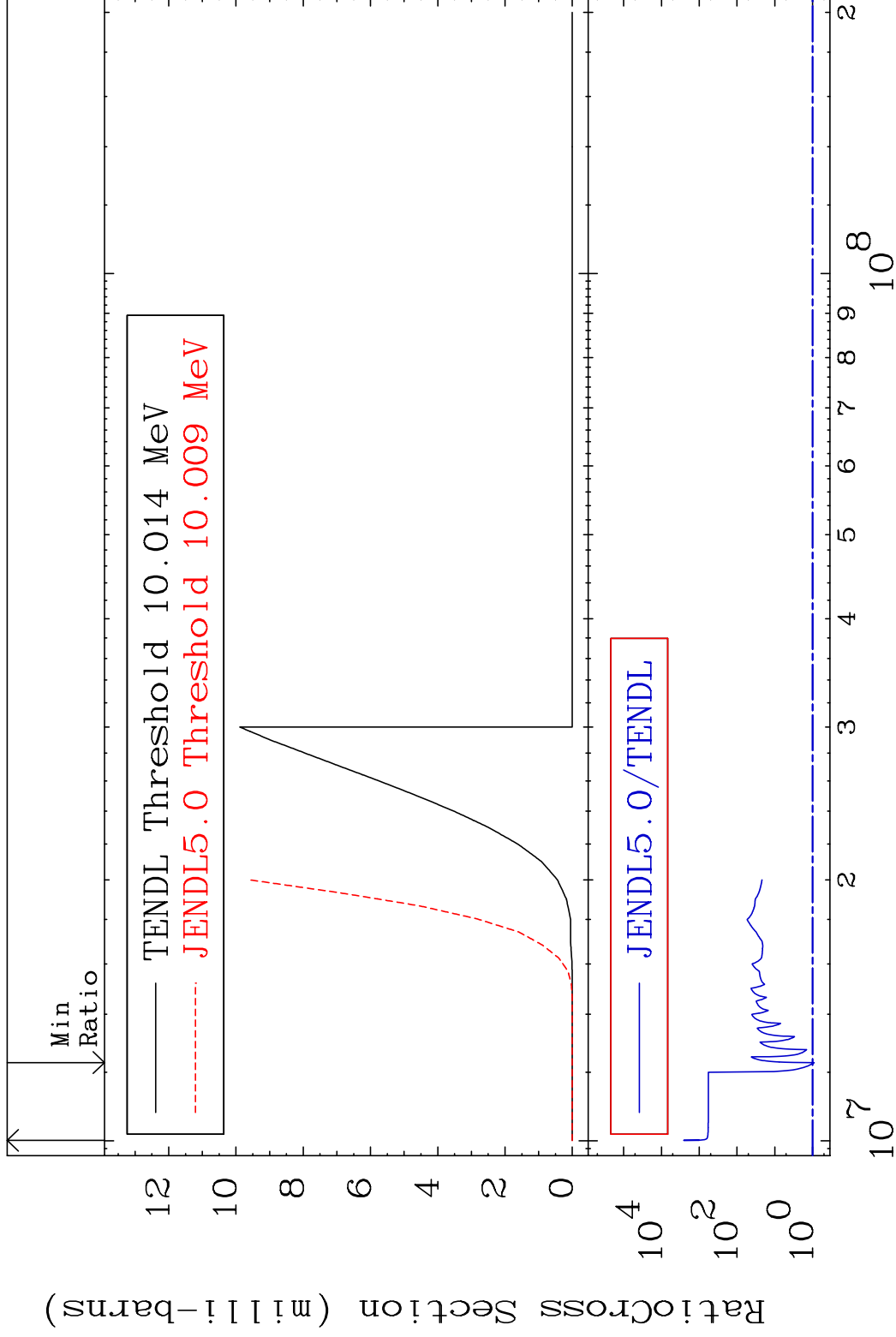


MAT 5931

(n, n') t

59-Pr-143

Cross Section -9.166 To 9999. %



12

Incident Energy (eV)

