

Program Complot
(Version 2018-1)

by

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Press Mouse Button to Start

MAT 6143

61-Pm-145

-98.34 To 9999. %

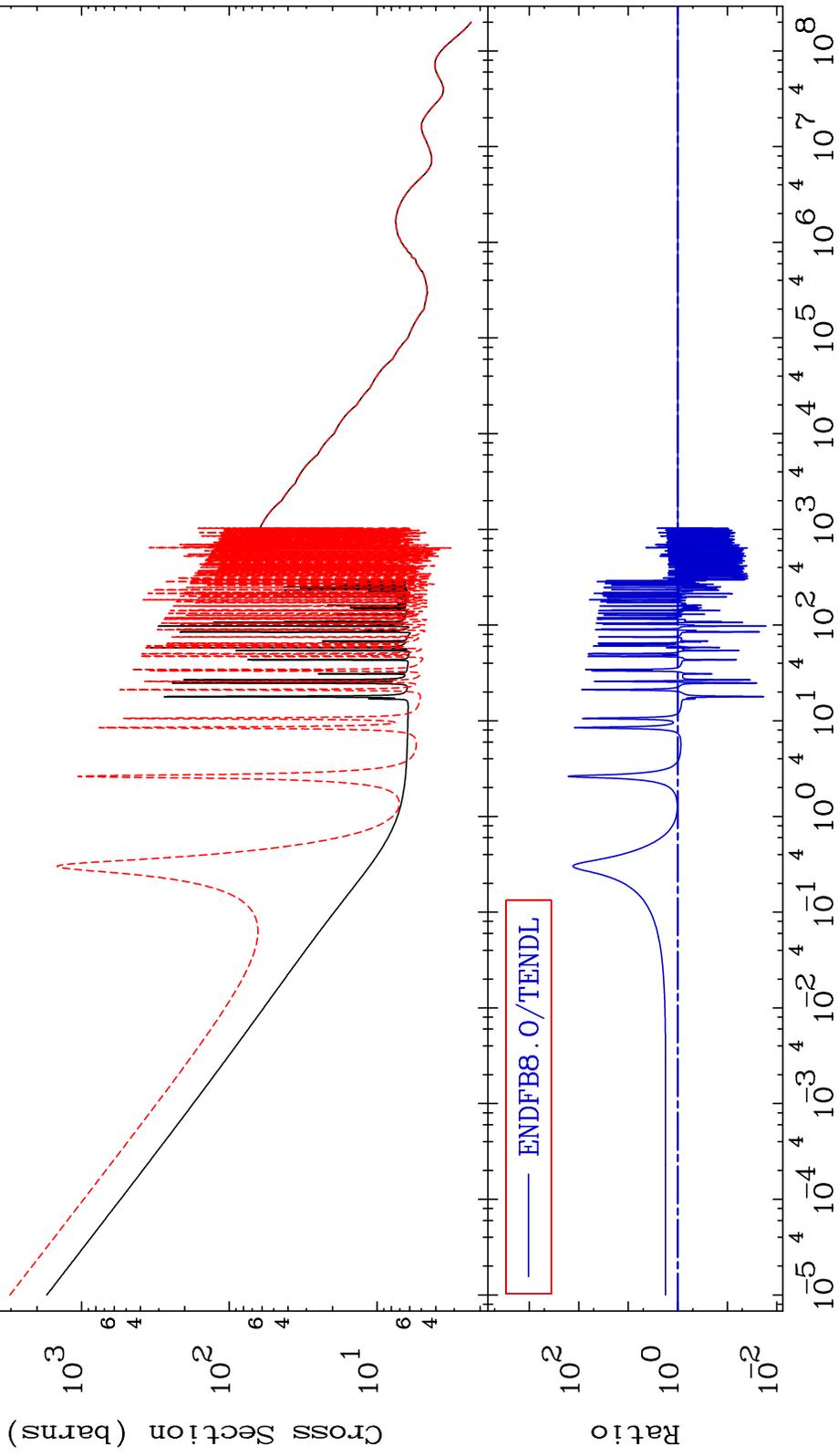
Total
Cross Section

Max
Ratio

Min
Ratio

TENDL
ENDFB8.0

ENDFB8.0/TENDL

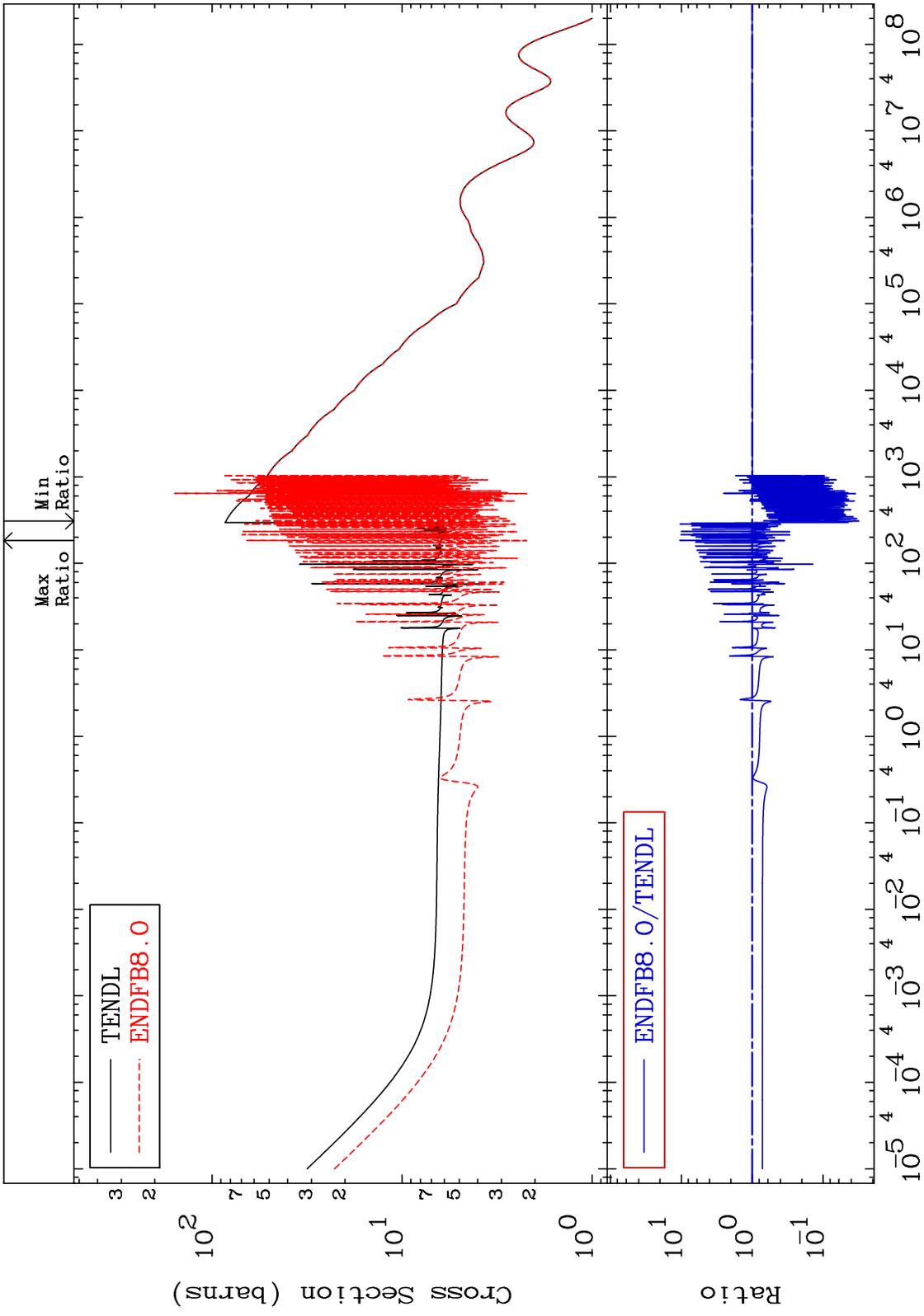


Incident Energy (eV)

61-Pm-145

1

MAT 6143 Elastic Cross Section 61-Pm-145 -96.86 To 953.1 %

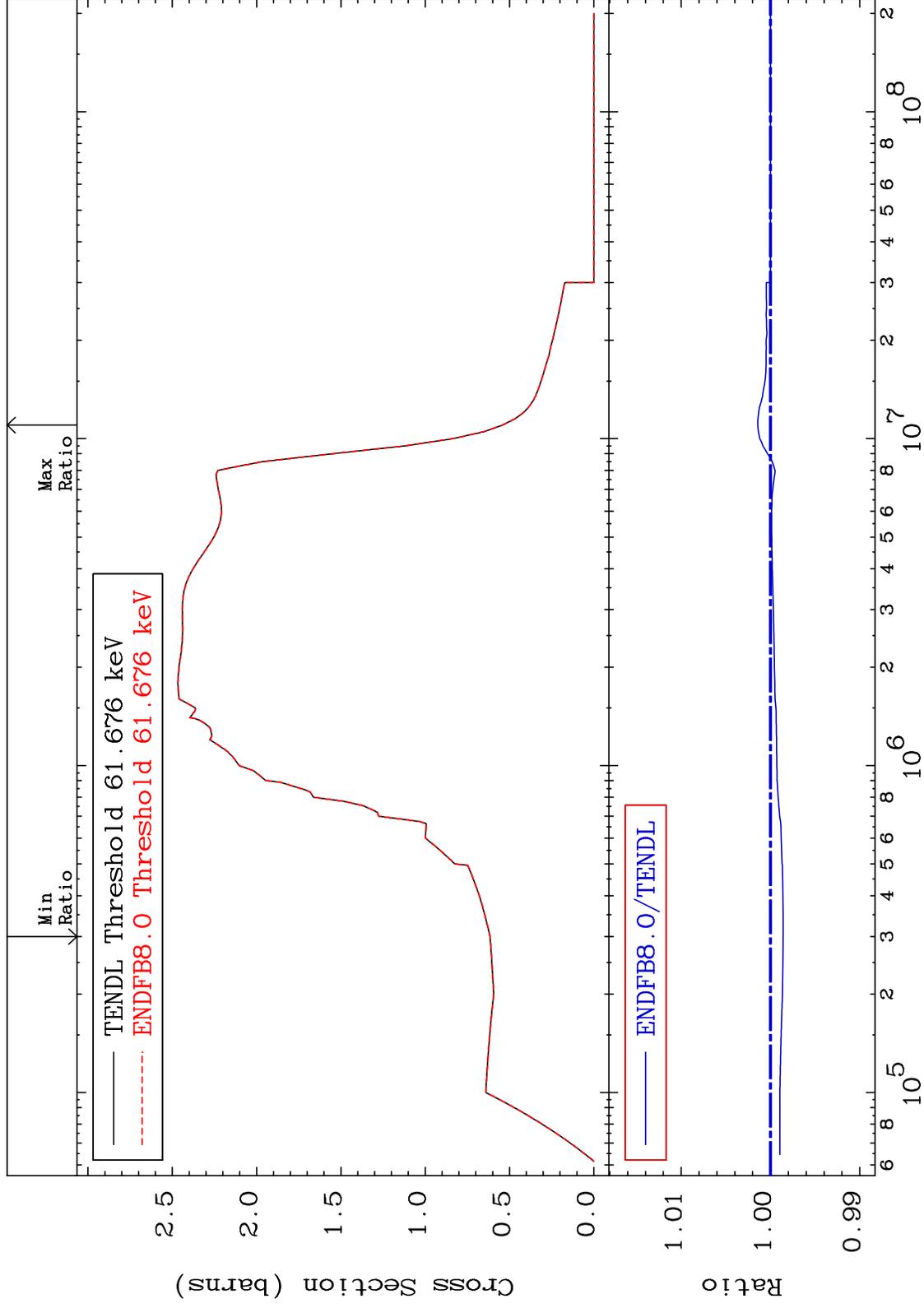


2 Incident Energy (eV) 61-Pm-145

MAT 6143