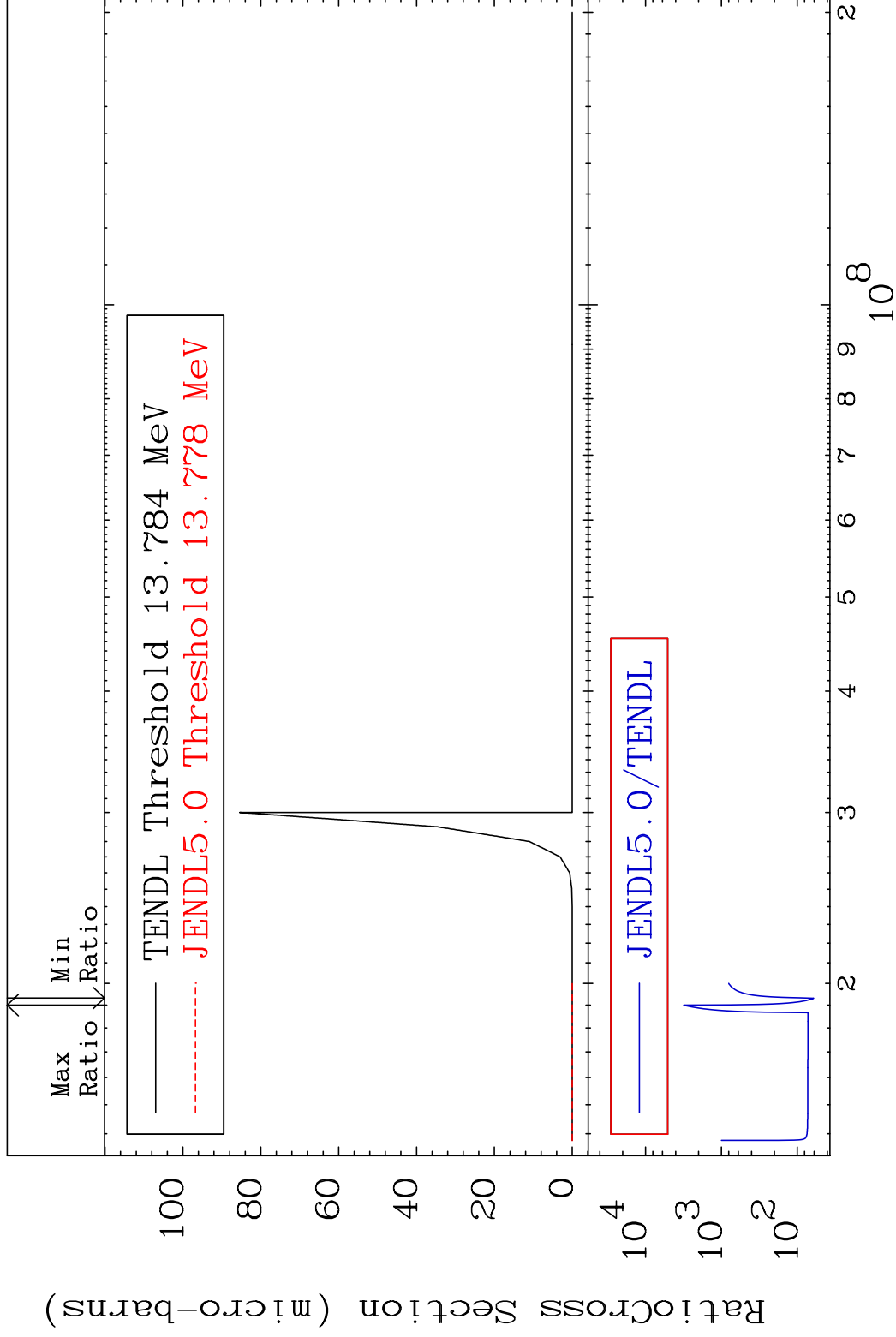
59-Pr-143

MAT 5931

(n,n') He-3

59-Pr-143

Cross Section 5893. To 9999. %

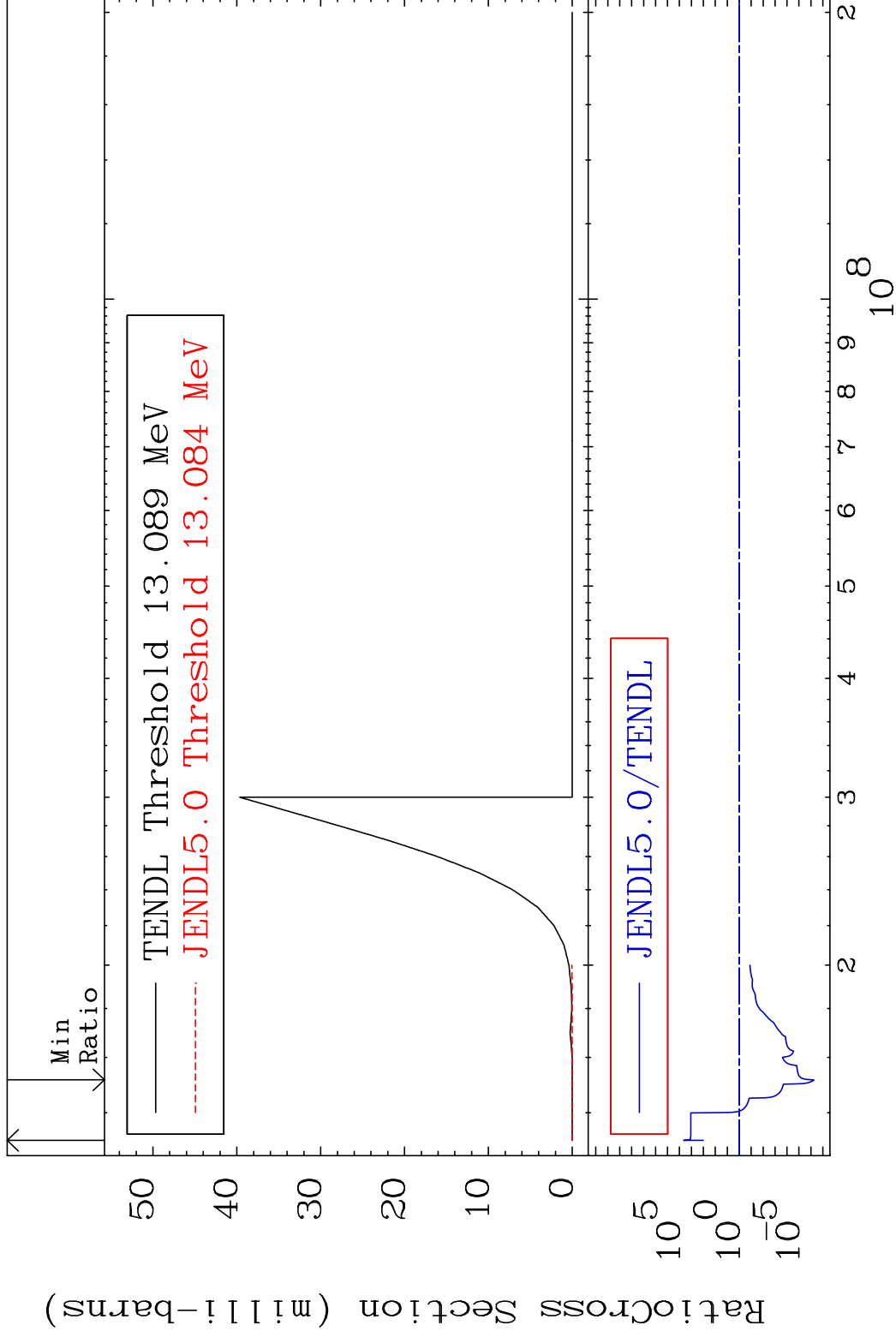


MAT 5931

(n,2n) p

59-Pr-143

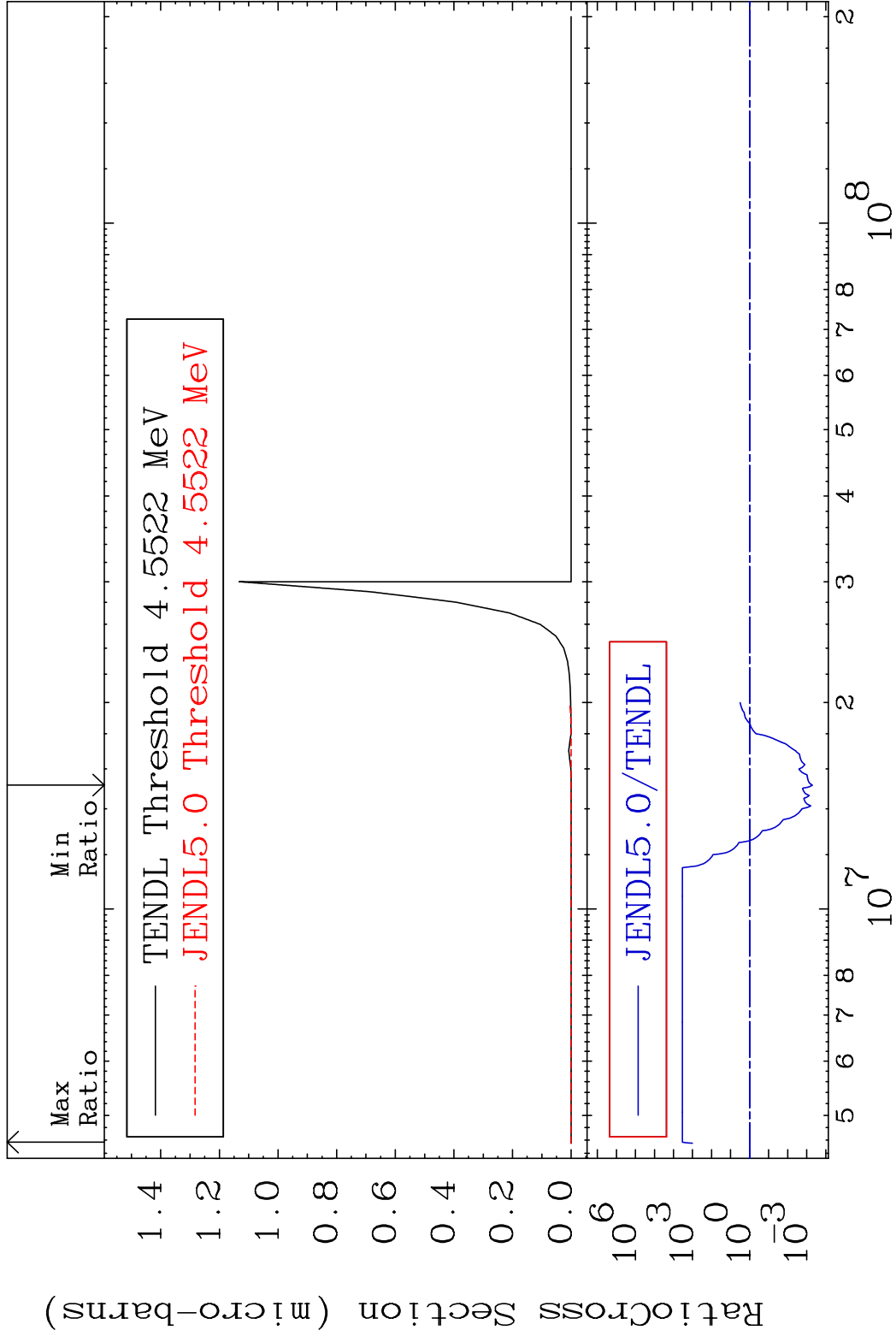
Cross Section -100.0 To 9999. %



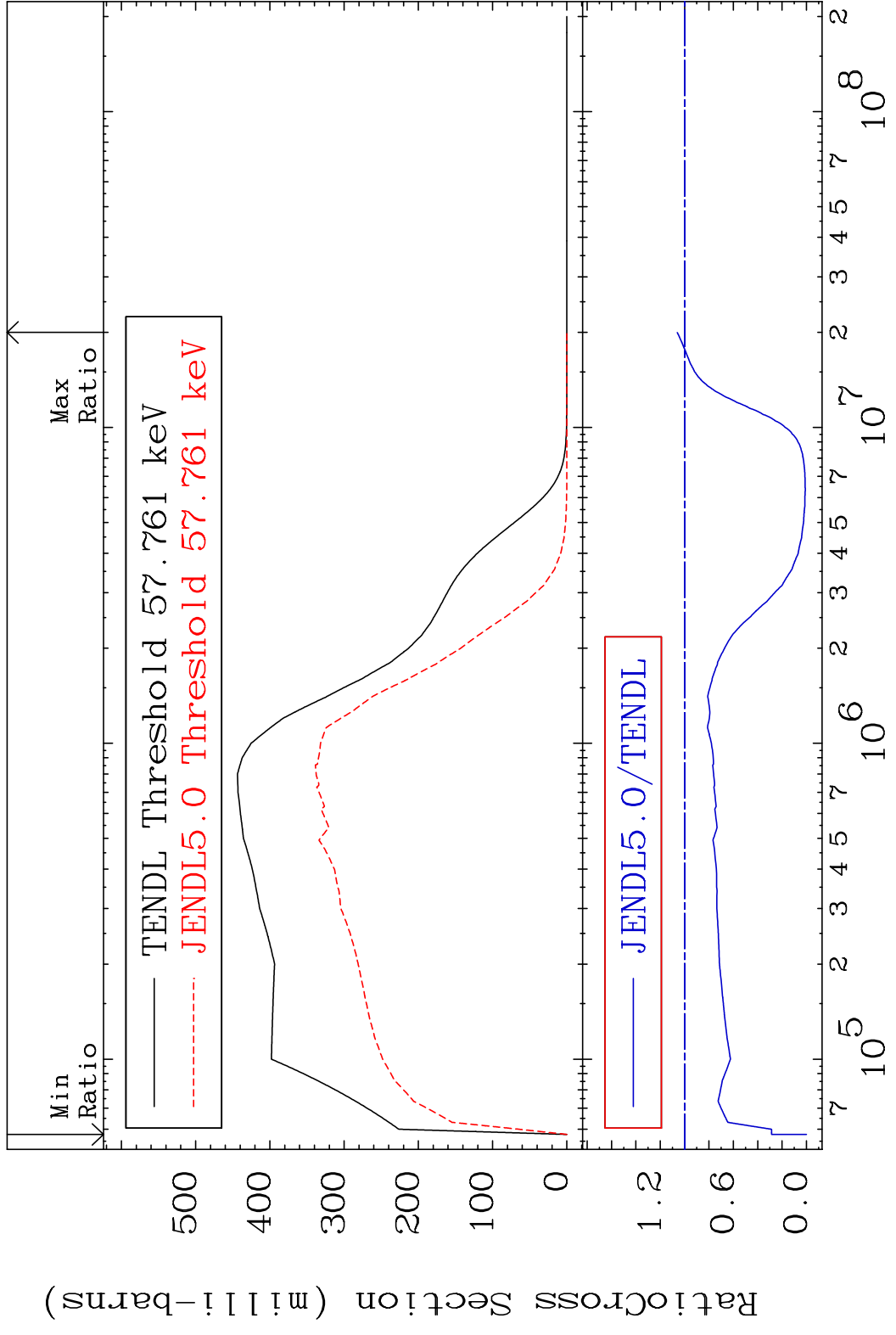
MAT 5931

(n,n') p α 59-Pr-143

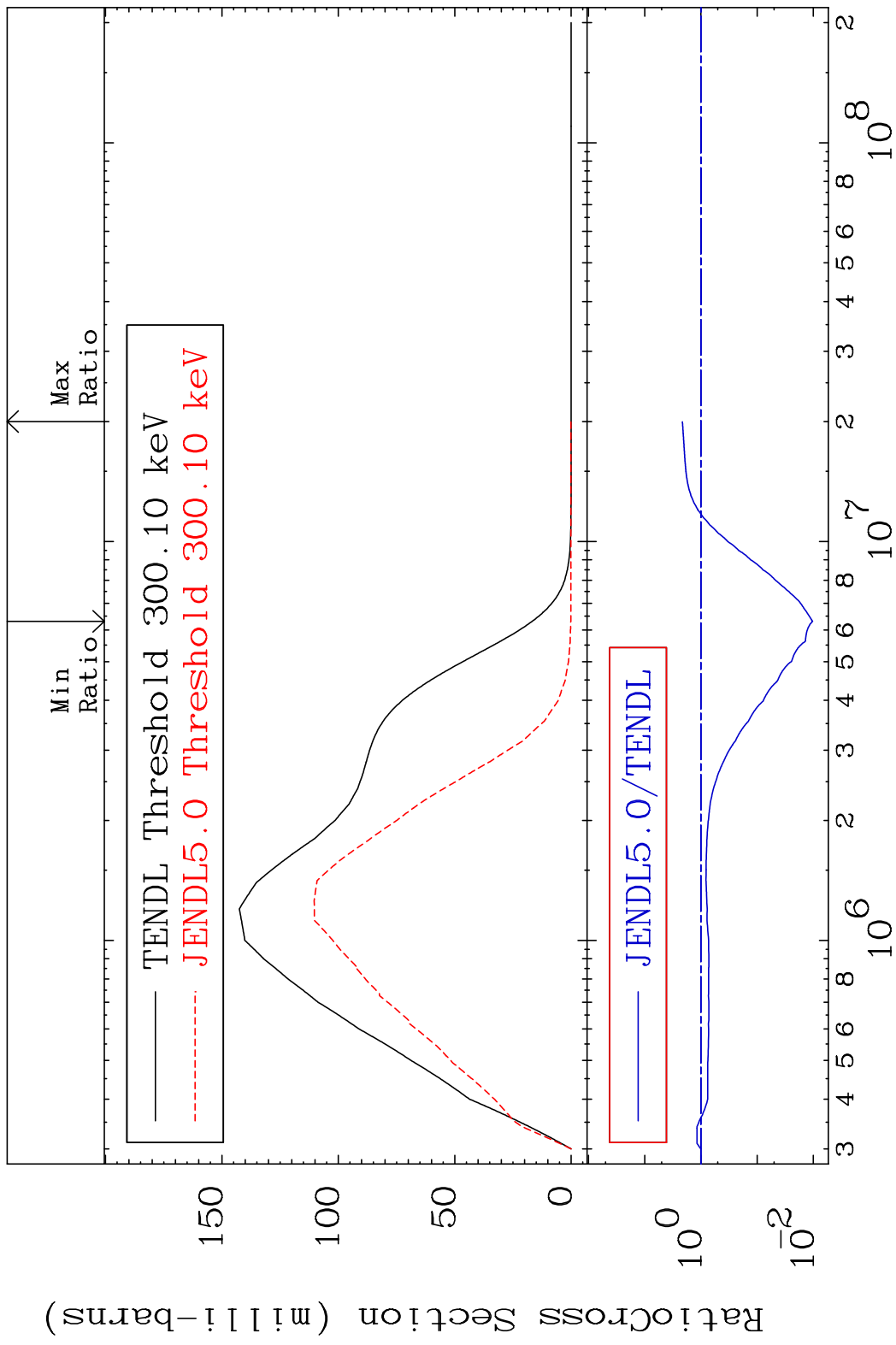
Cross Section -99.95 To 9999. %



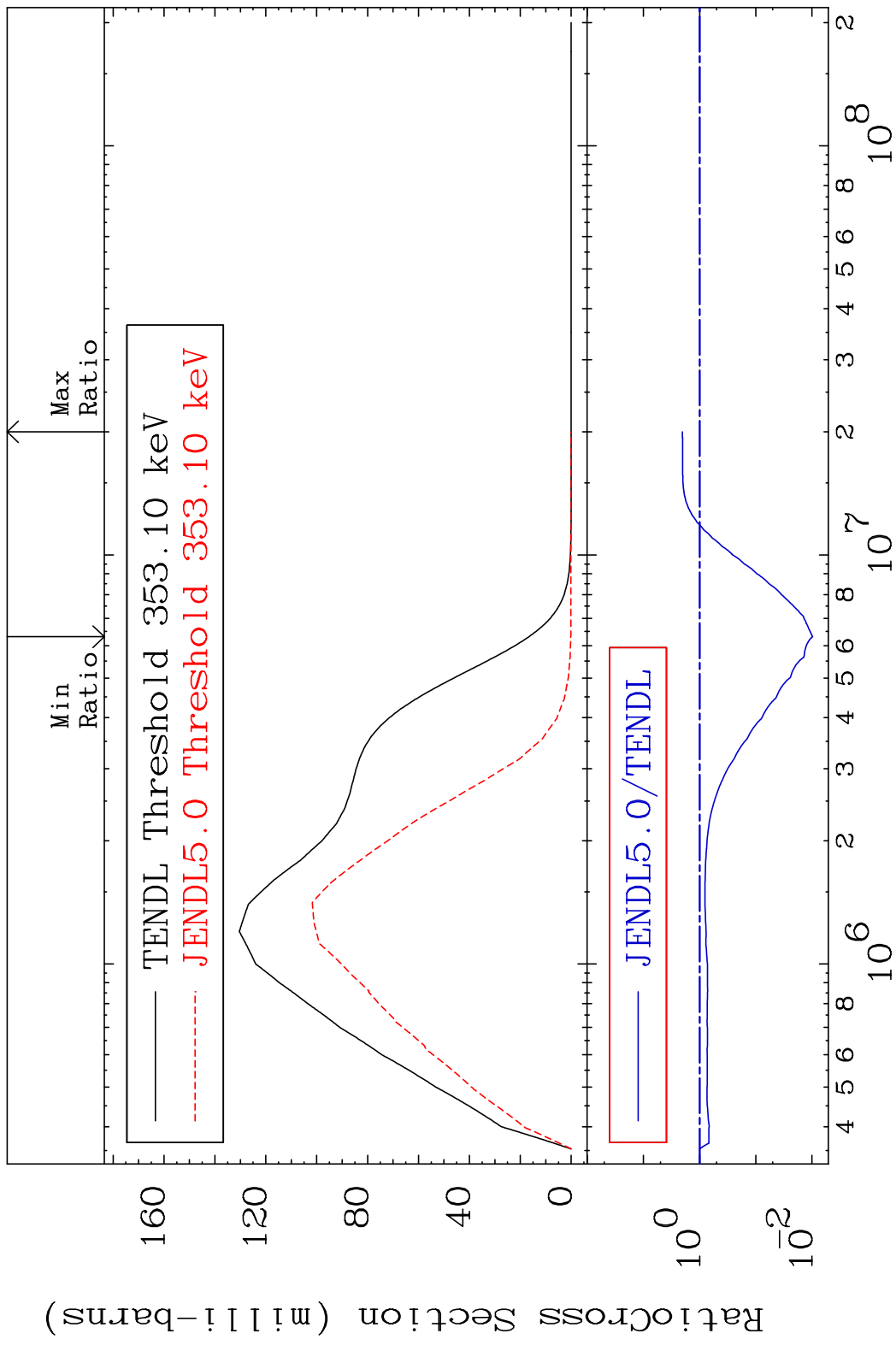
MAT 5931 MT= 51 (n,n') Level 59-Pr-143
 Cross Section -100.0 To 6.095 %