Inelastic
Cross Section

61-Pm-145
-0.142 To 0.142 %

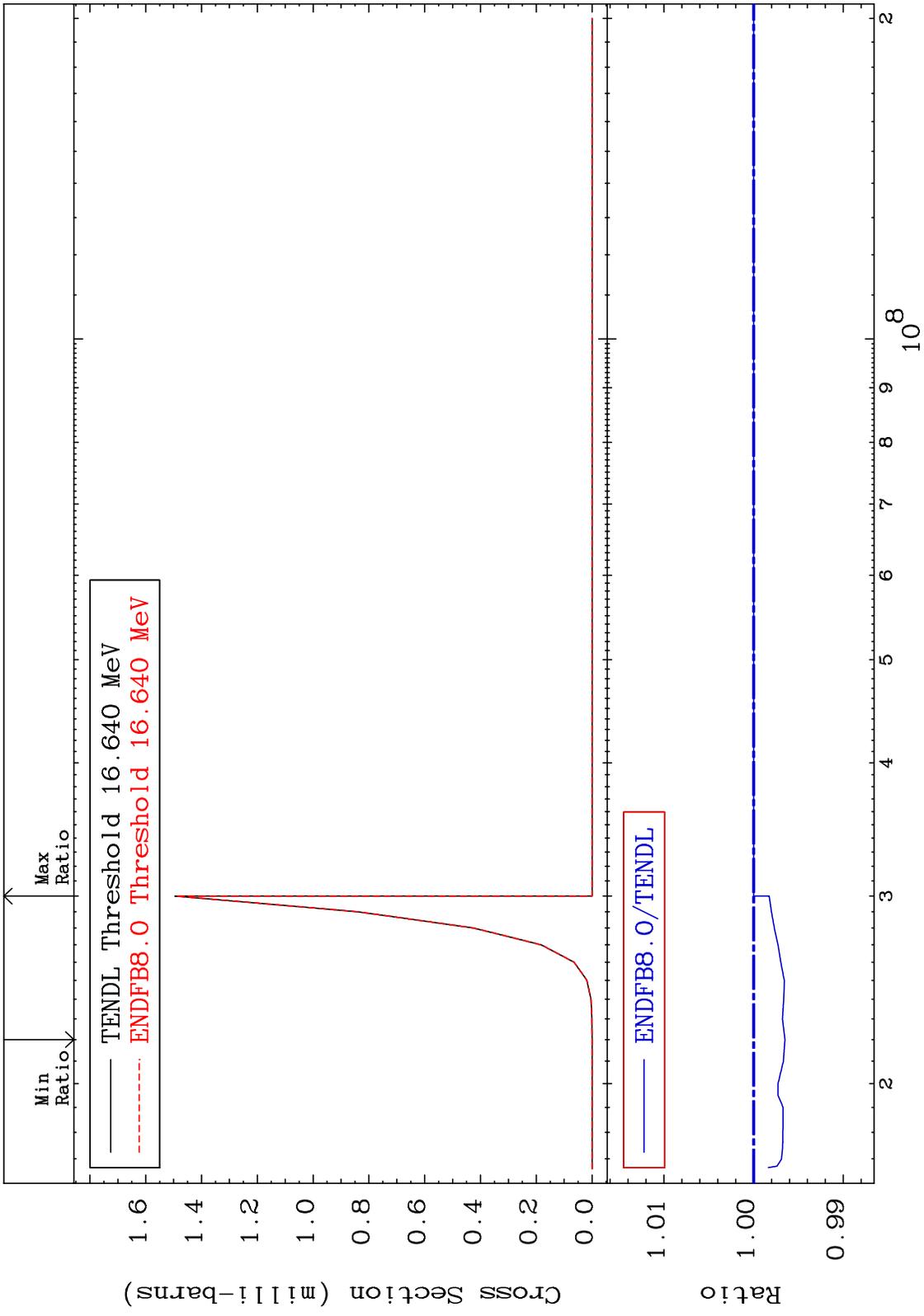


3

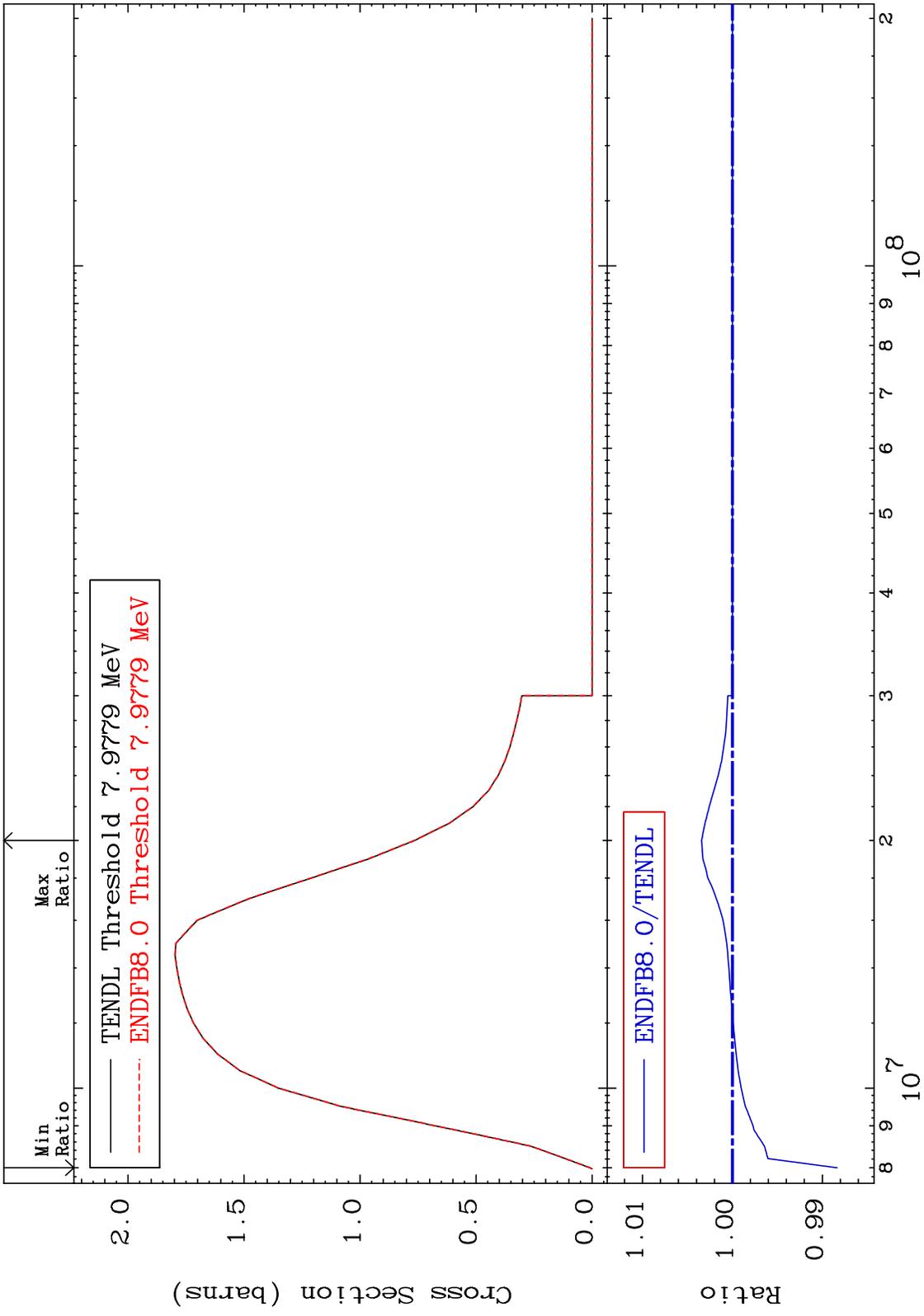
Incident Energy (eV)