MAT 5931 MT= 52 (n, n') Level 59-Pr-143
 Cross Section -98.97 To 114.0 %

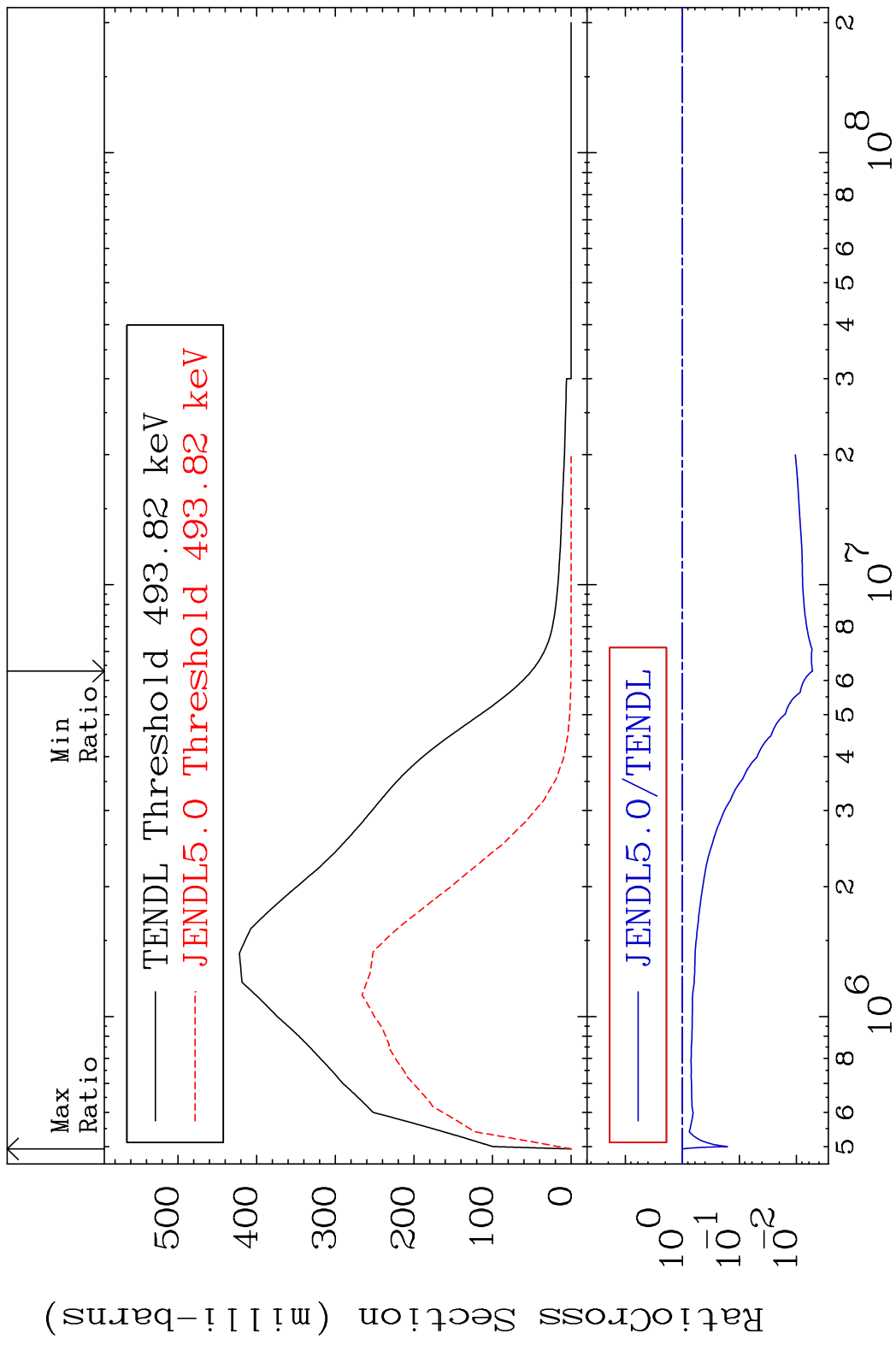


MAT 5931 MT= 53 (n, n') Level 59-Pr-143
 Cross Section -99.02 To 103.2 %

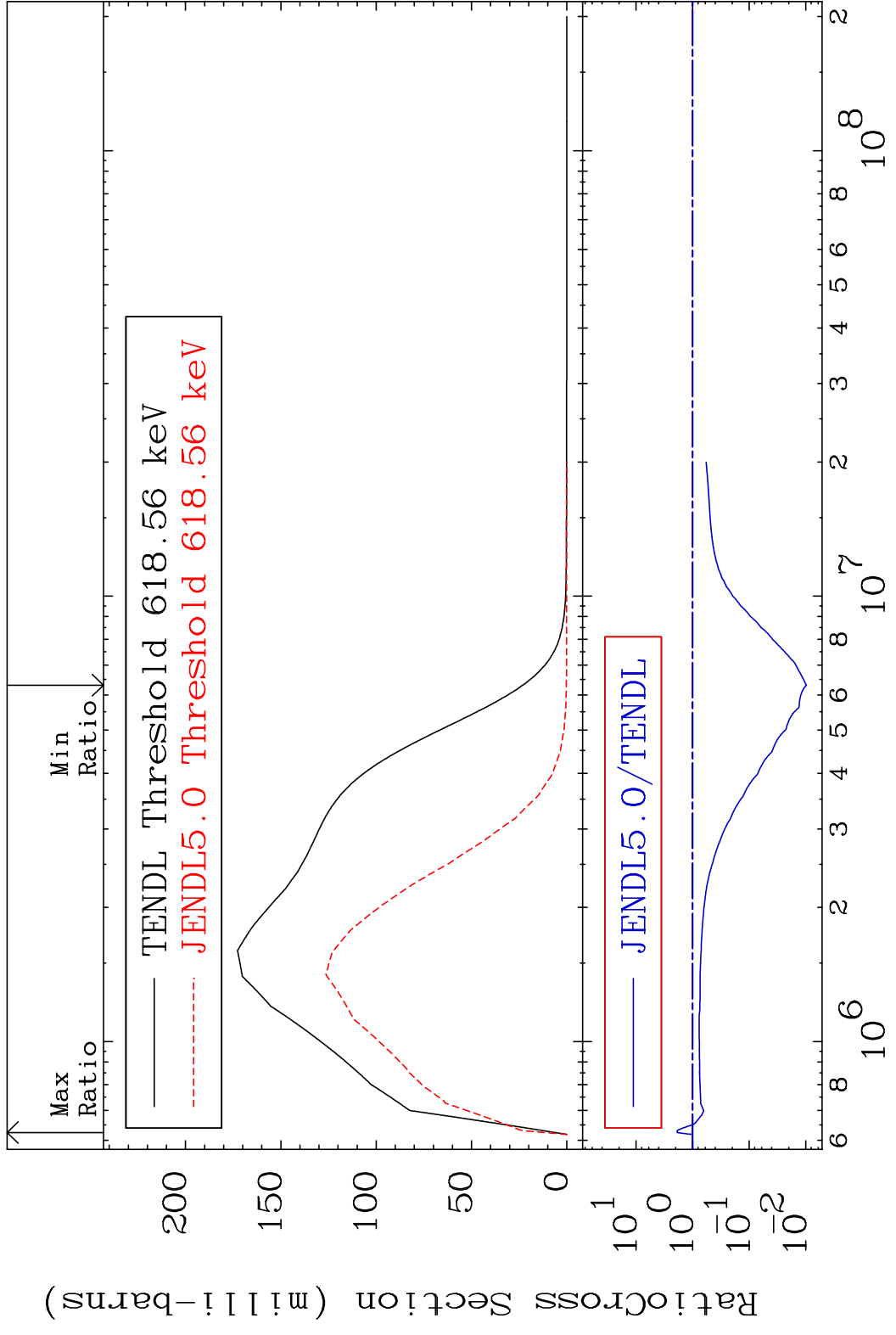


18 Incident Energy (eV) 59-Pr-143

MAT 5931 MT= 54 (n,n') Level 59-Pr-143
 Cross Section -99.48 To 0.000 %

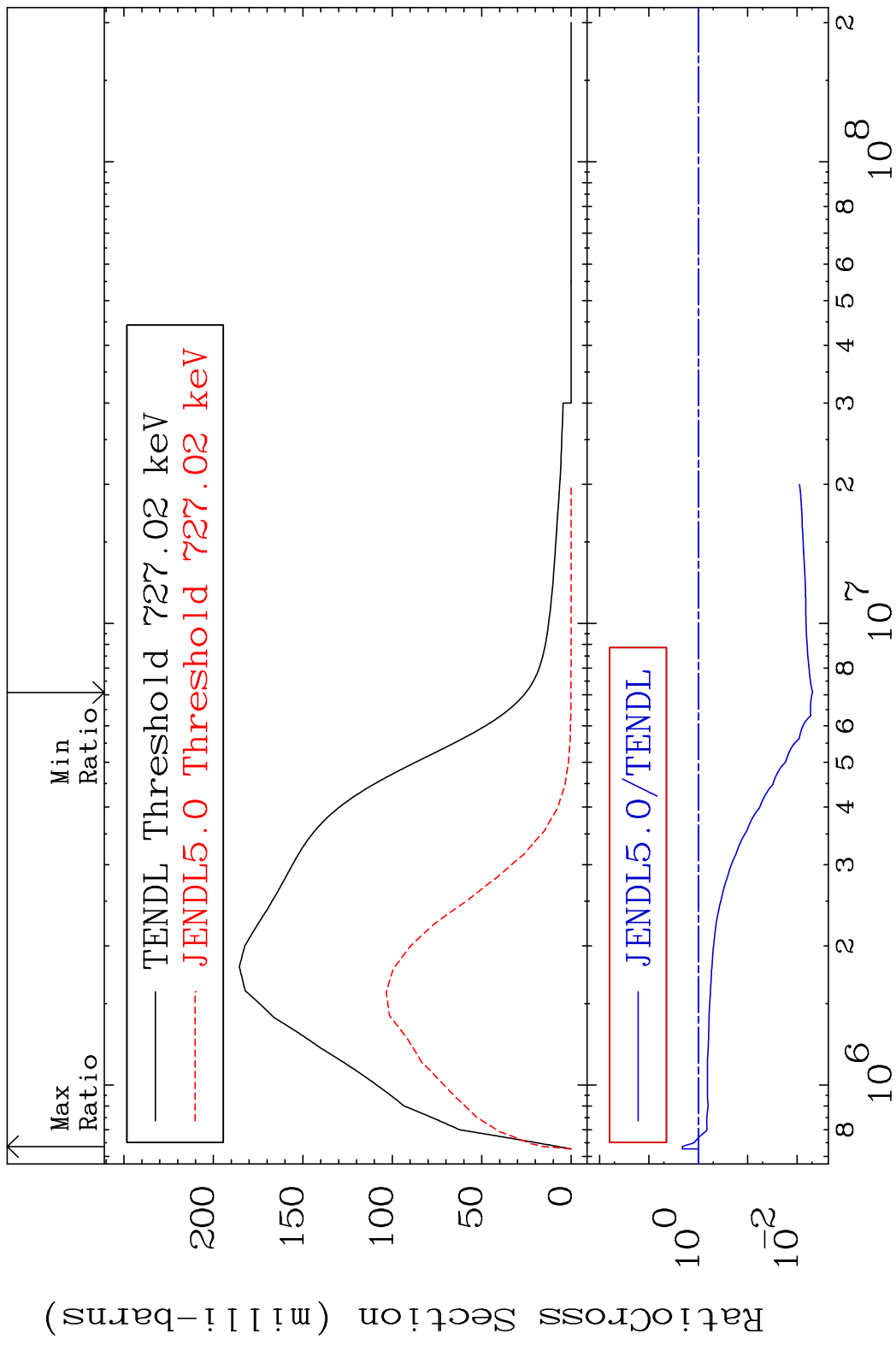


MAT 5931 MT= 55 (n,n') Level 59-Pr-143
 Cross Section -99.03 To 87.82 %

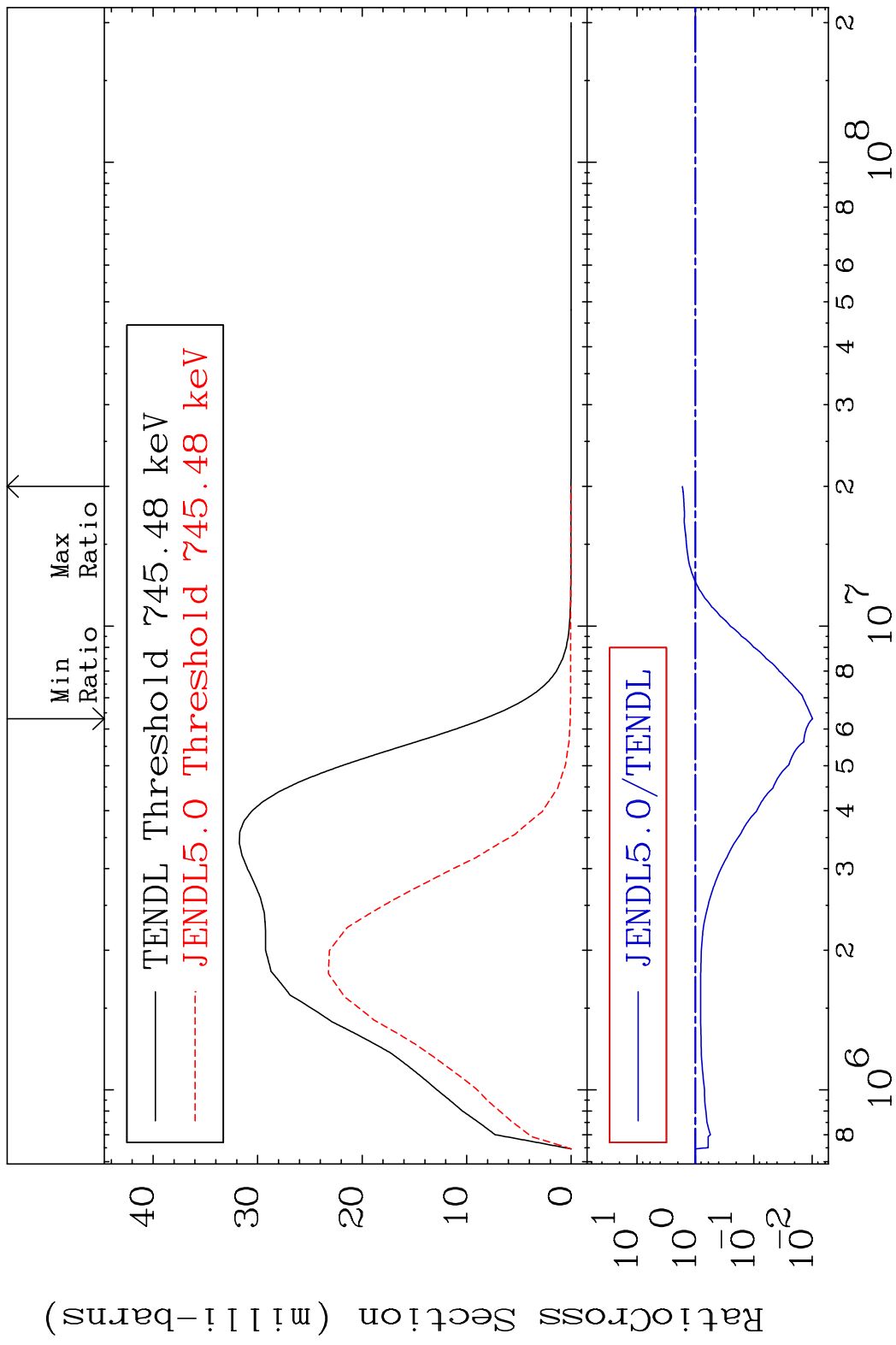


20 Incident Energy (eV) 59-Pr-143

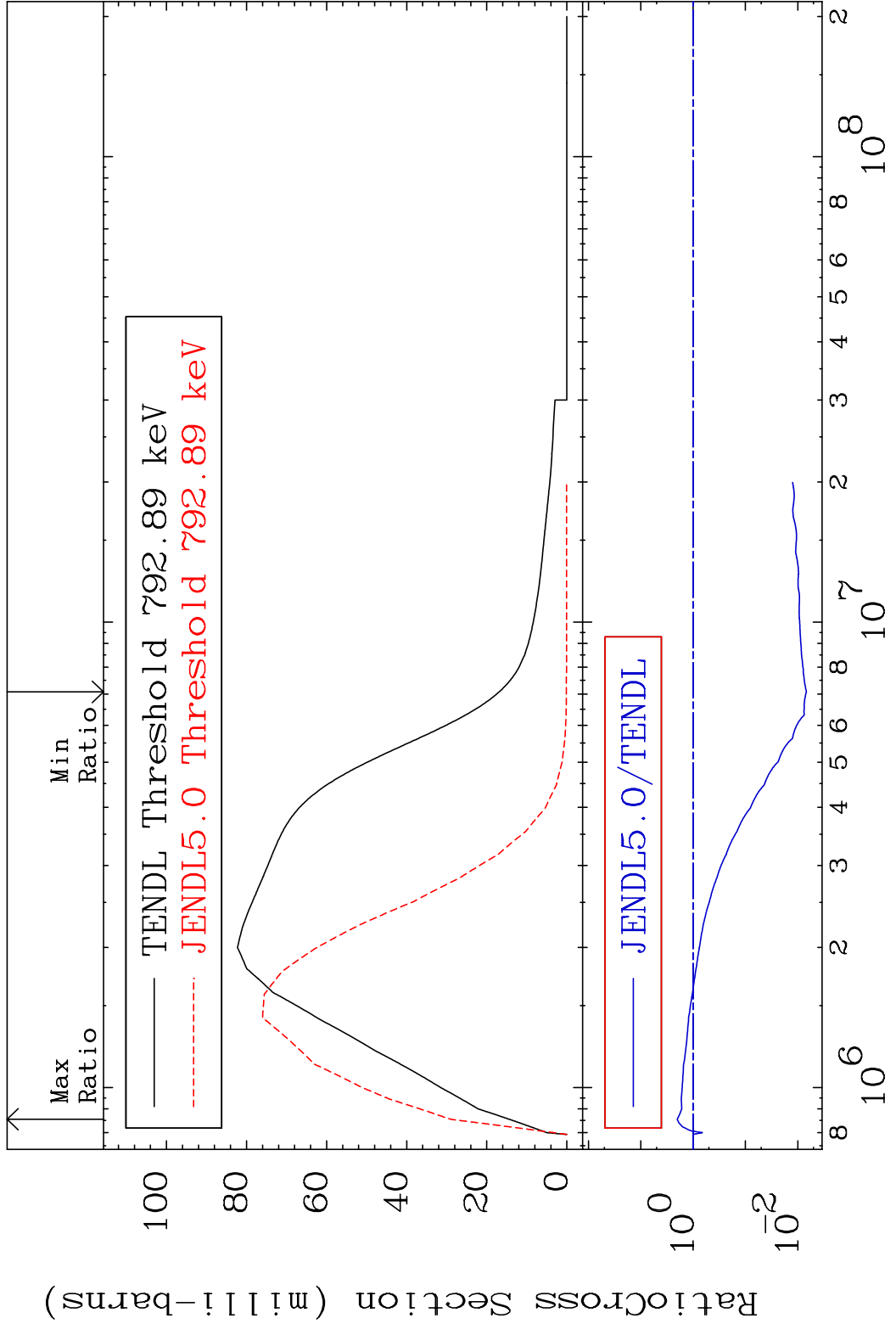
MAT 5931 MT= 56 (n,n') Level 59-Pr-143
 Cross Section -99.51 To 110.8 %



MAT 5931 MT= 57 (n, n') Level 59-Pr-143
 Cross Section -99.02 To 67.12 %



MAT 5931 MT= 58 (n,n') Level 59-Pr-143
 Cross Section -99.32 To 101.7 %

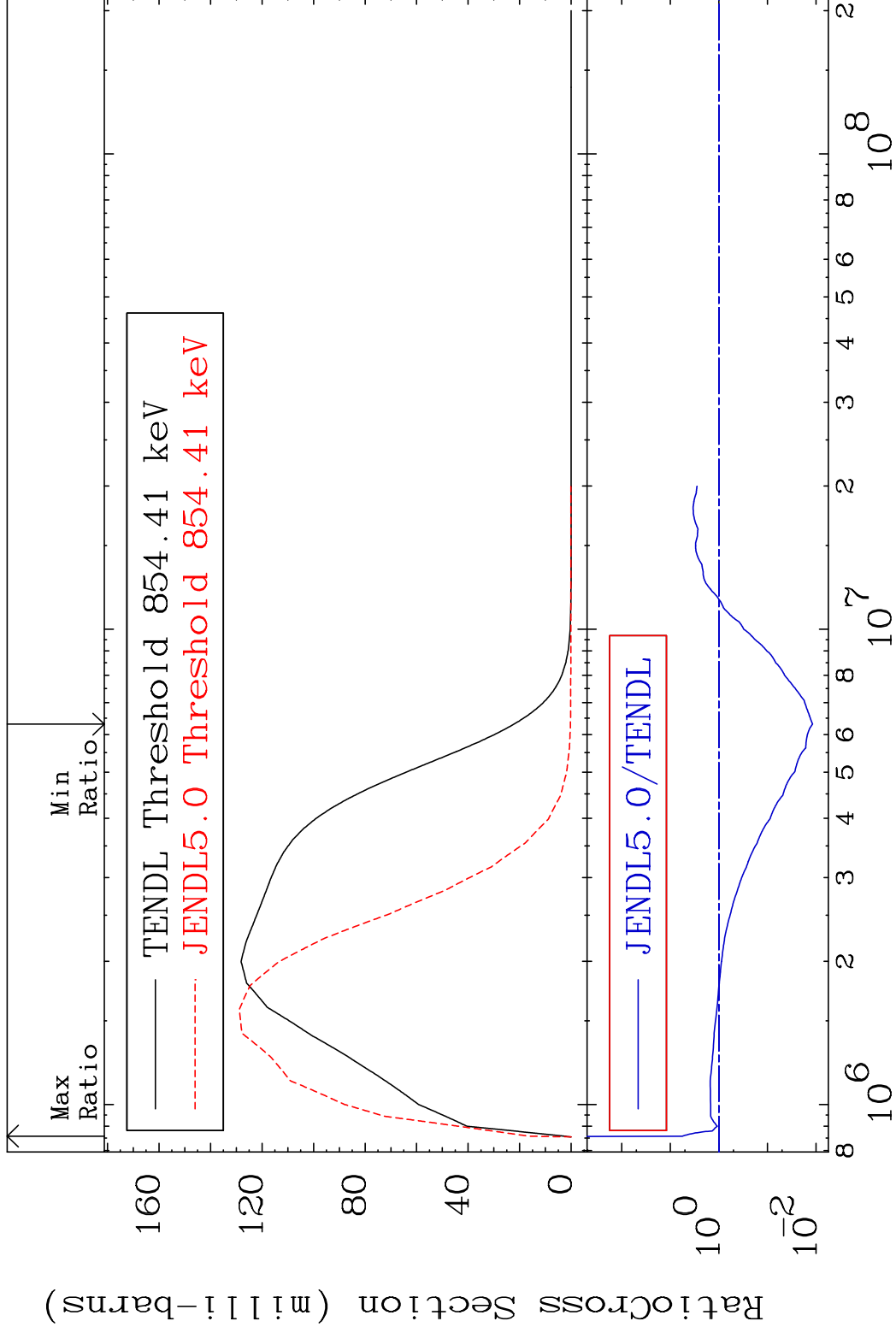


MAT 5931

MT= 59 (n, n') Level

59-Pr-143

Cross Section -98.82 To 465.7 %



24

Incident Energy (eV)

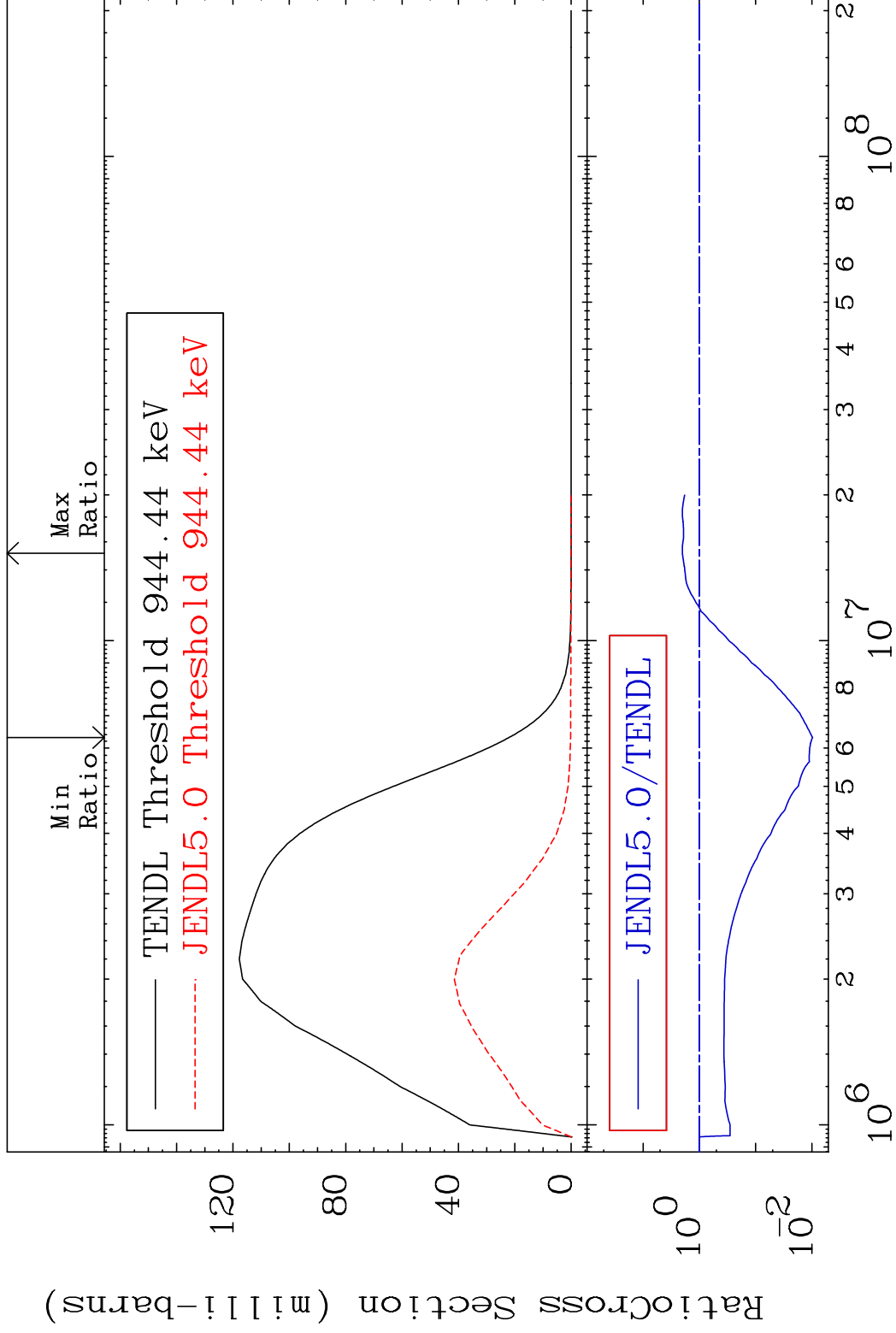
59-Pr-143

MAT 5931

MT= 60 (n, n') Level

59-Pr-143

Cross Section -99.02 To 100.5 %



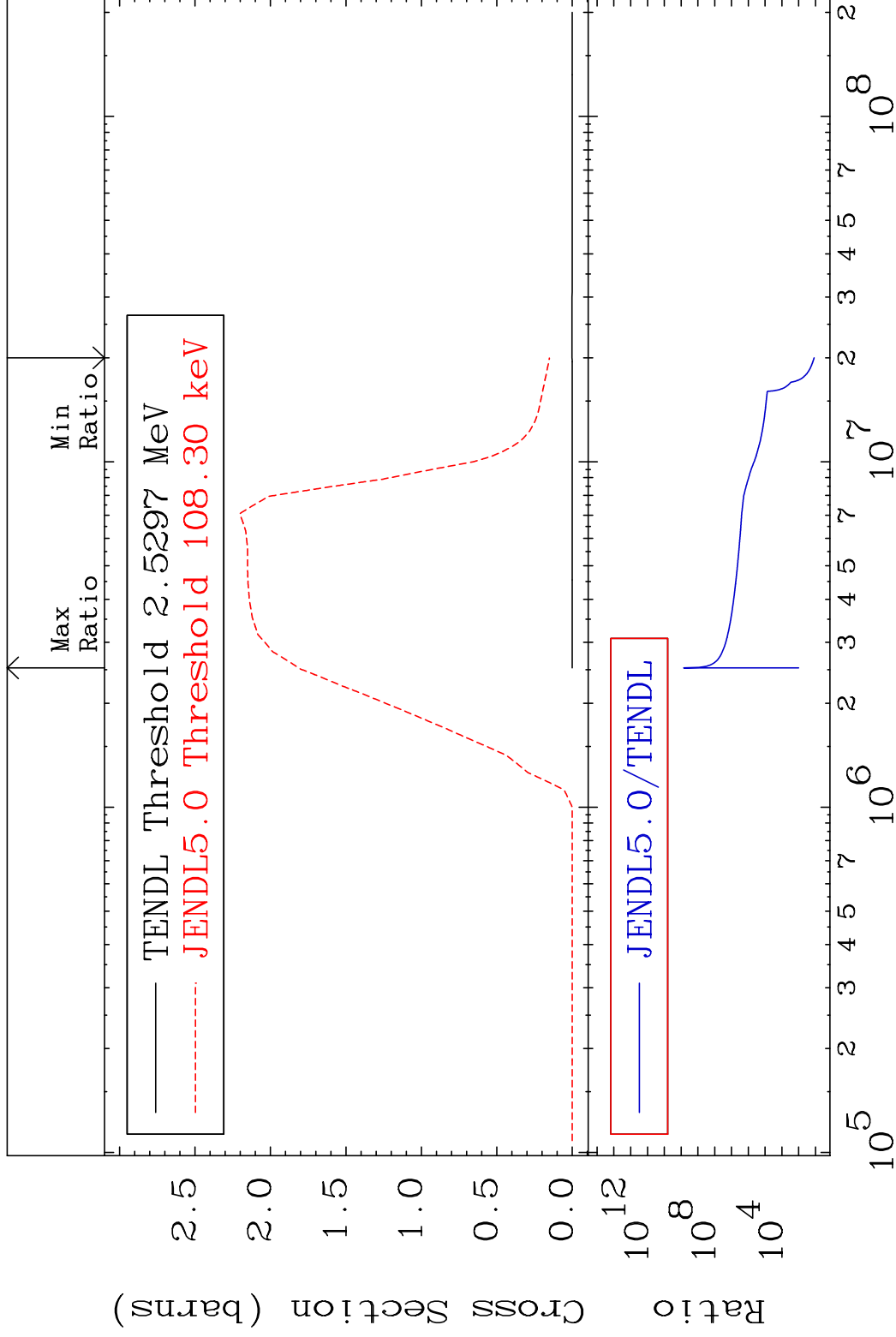
25

Incident Energy (eV)

59-Pr-143

MAT 5931

(n,n') Continuum 59-Pr-143
Cross Section 9999. To 9999. %



26

Incident Energy (eV)

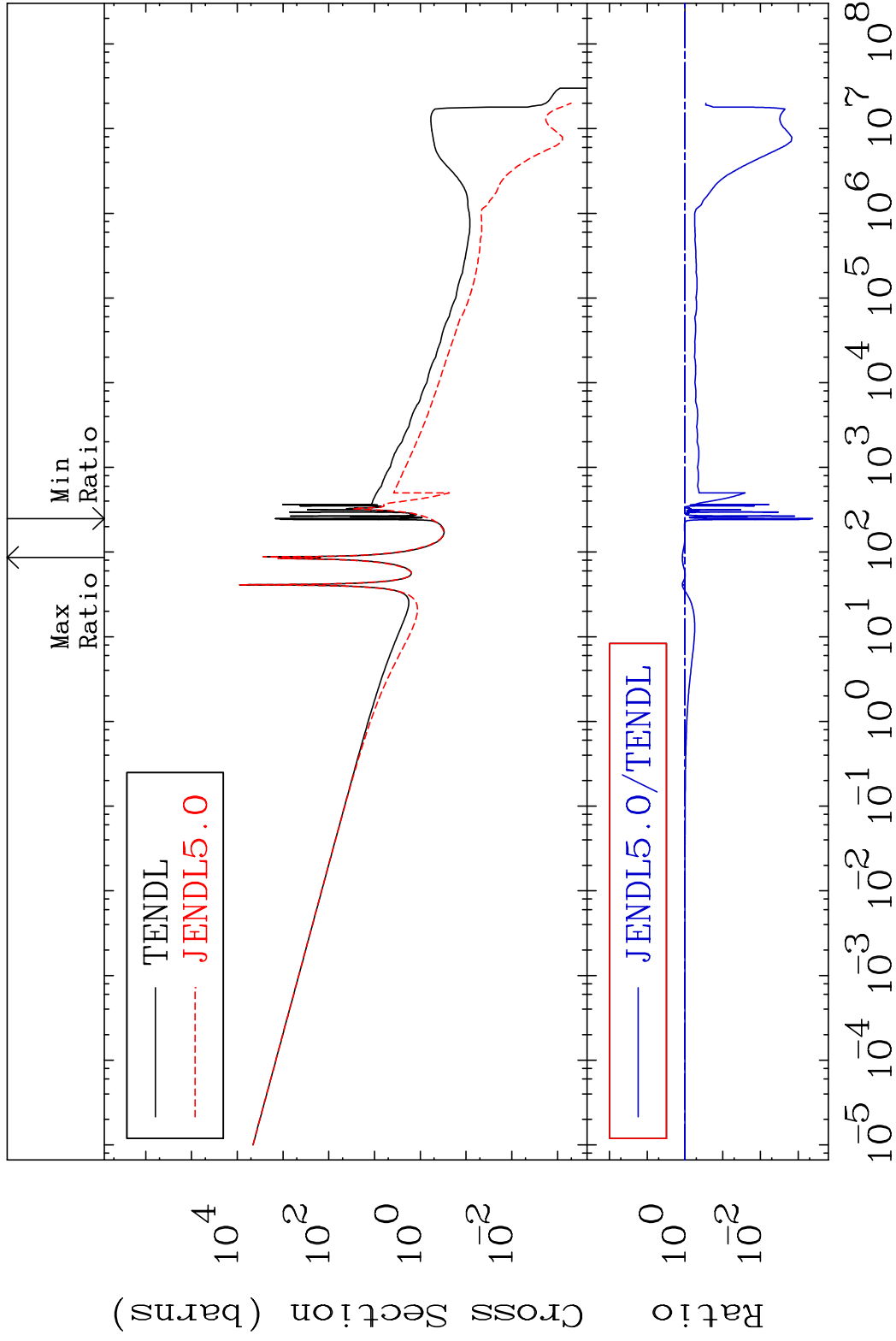
59-Pr-143

MAT 5931

(n, γ)

59-Pr-143

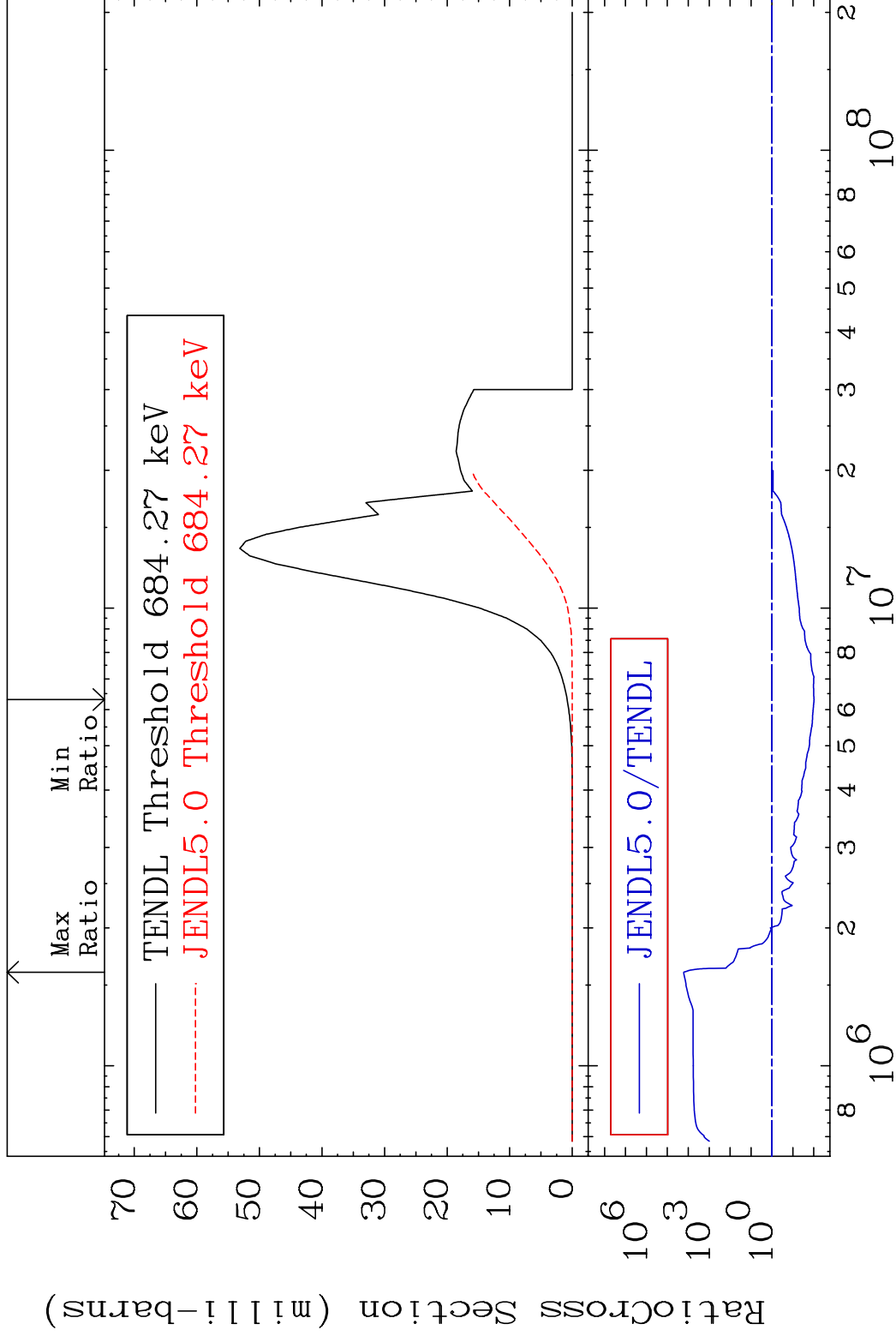
Cross Section -99.96 To 17.41 %



27

Incident Energy (eV)

59-Pr-143

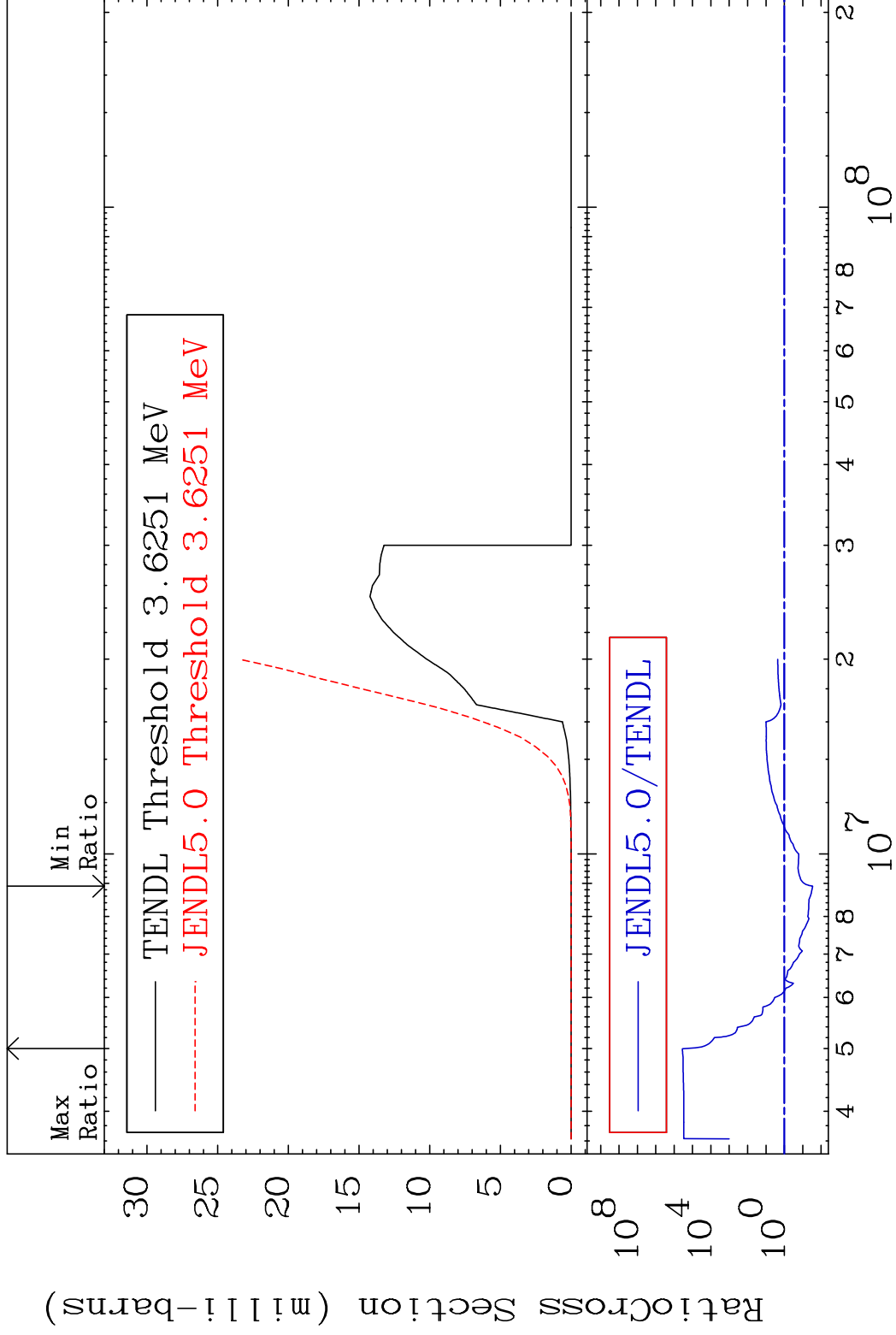


MAT 5931

(n,d)

59-Pr-143

Cross Section -97.09 To 9999. %



29

Incident Energy (eV)

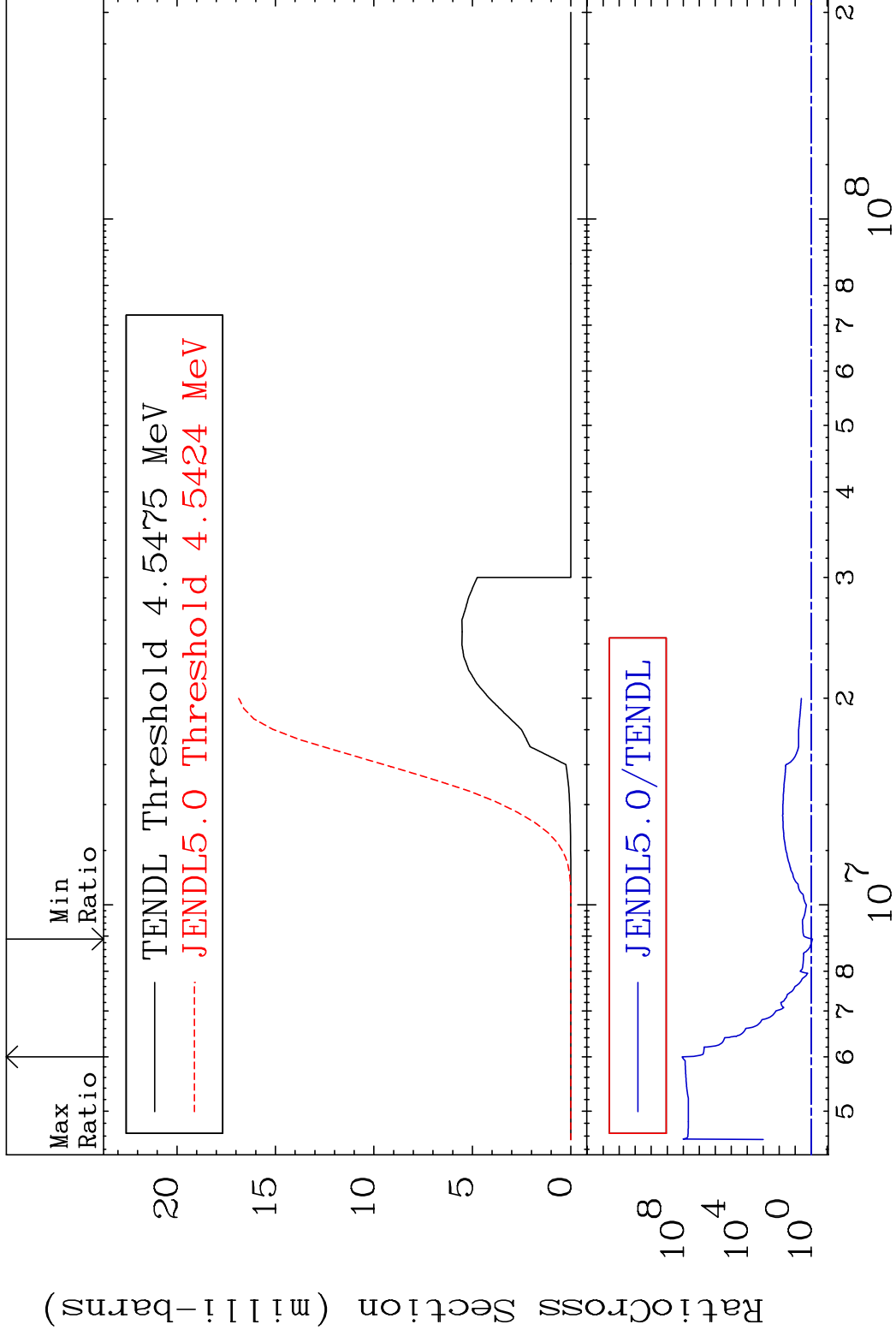
59-Pr-143

MAT 5931

(n, t)

59-Pr-143

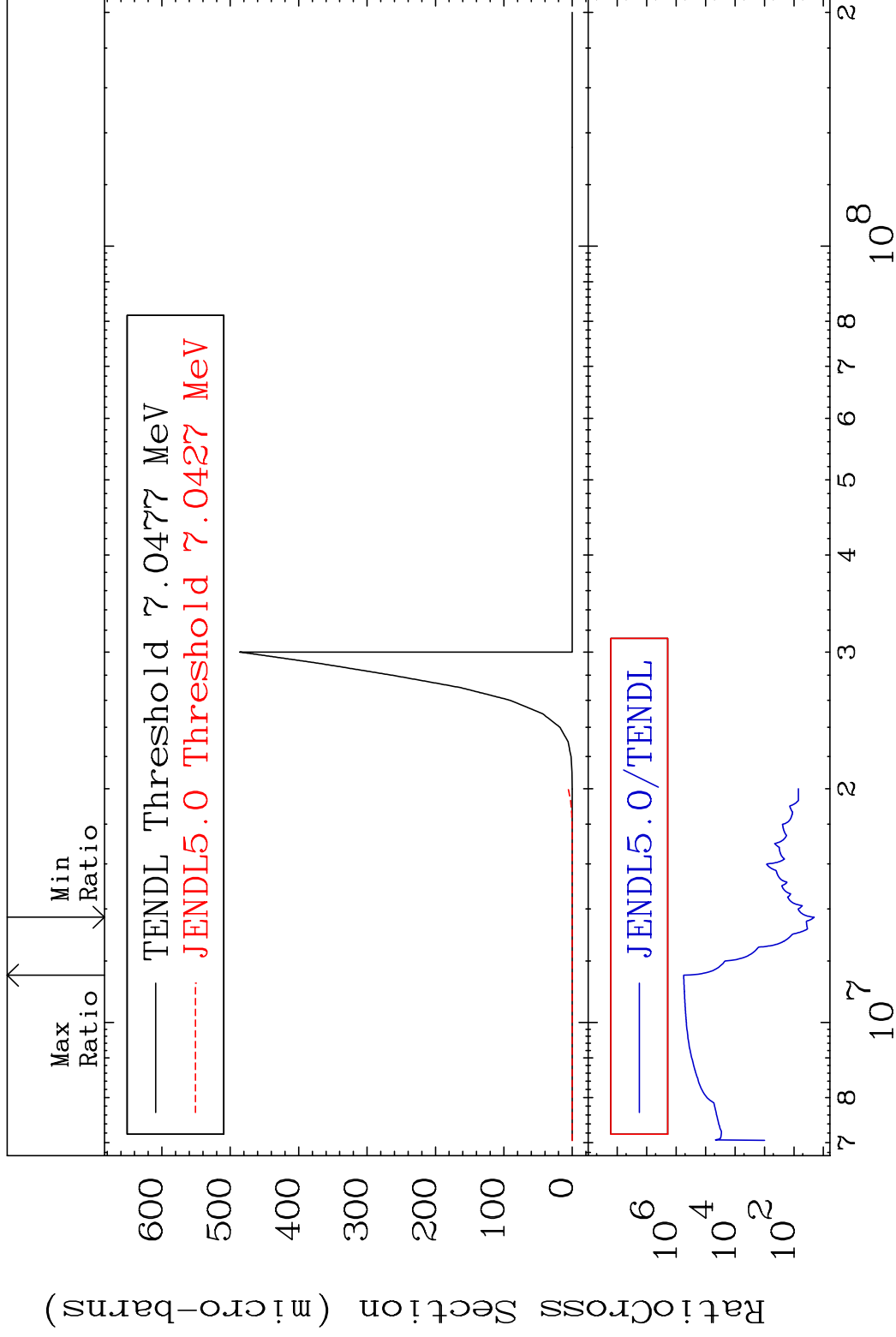
Cross Section -17.56 To 9999. %



30

Incident Energy (eV)

59-Pr-143

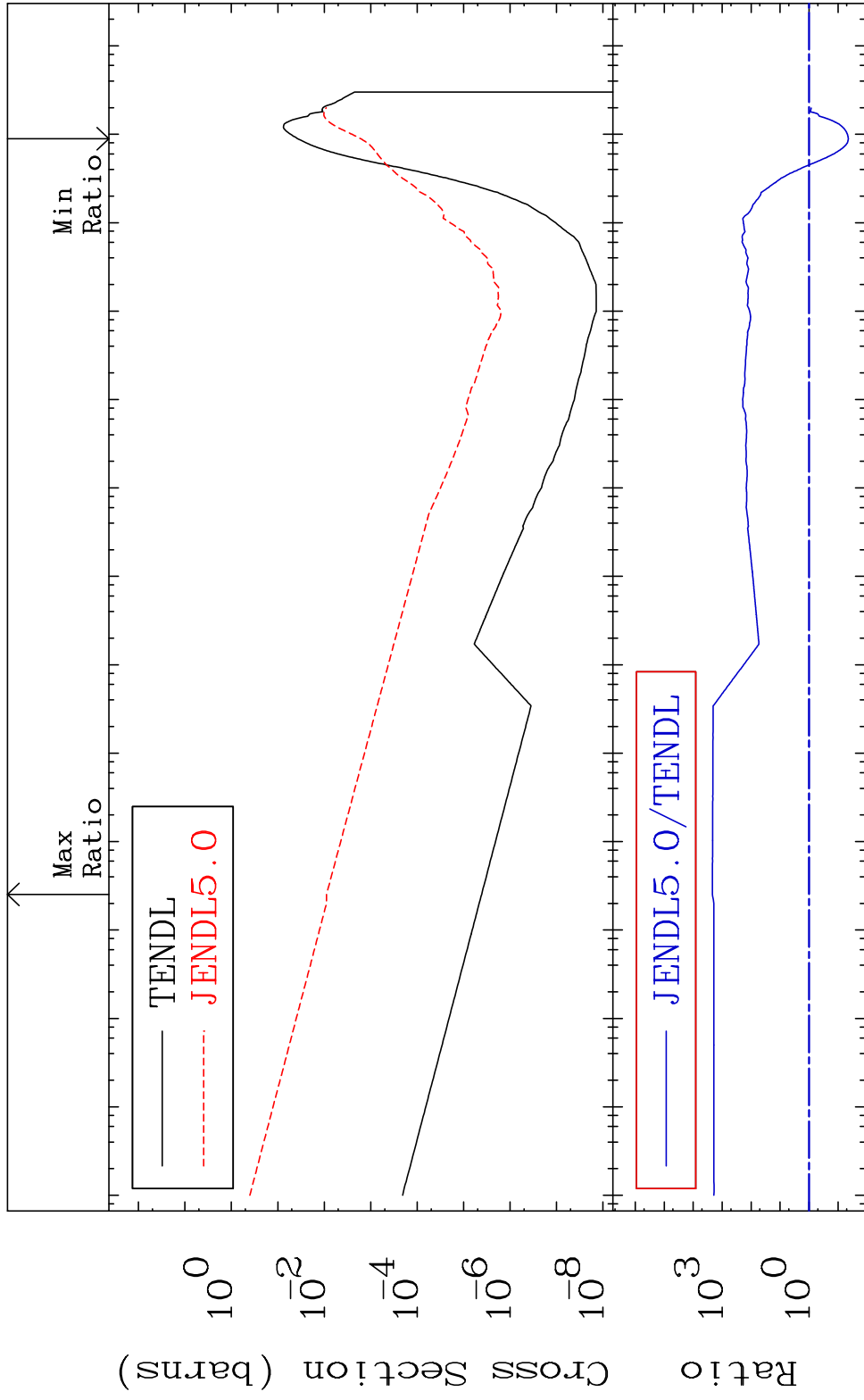


MAT 5931

(n, α)

59-Pr-143

Cross Section -95.58 To 9999. %



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

32

Incident Energy (eV)

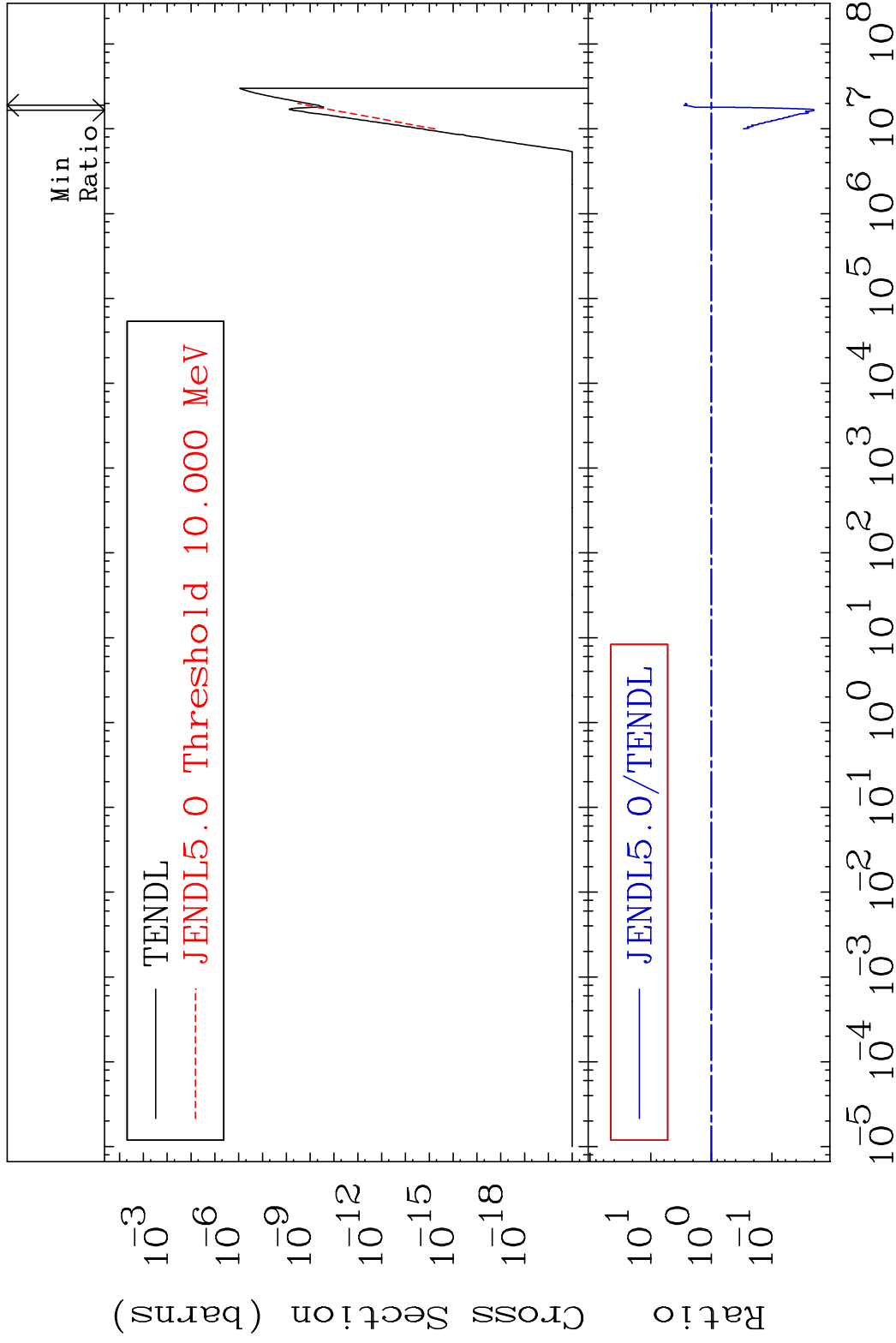
59-Pr-143

MAT 5931

(n, 2α)