61-Pm-145

MAT 6143 (n,2n) d 61-Pm-145
 Cross Section -0.350 To 0.000 %



MAT 6143 $(n,2n)$ Cross Section $^{61}\text{Pm}-145$ -1.164 To 0.344 %



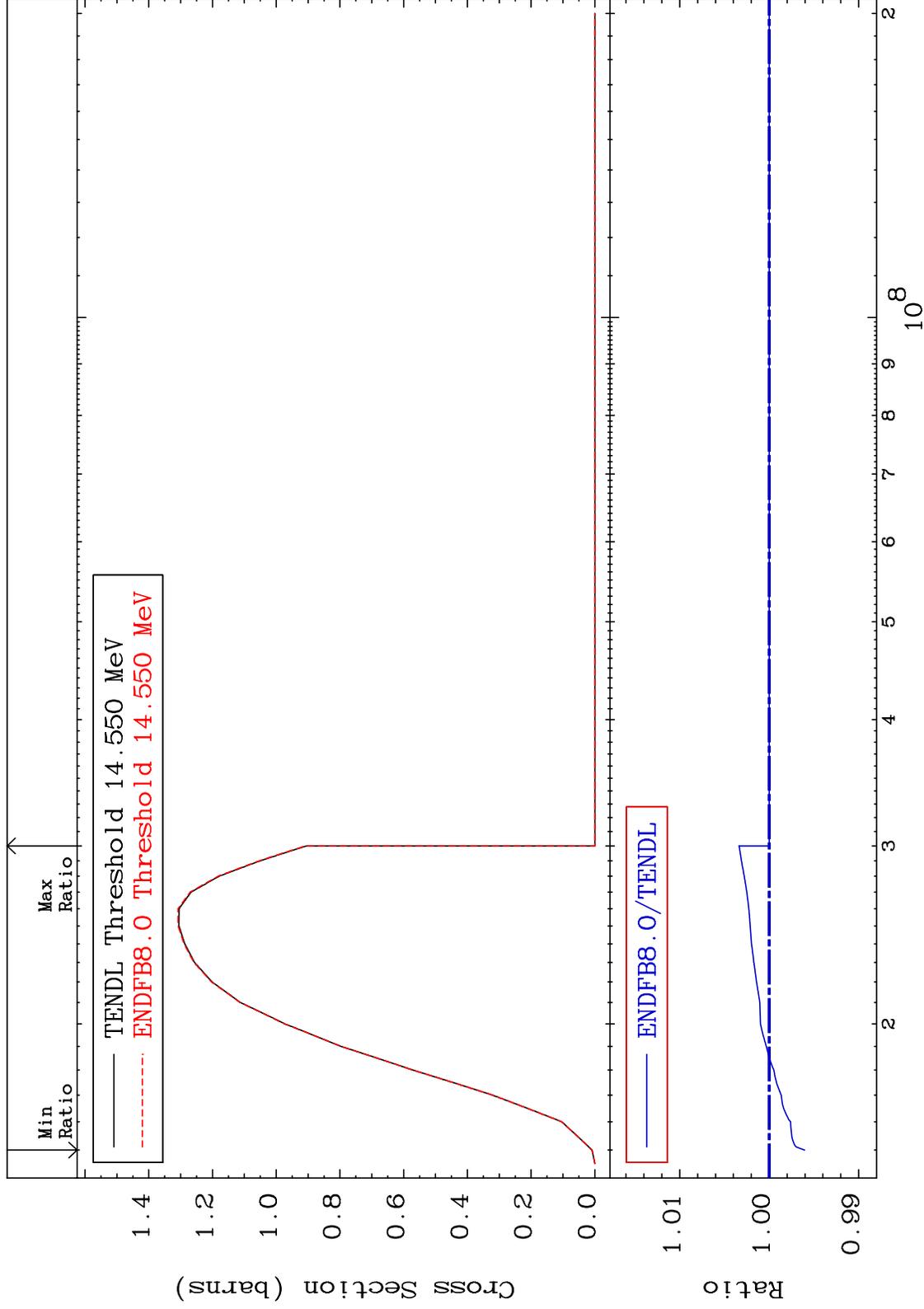
5 Incident Energy (eV) $^{61}\text{Pm}-145$

MAT 6143

(n,3n)

61-Pm-145

Cross Section -0.396 To 0.336 %



6

Incident Energy (eV)

61-Pm-145

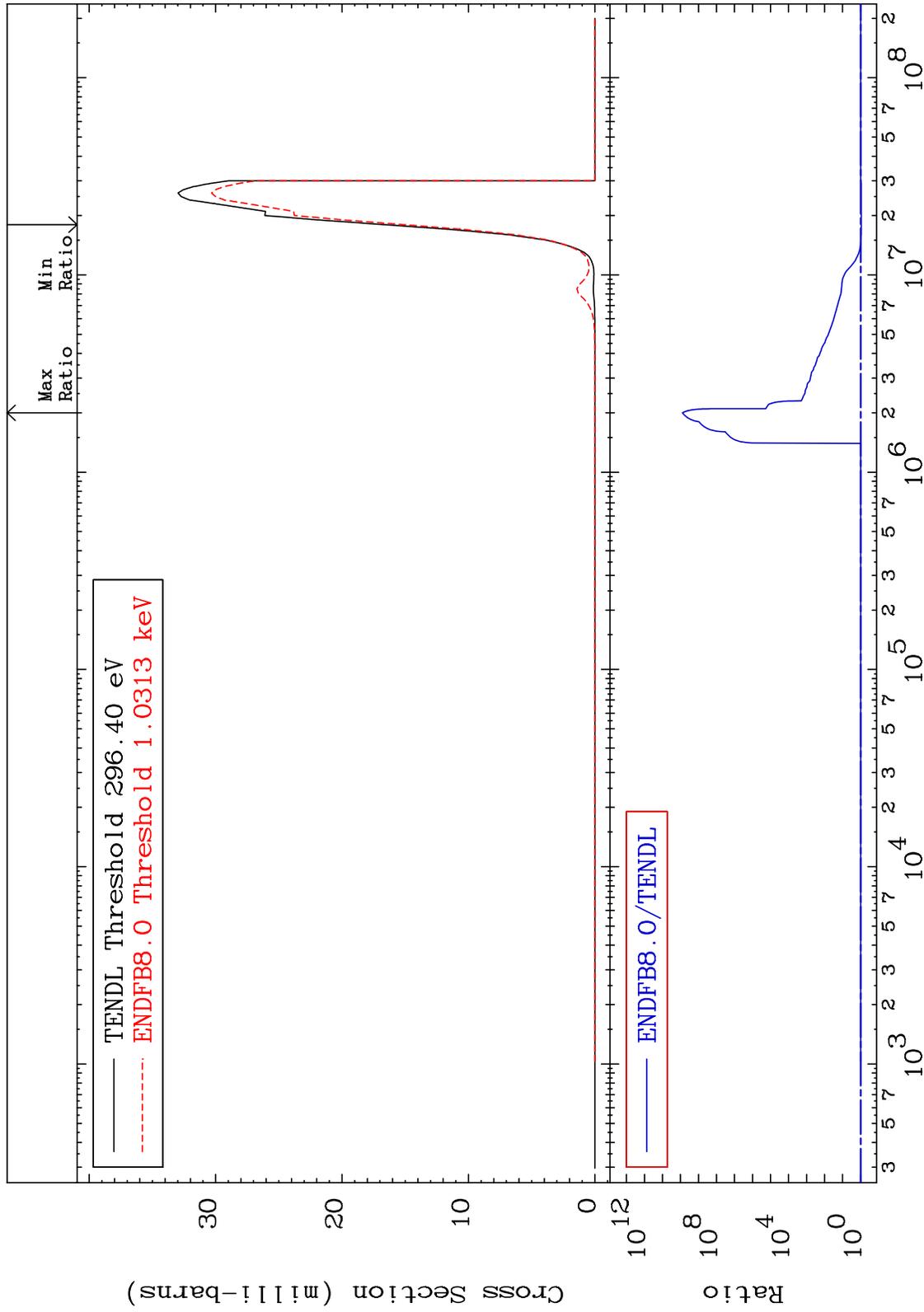
MAT 6143

(n, n') α

61-Pm-145

Cross Section

-9.178 To 9999. %

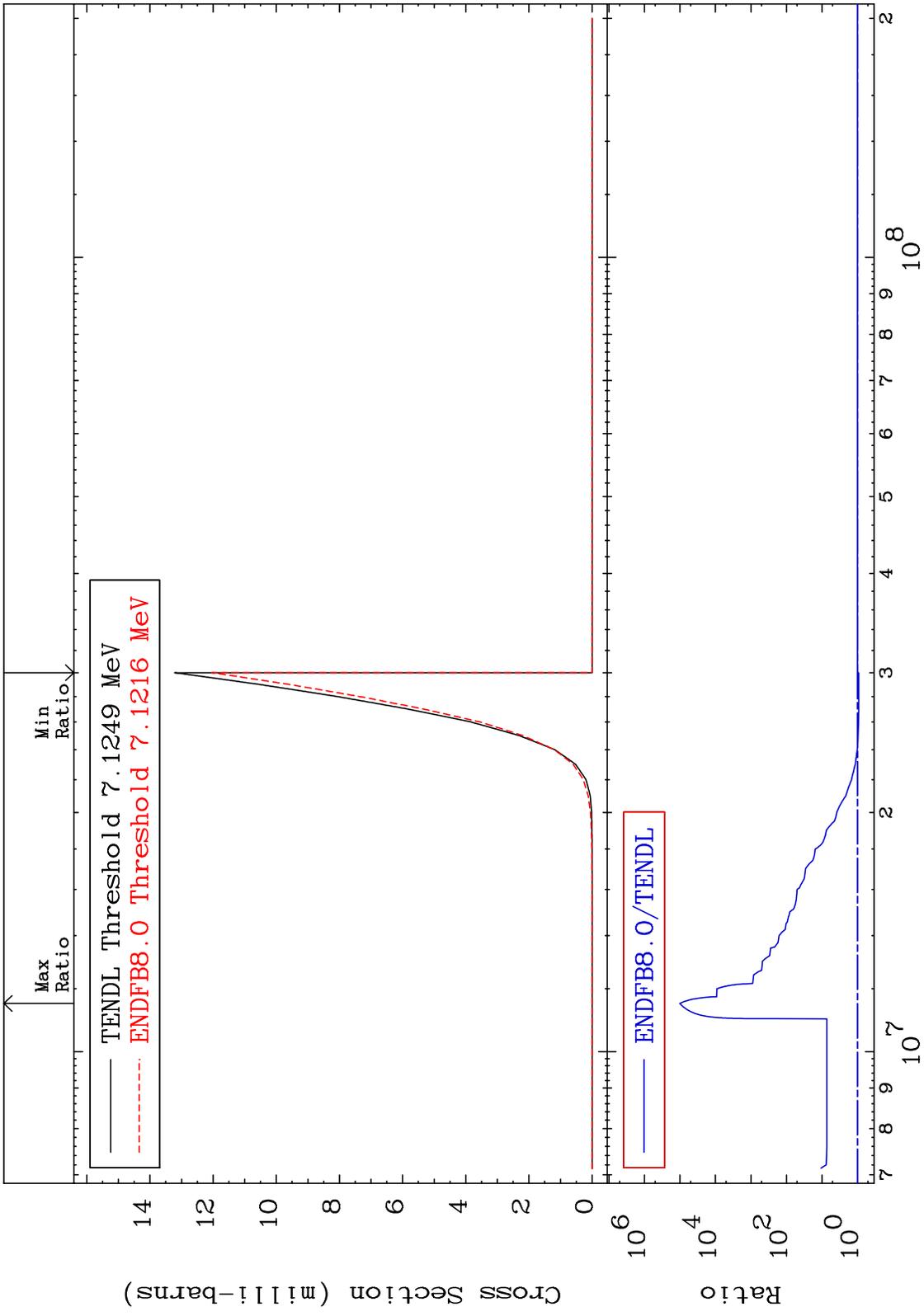


7

Incident Energy (eV)