59-Pr-143

Cross Section -97.98 To 185.9 %



33

Incident Energy (eV)

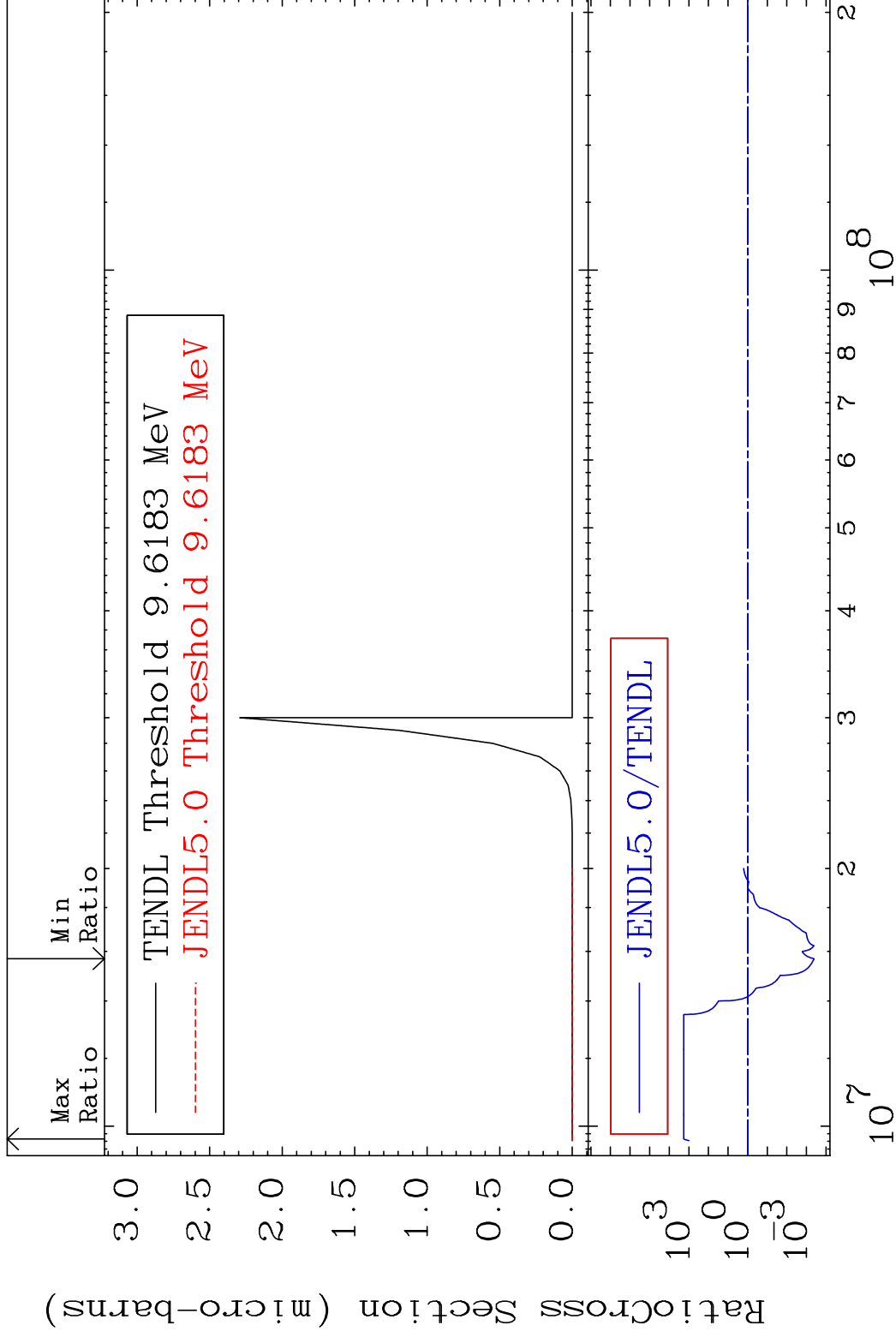
59-Pr-143

MAT 5931

(n,2p)

59-Pr-143

Cross Section -99.96 To 9999. %



34

Incident Energy (eV)

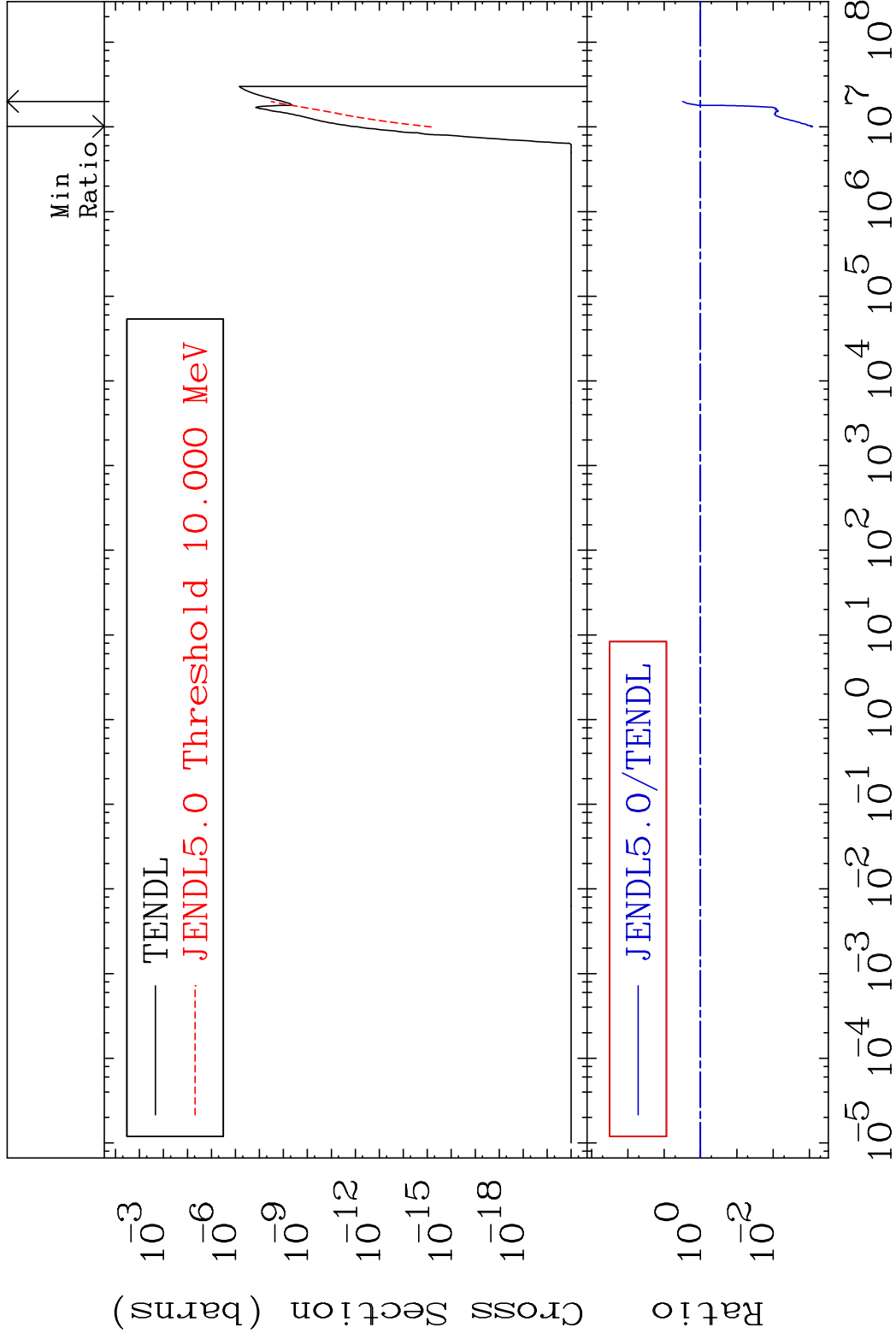
59-Pr-143

MAT 5931

(n,p) α

59-Pr-143

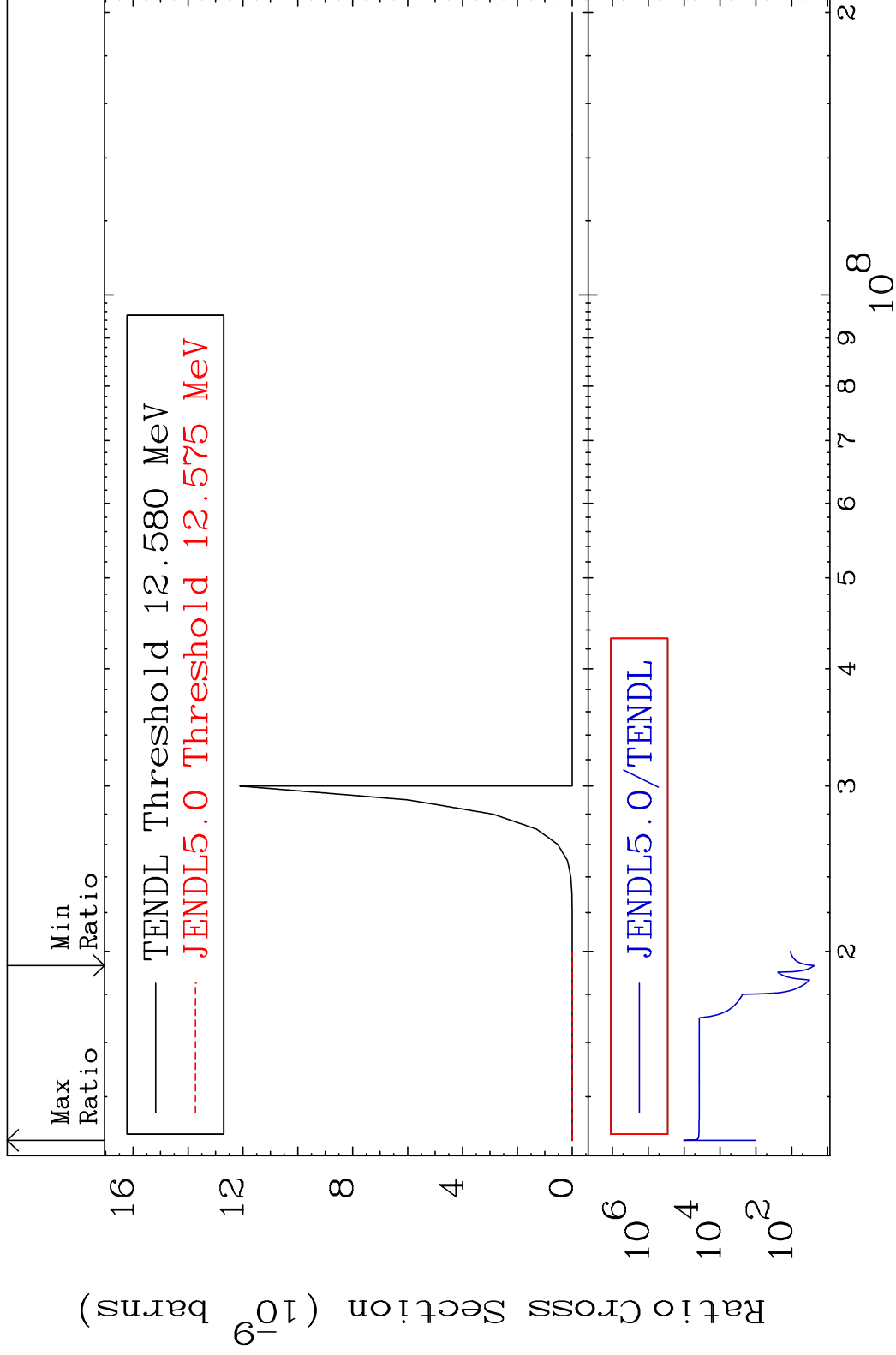
Cross Section -99.92 To 216.0 %



35

Incident Energy (eV)

59-Pr-143

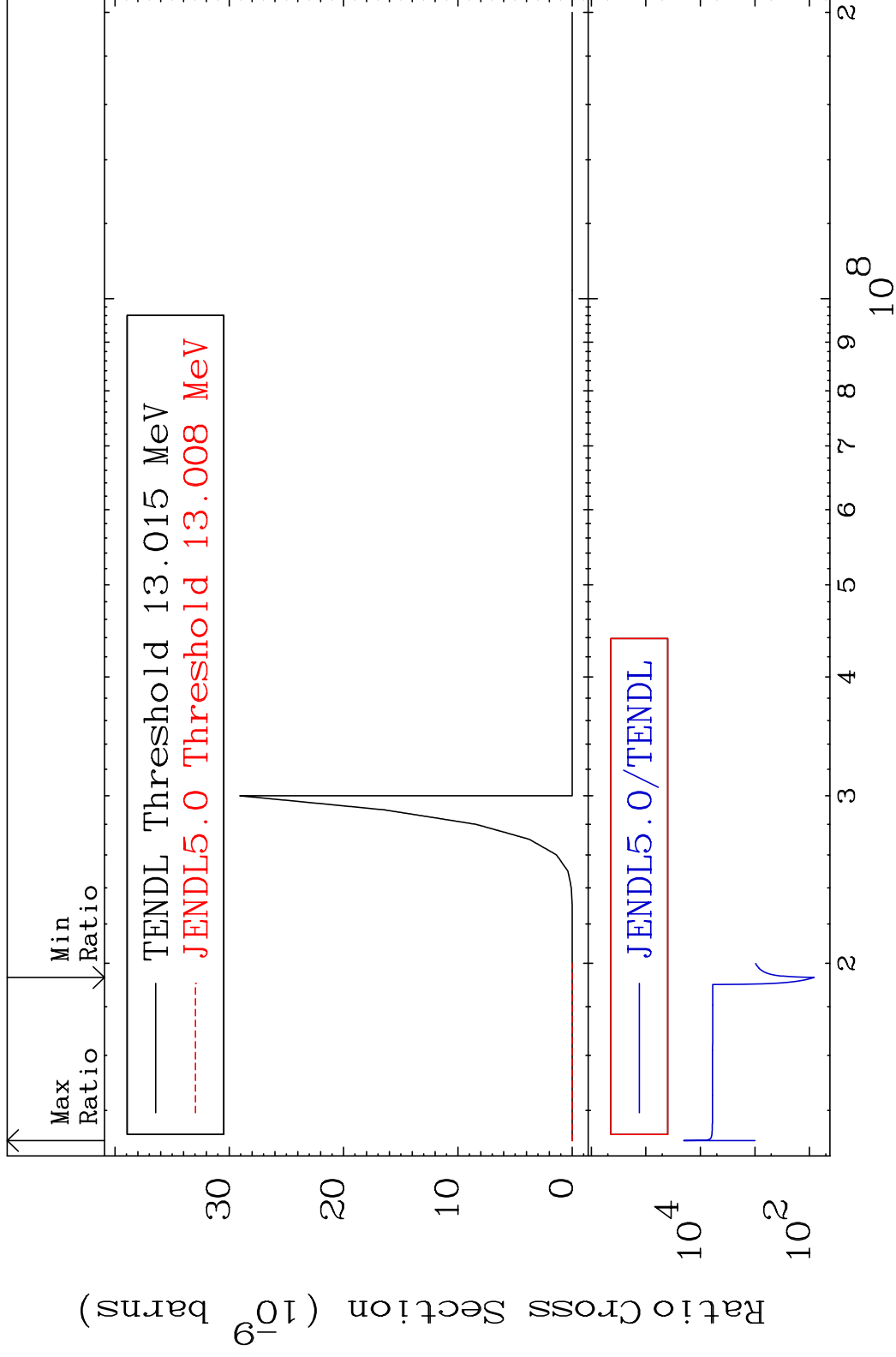


MAT 5931

(n,p) t

59-Pr-143

Cross Section 8086. To 9999. %

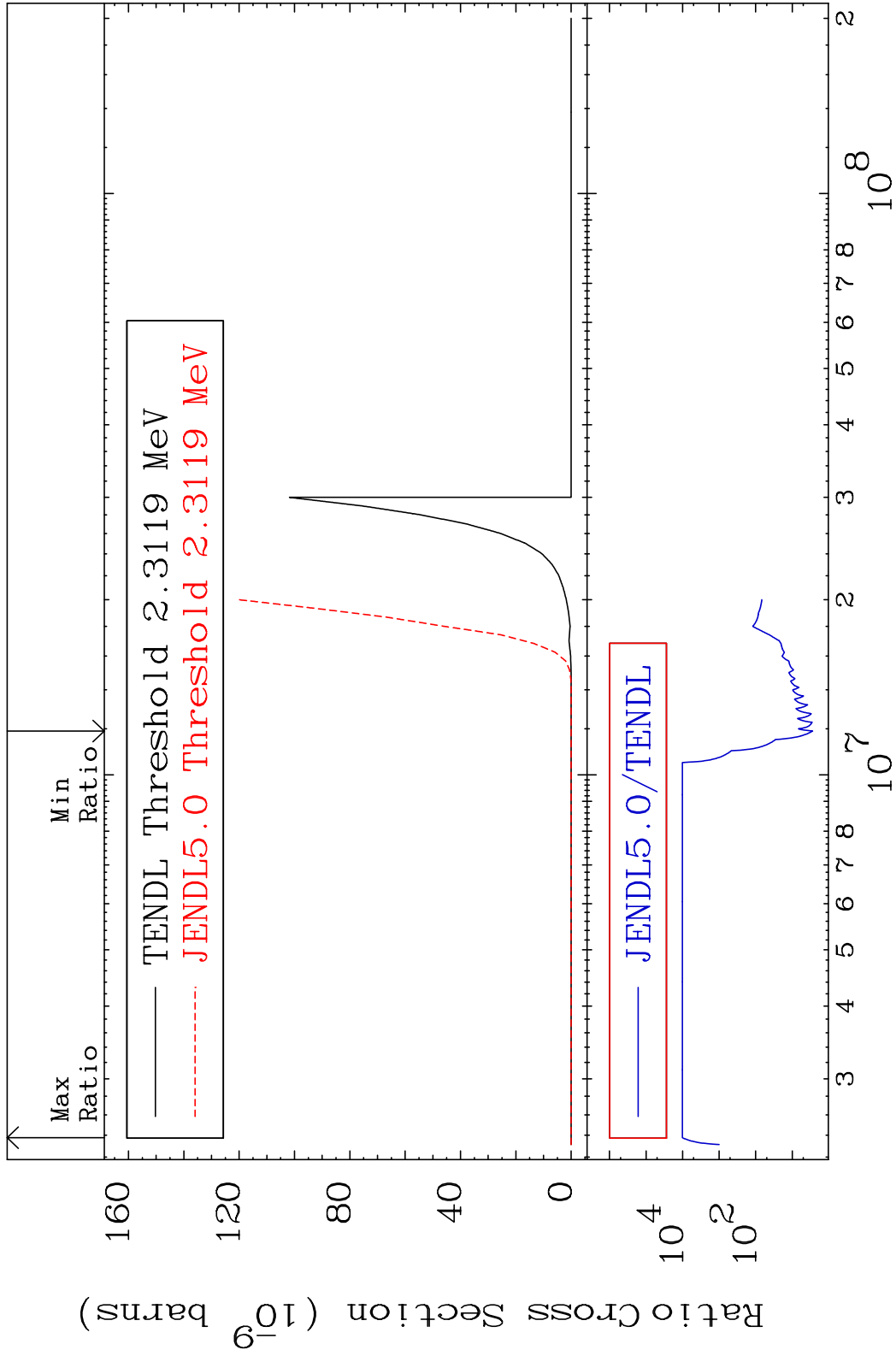


MAT 5931

(n,d) α

59-Pr-143

Cross Section 178.0 To 9999. %



38

Incident Energy (eV)