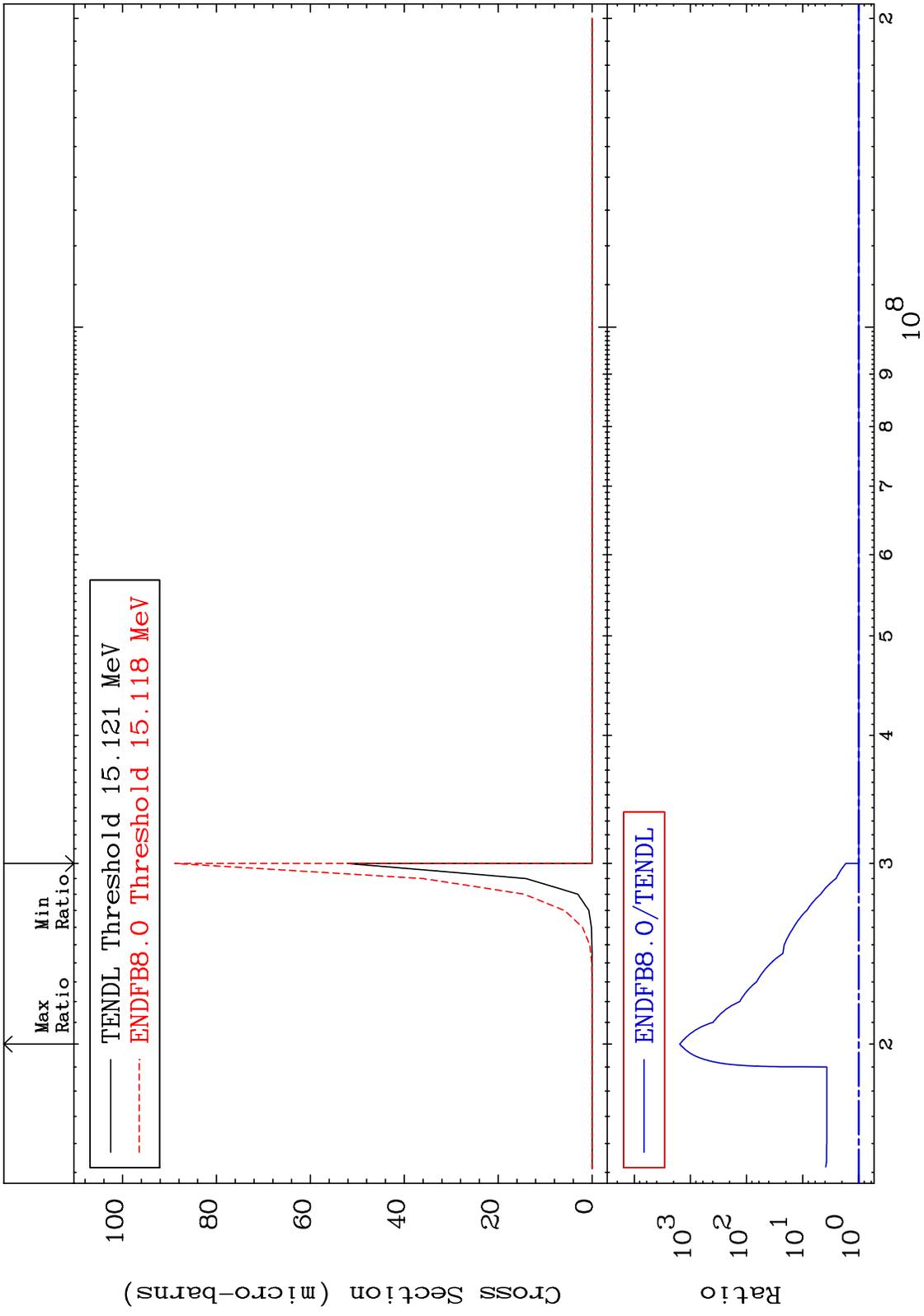
61-Pm-145

MAT 6143 $(n, 2n) \alpha$ $^{61}\text{Pm}-145$
 Cross Section -8.982 To $9999. \%$