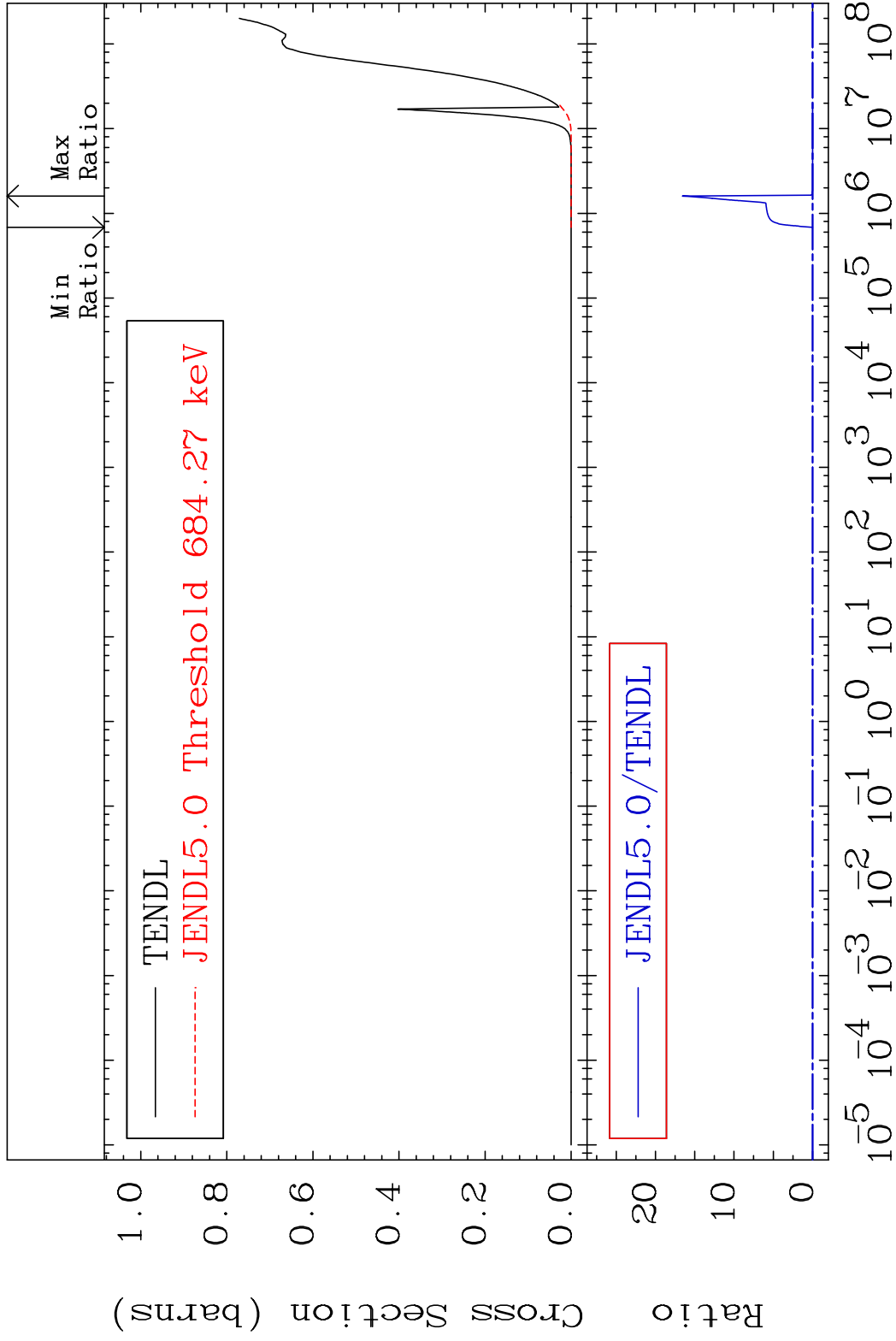
59-Pr-143

MAT 5931

Hydrogen Production

59-Pr-143

Cross Section -100.0 To 9999. %



39

Incident Energy (eV)

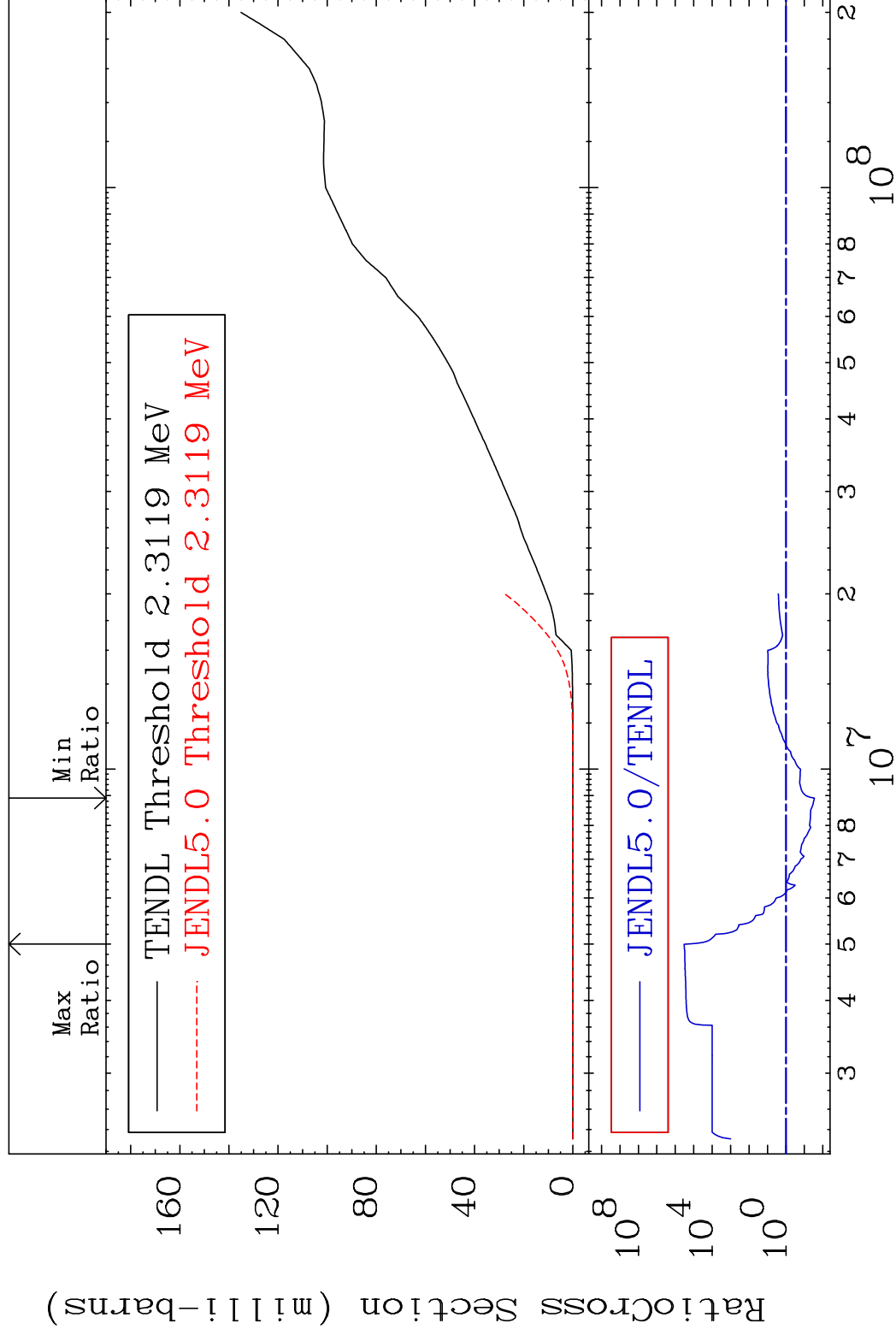
59-Pr-143

MAT 5931

Deuterium Production

59-Pr-143

Cross Section -97.09 To 9999. %



40

Incident Energy (eV)

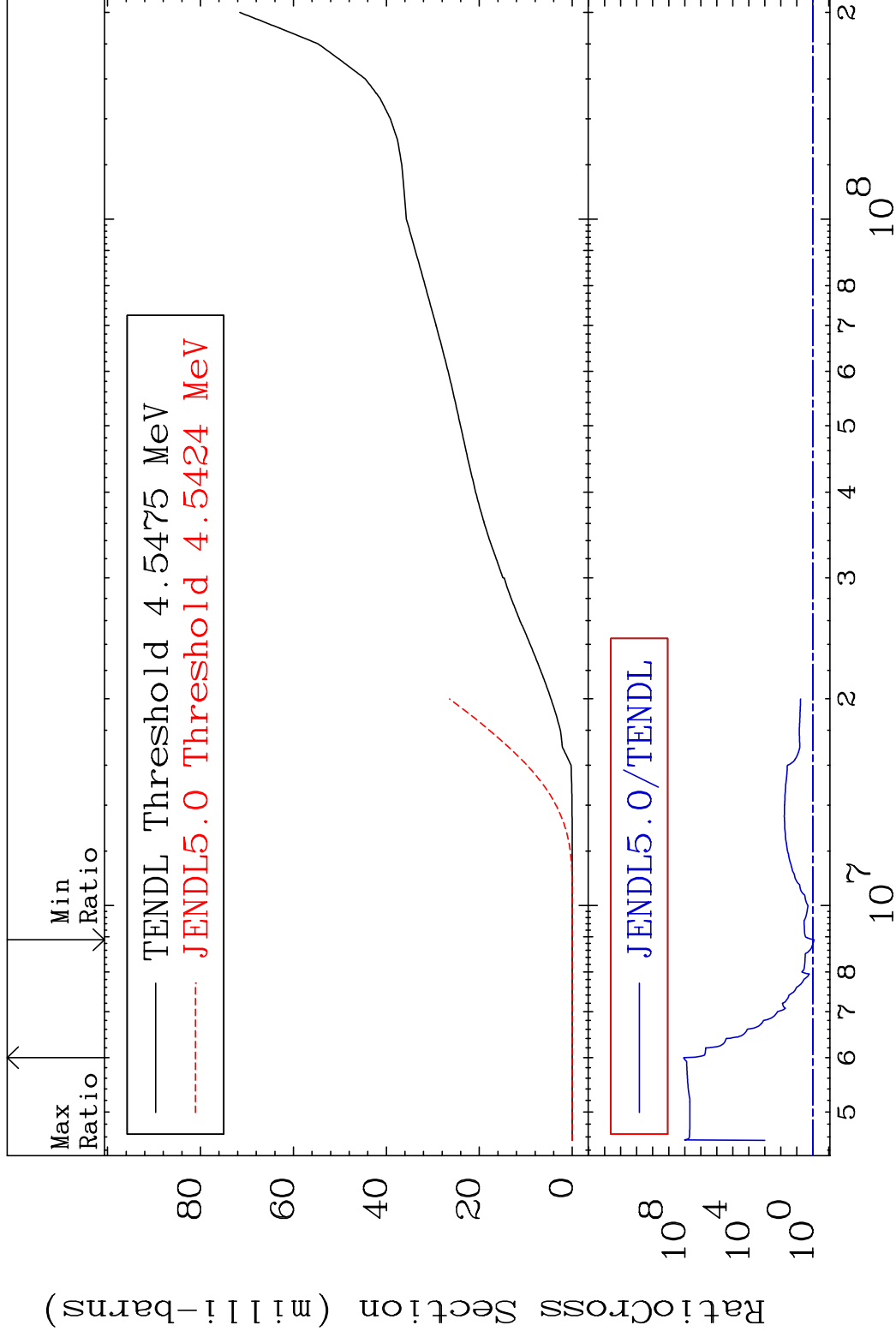
59-Pr-143

MAT 5931

Tritium Production

59-Pr-143

Cross Section -17.56 To 9999. %

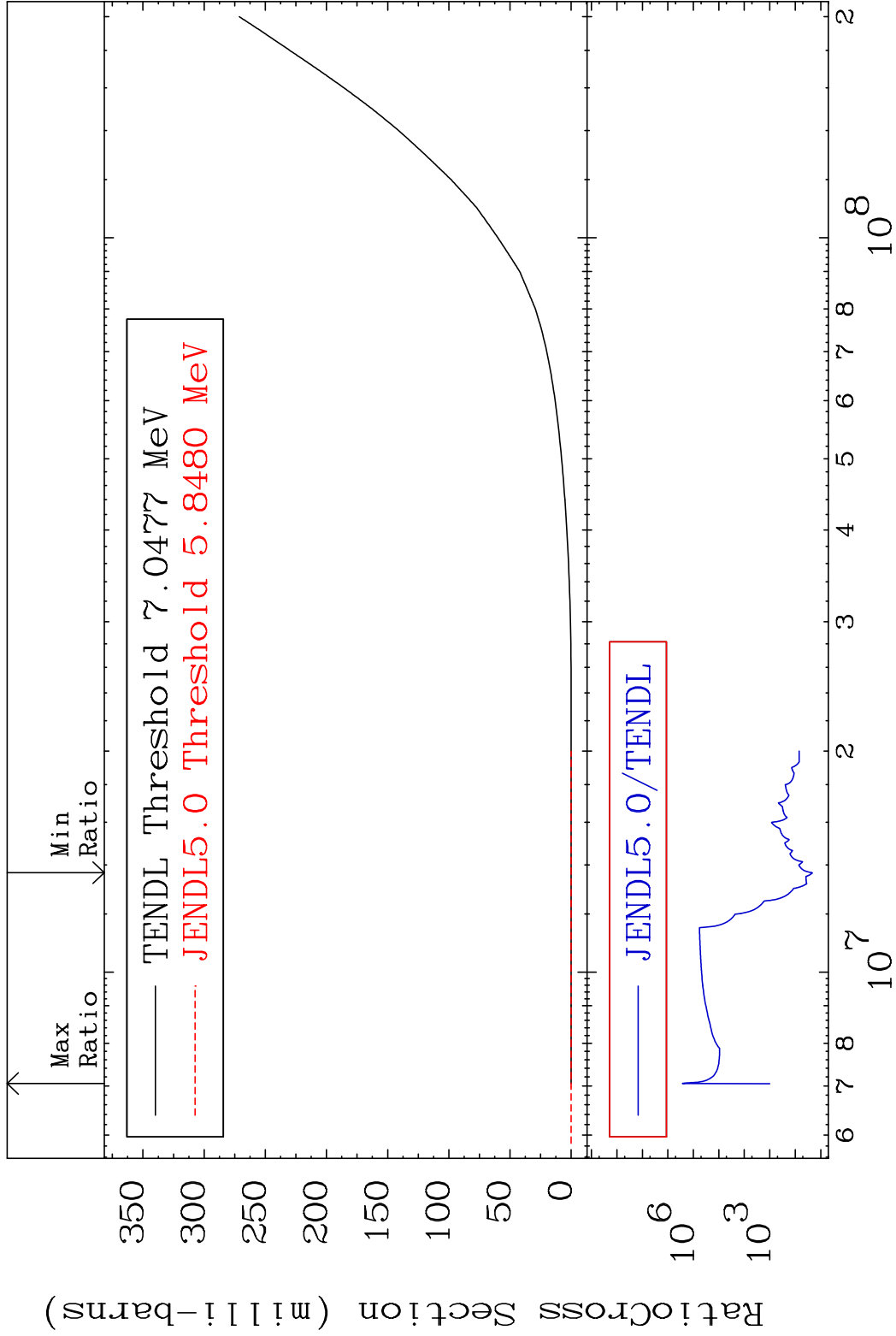


41

Incident Energy (eV)

59-Pr-143

Cross Section 1991. To 9999. %

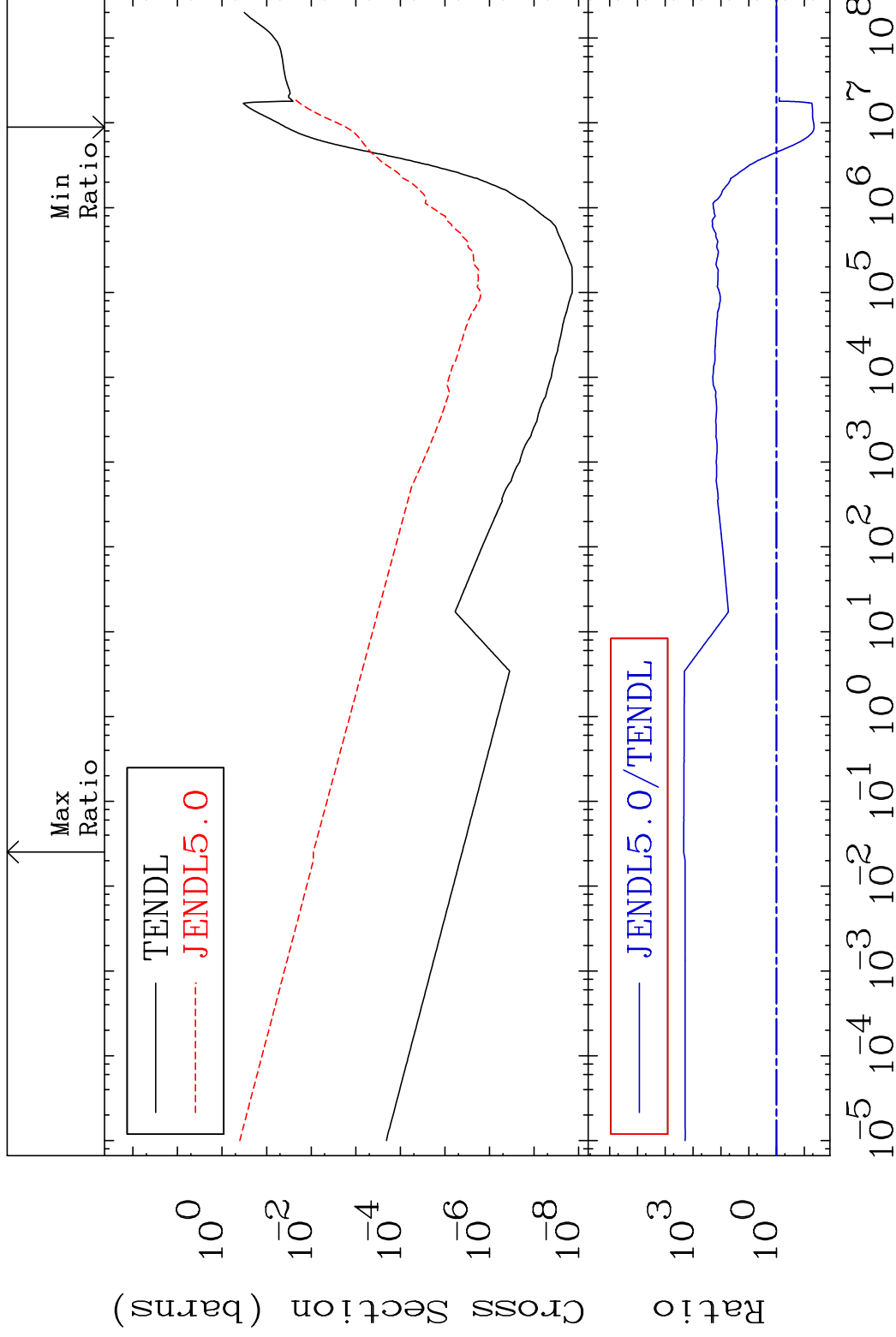


MAT 5931

He-4 Production

59-Pr-143

Cross Section -95.53 To 9999. %

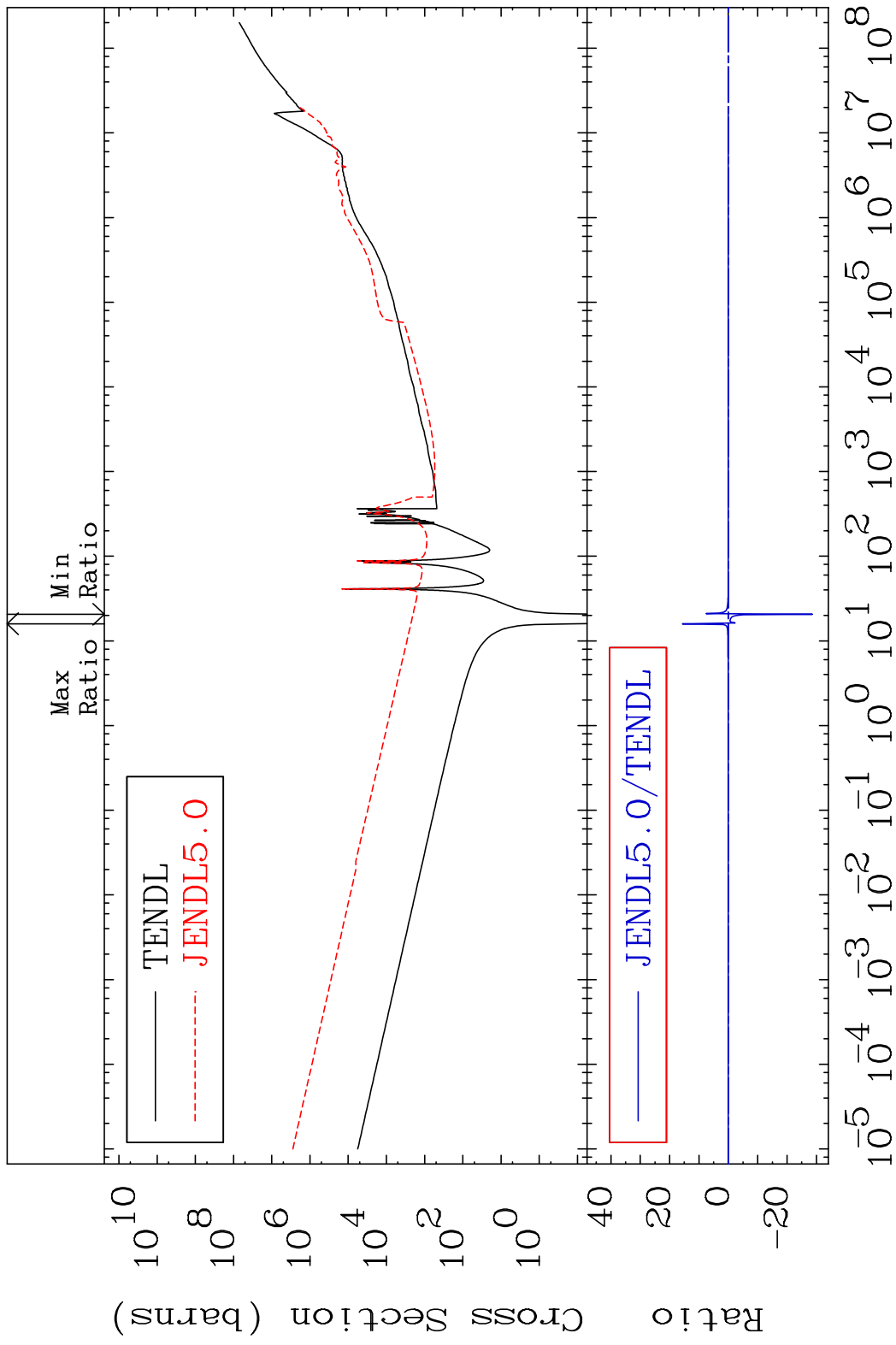


43

Incident Energy (eV)

59-Pr-143

MAT 5931 Kerma total (eV-barns) 59-Pr-143
 Cross Section -9999. To 9999. %

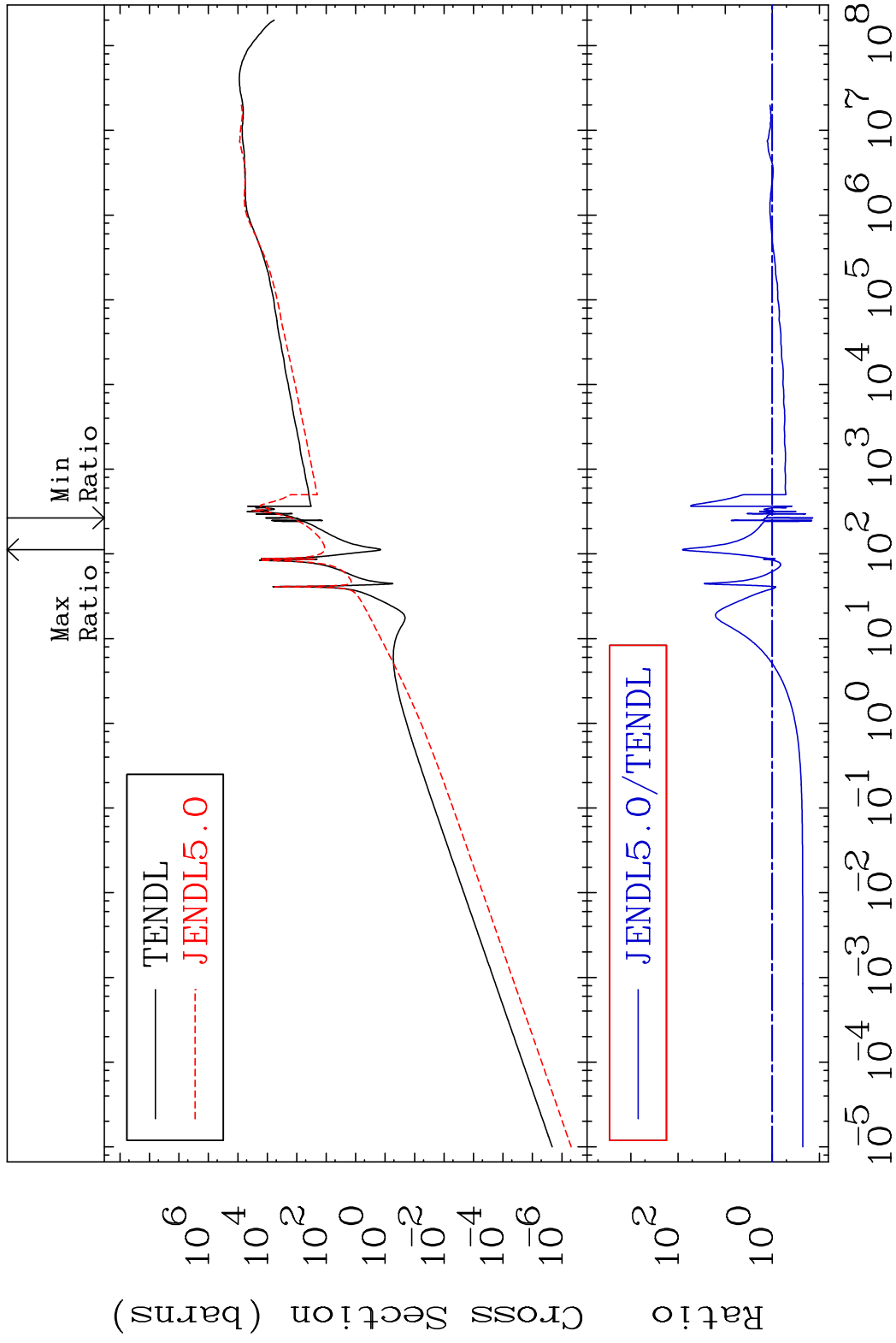


MAT 5931

Kerma elastic

59-Pr-143

Cross Section -86.01 To 7990. %

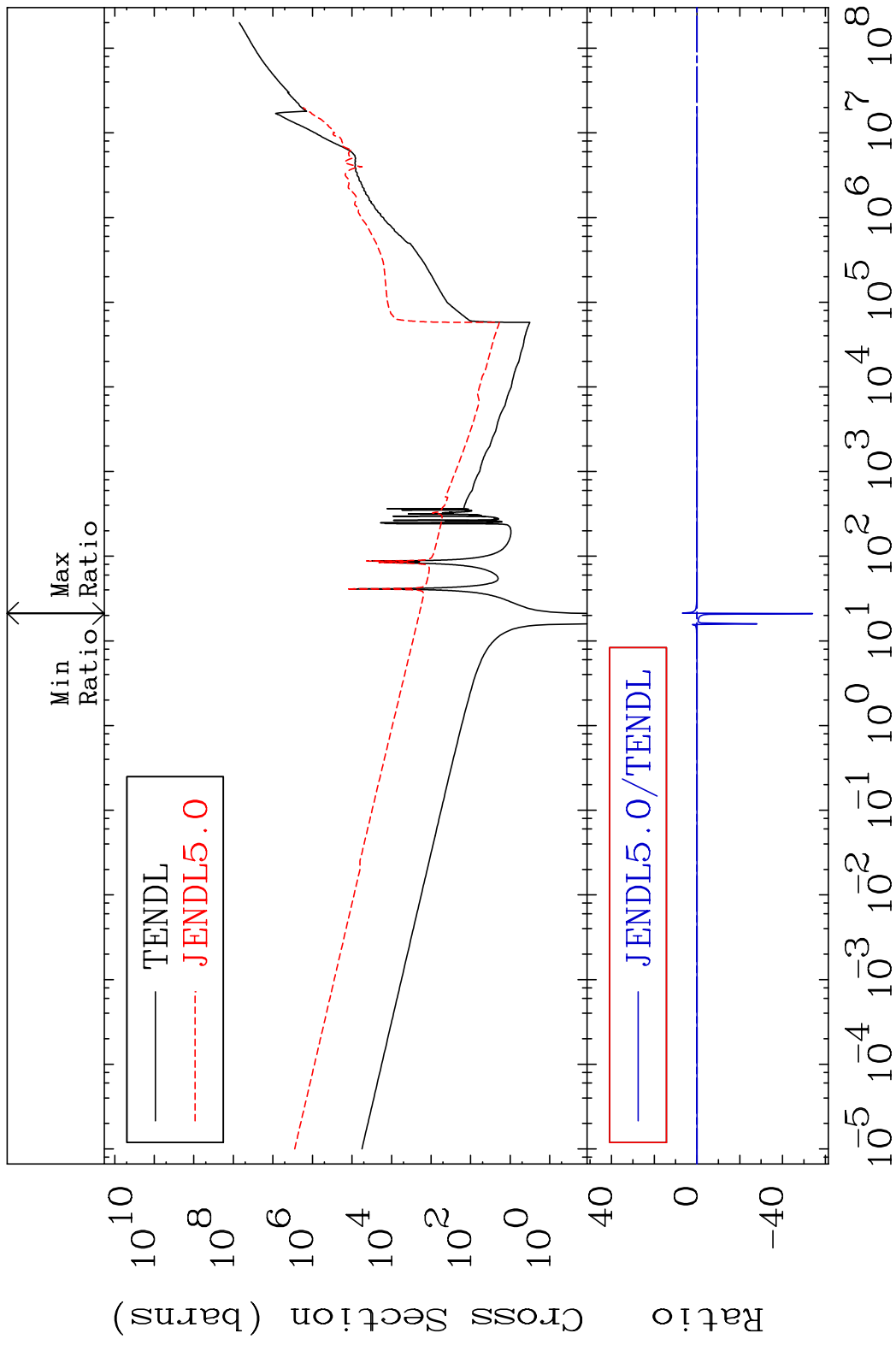


45

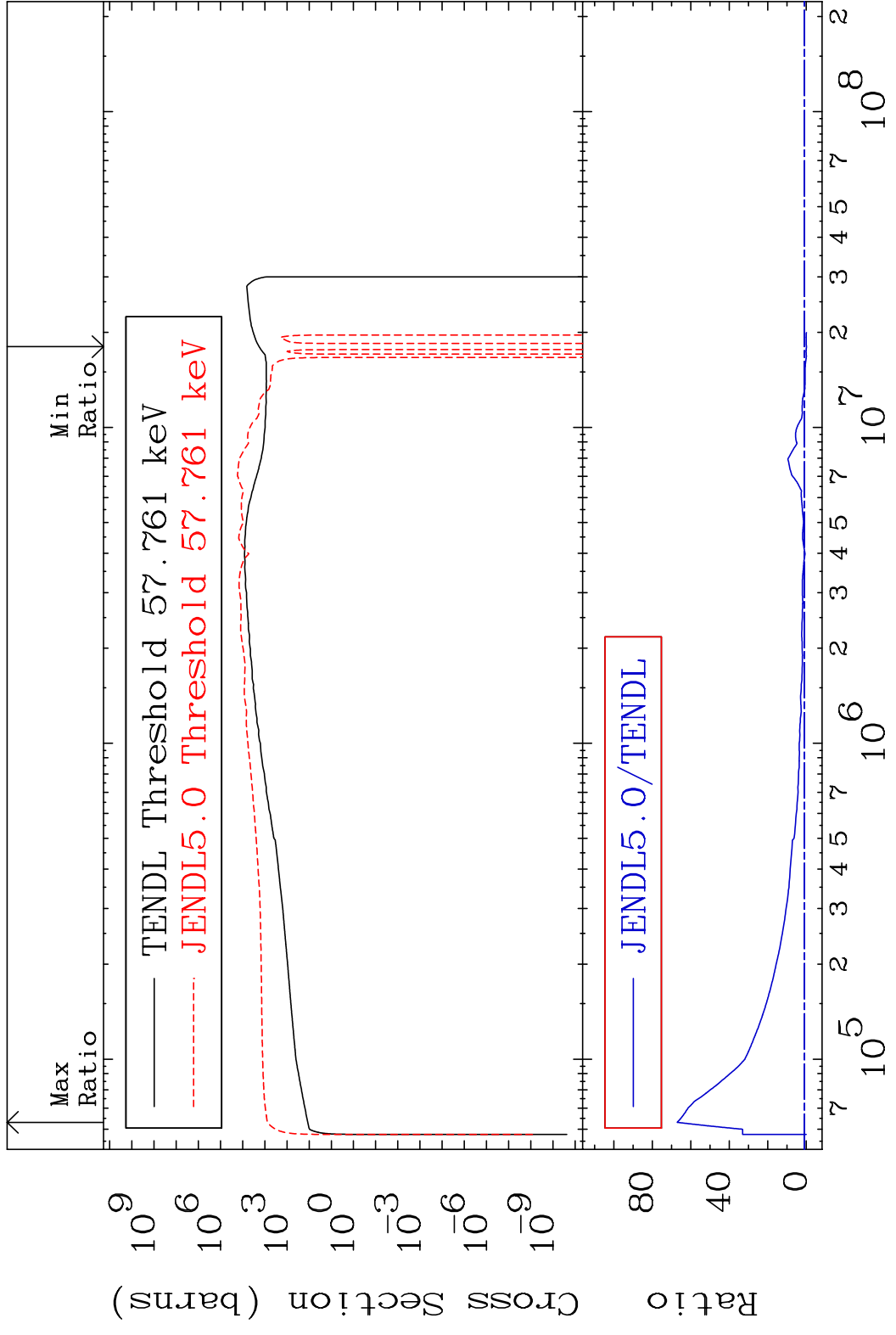
Incident Energy (eV)

59-Pr-143

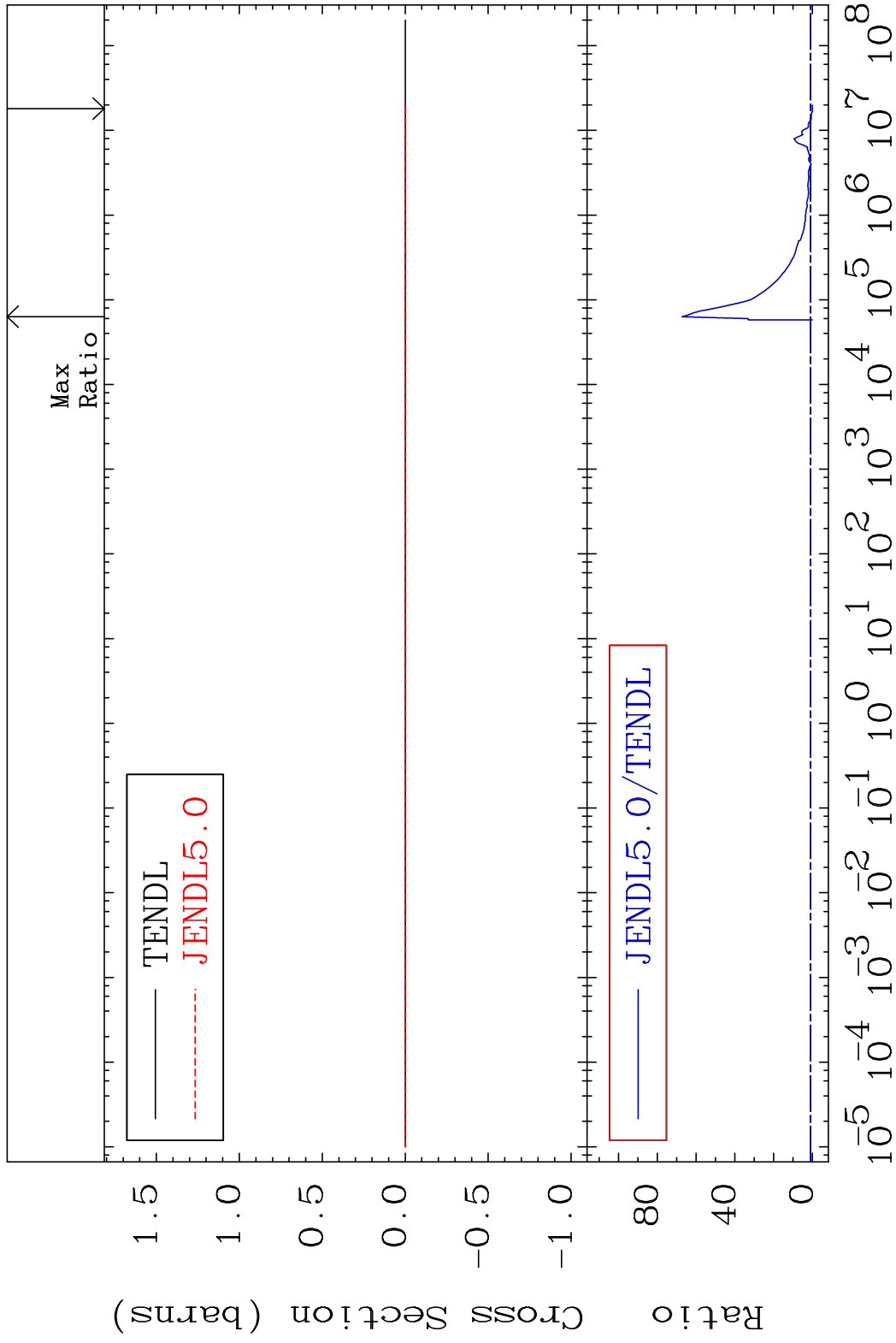
MAT 5931 Kerma non-elastic (all but mt2) 59-Pr-143
 Cross Section -9999. To 9999. %



MAT 5931 Kerma inelastic (mt51-91) 59-Pr-143
 Cross Section -108.8 To 6605. %



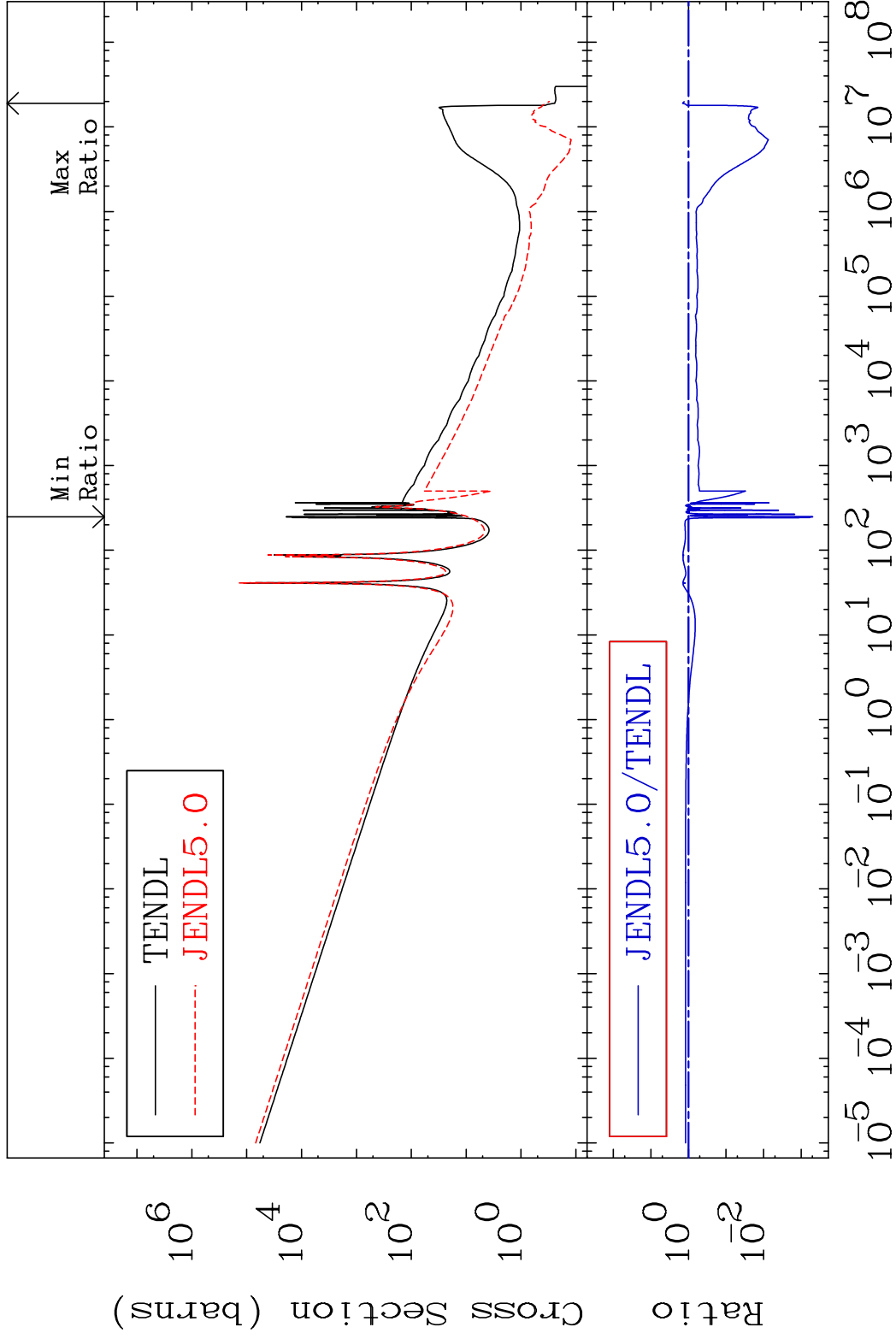
MAT 5931 Kerma fission (mt18 or mt19-20-21-38) 59-Pr-143
 Cross Section -108.8 To 6605. %



MAT 5931

Kerma capture (mt102) 59-Pr-143

Cross Section -99.95 To 45.43 %



49

Incident Energy (eV)

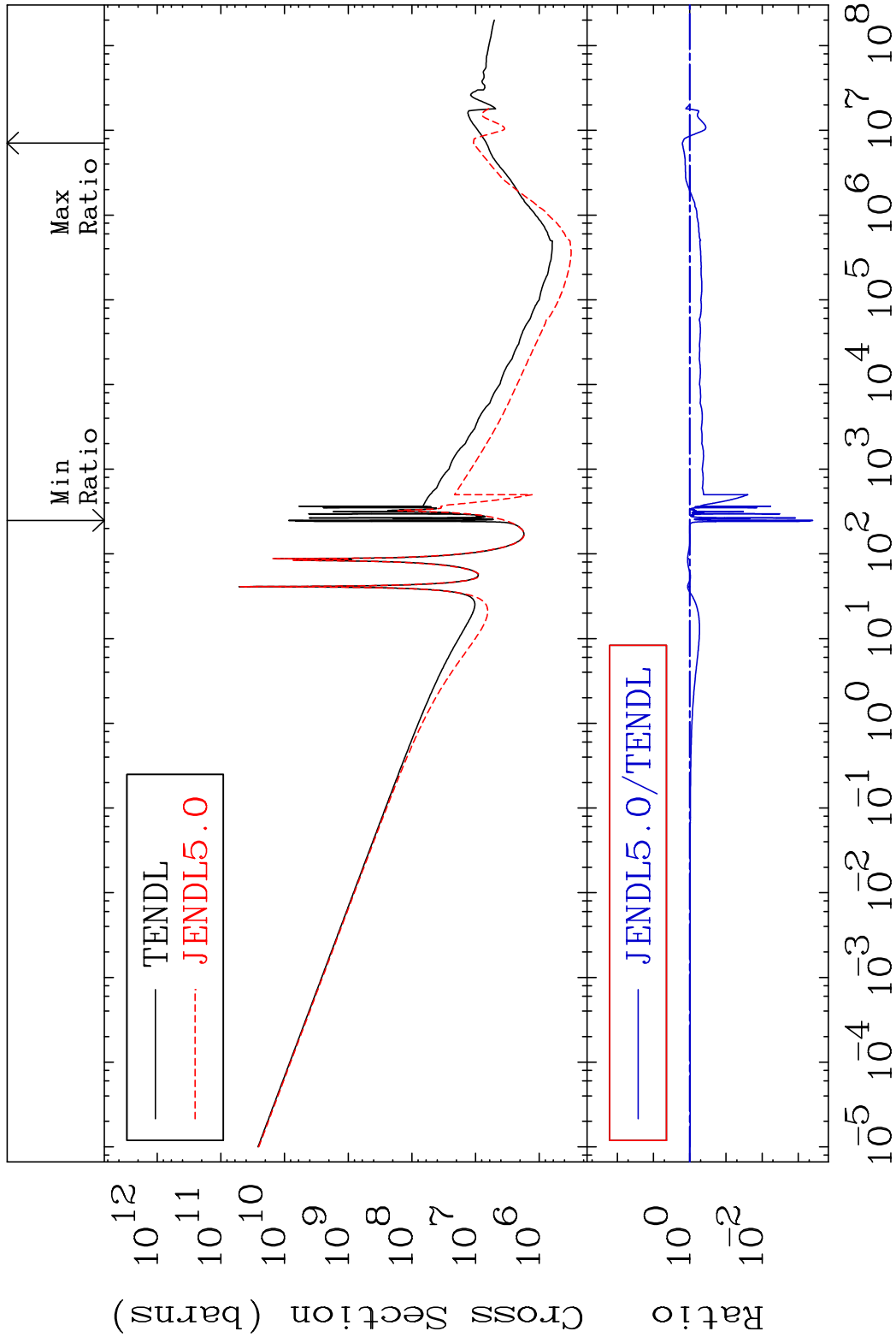
59-Pr-143

MAT 5931

Total photon (eV-barns)

59-Pr-143

Cross Section -99.96 To 59.52 %

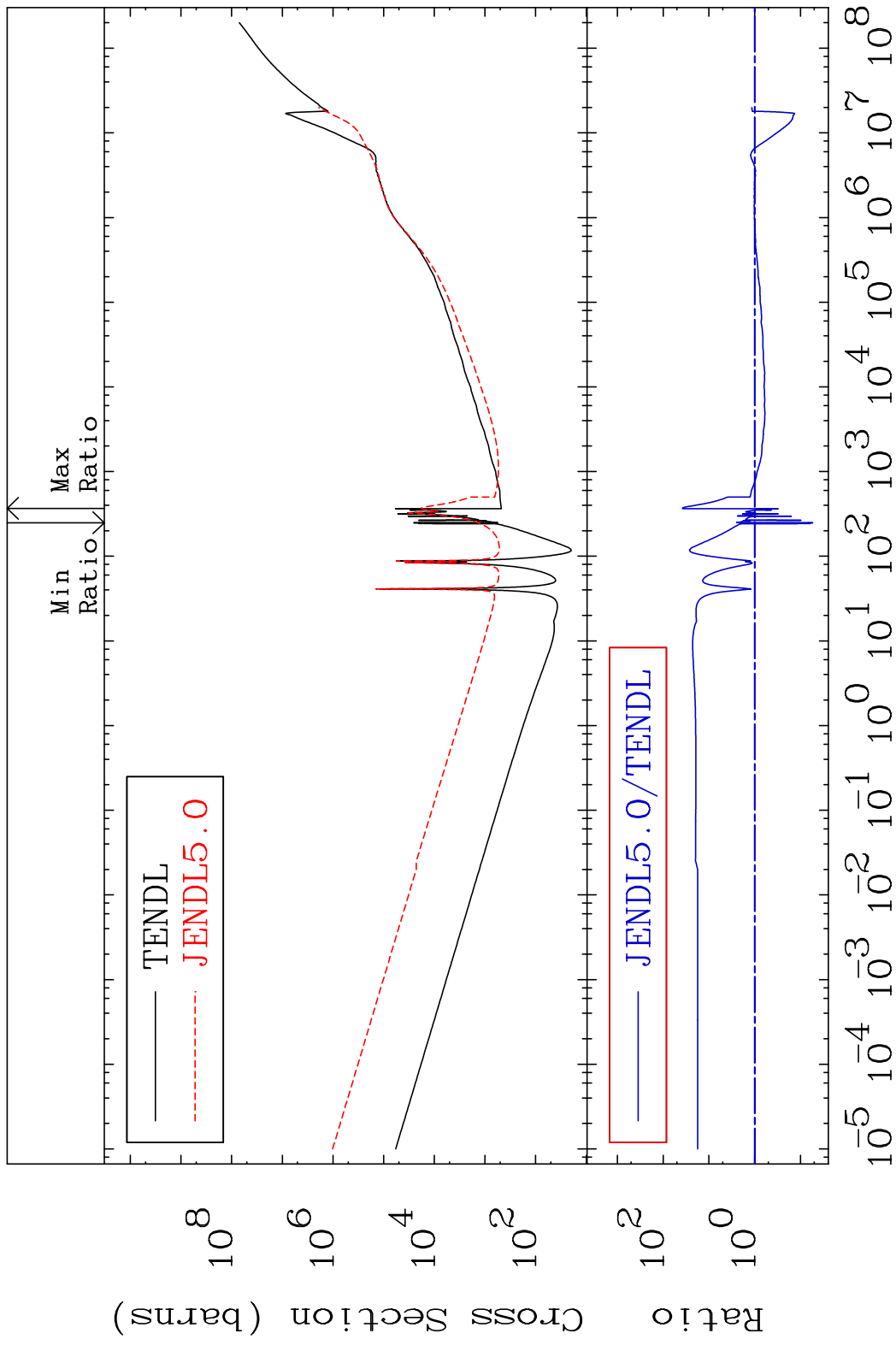


50

Incident Energy (eV)

59-Pr-143

MAT 5931 Total kinematic kerma (high limit) 59-Pr-143
 Cross Section -94.57 To 3705. %

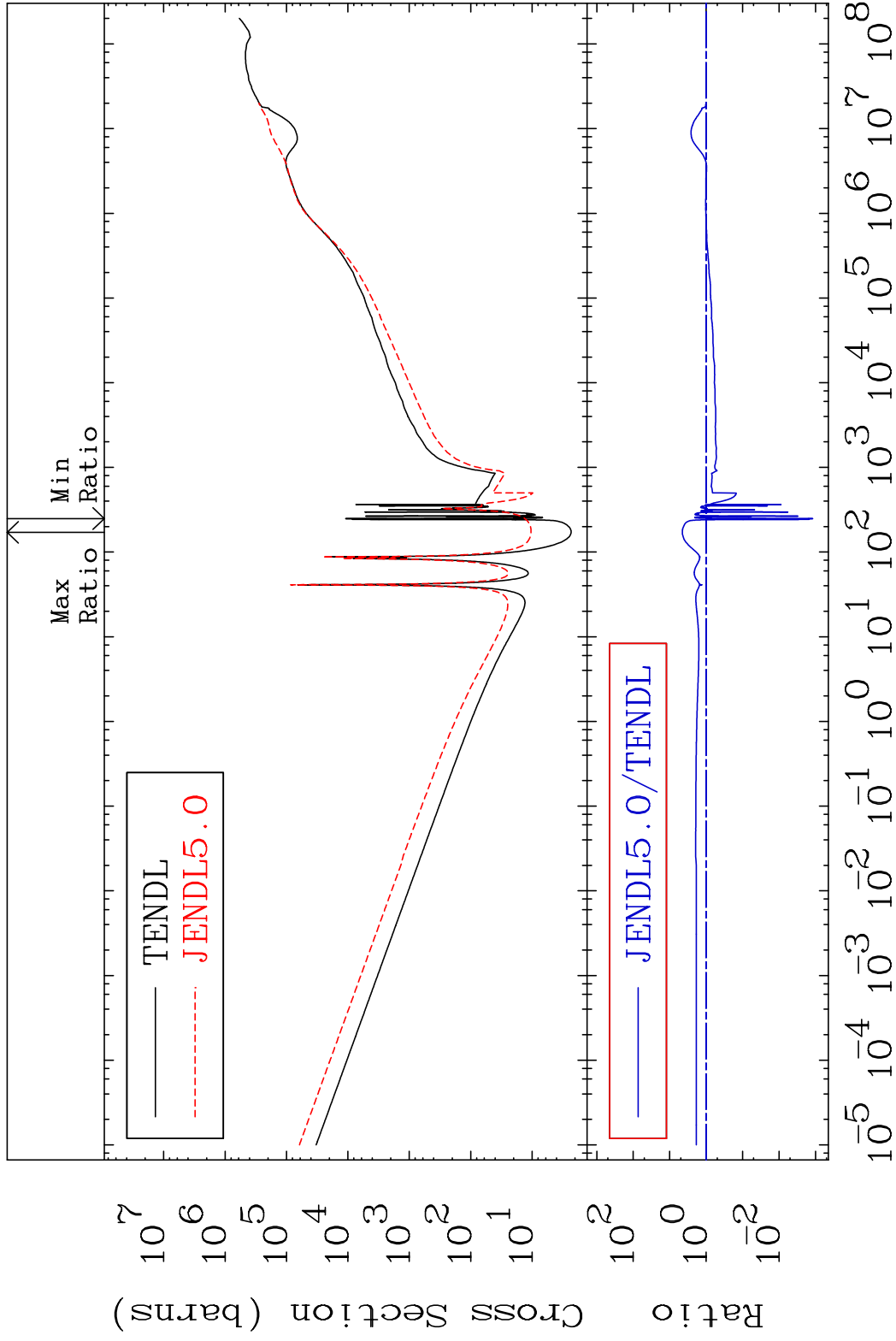


MAT 5931

Dpa total (eV-barns)

59-Pr-143

Cross Section -99.88 To 350.2 %



52

Incident Energy (eV)

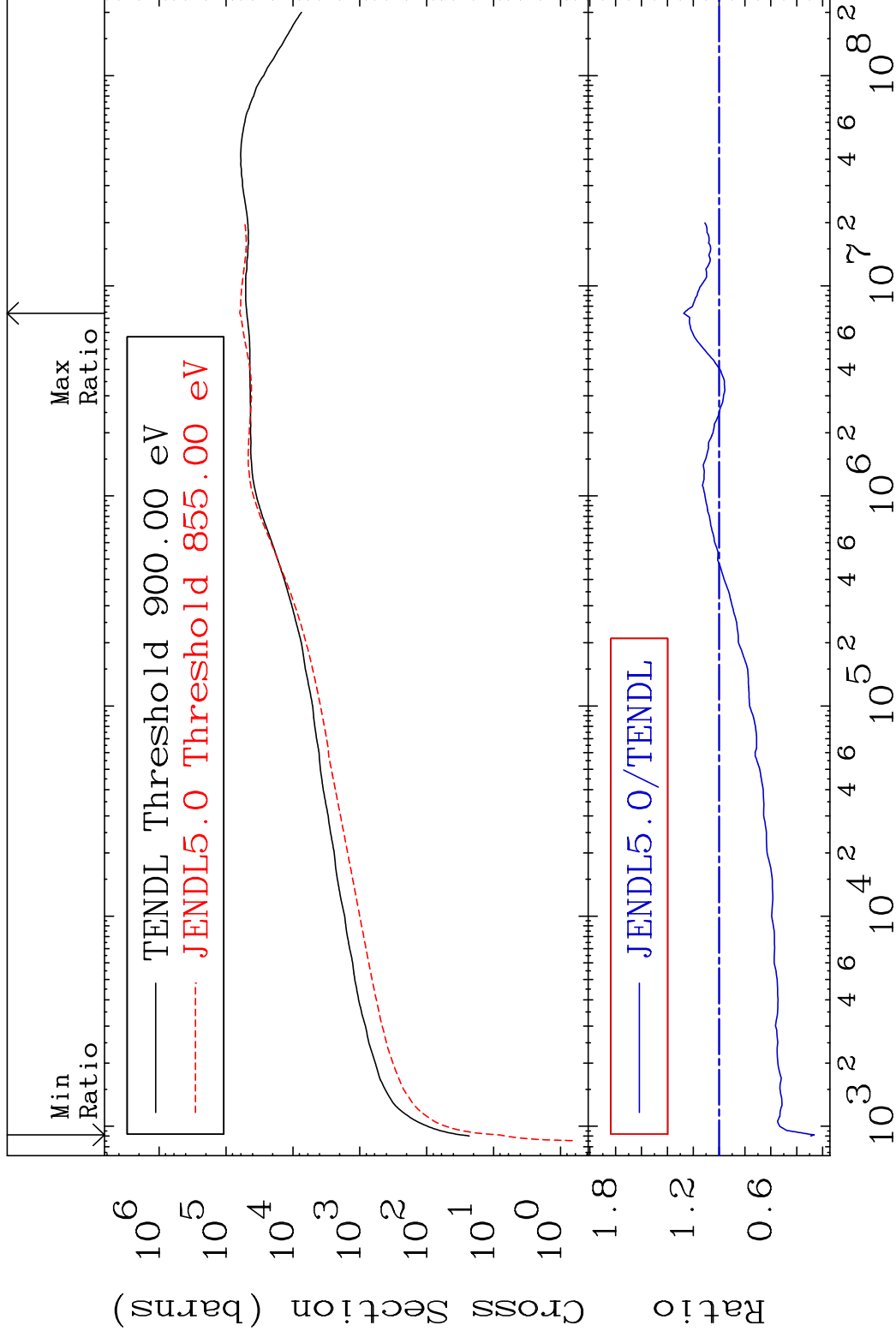
59-Pr-143

MAT 5931

Dpa elastic (mt2)

59-Pr-143

Cross Section -73.46 To 27.42 %

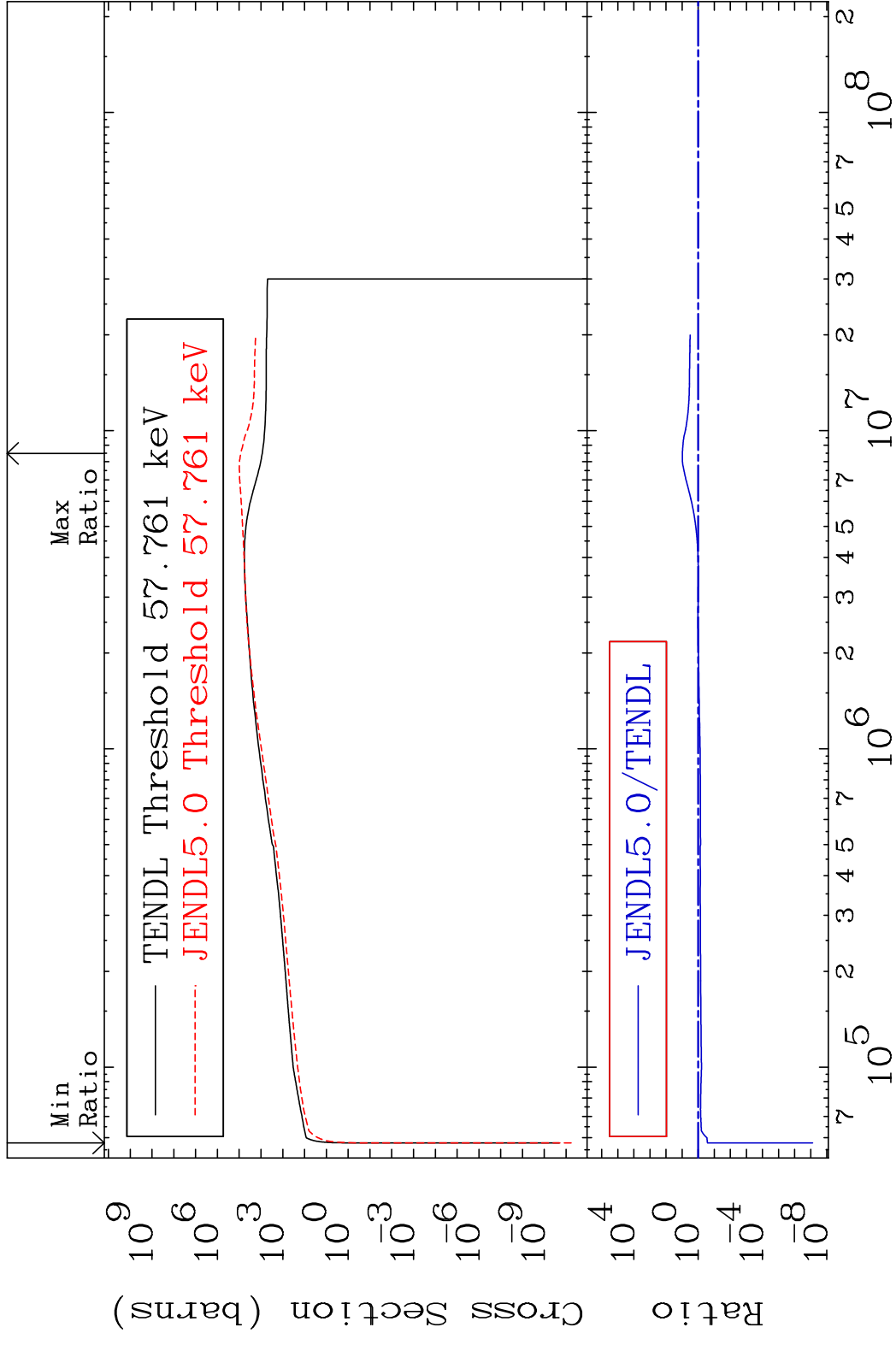


53

Incident Energy (eV)

59-Pr-143

MAT 5931 Dpa inelastic (mt51-91) 59-Pr-143
 Cross Section -100.0 To 868.6 %



MAT 5931 Dpa disappearance (mt102 -120) 59-Pr-143
 Cross Section -99.88 To 904.4 %