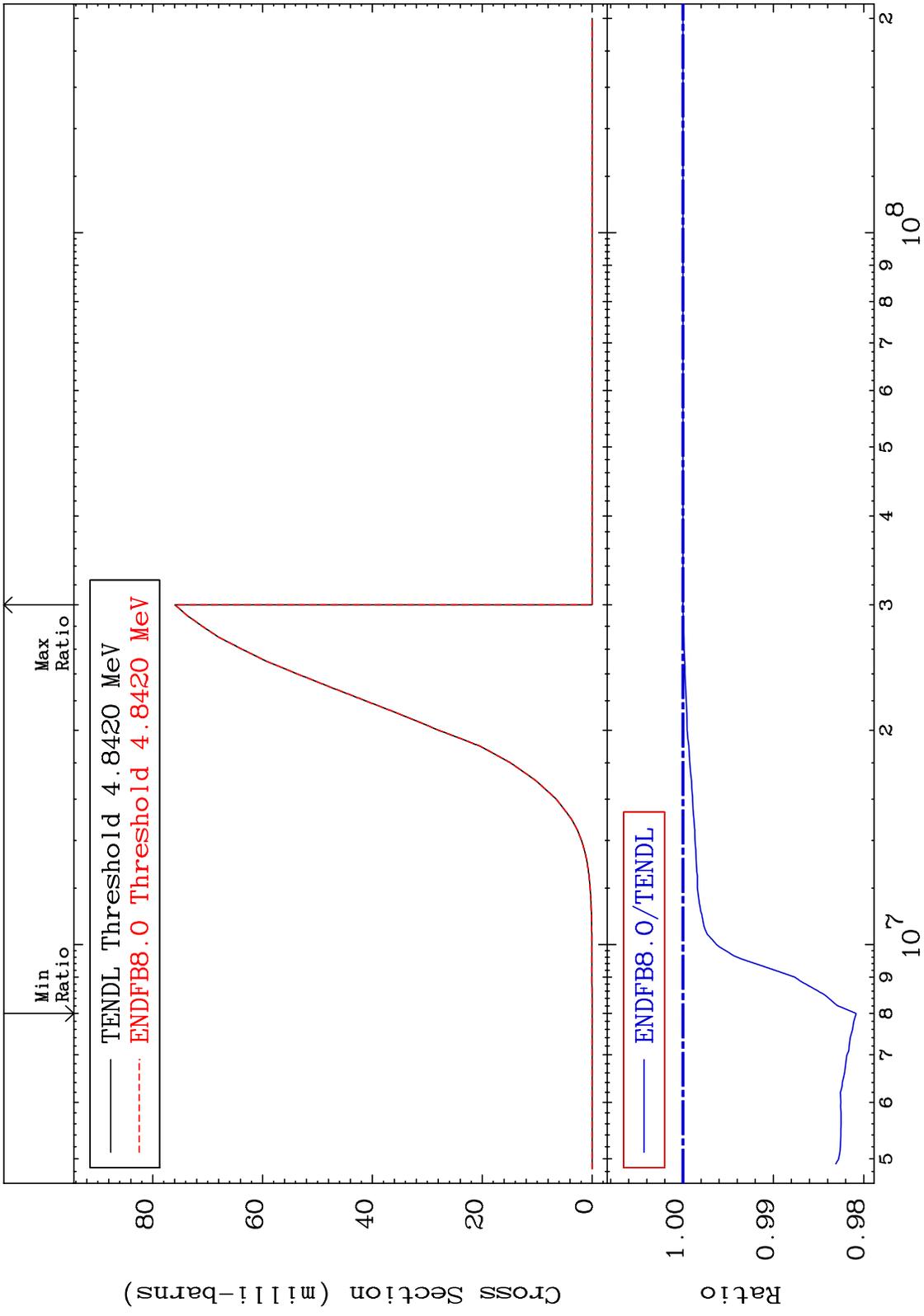


8 $^{61}\text{Pm}-145$

MAT 6143 $(n, 3n) \alpha$ 61-Pm-145
 Cross Section 0.000 To 9999. %

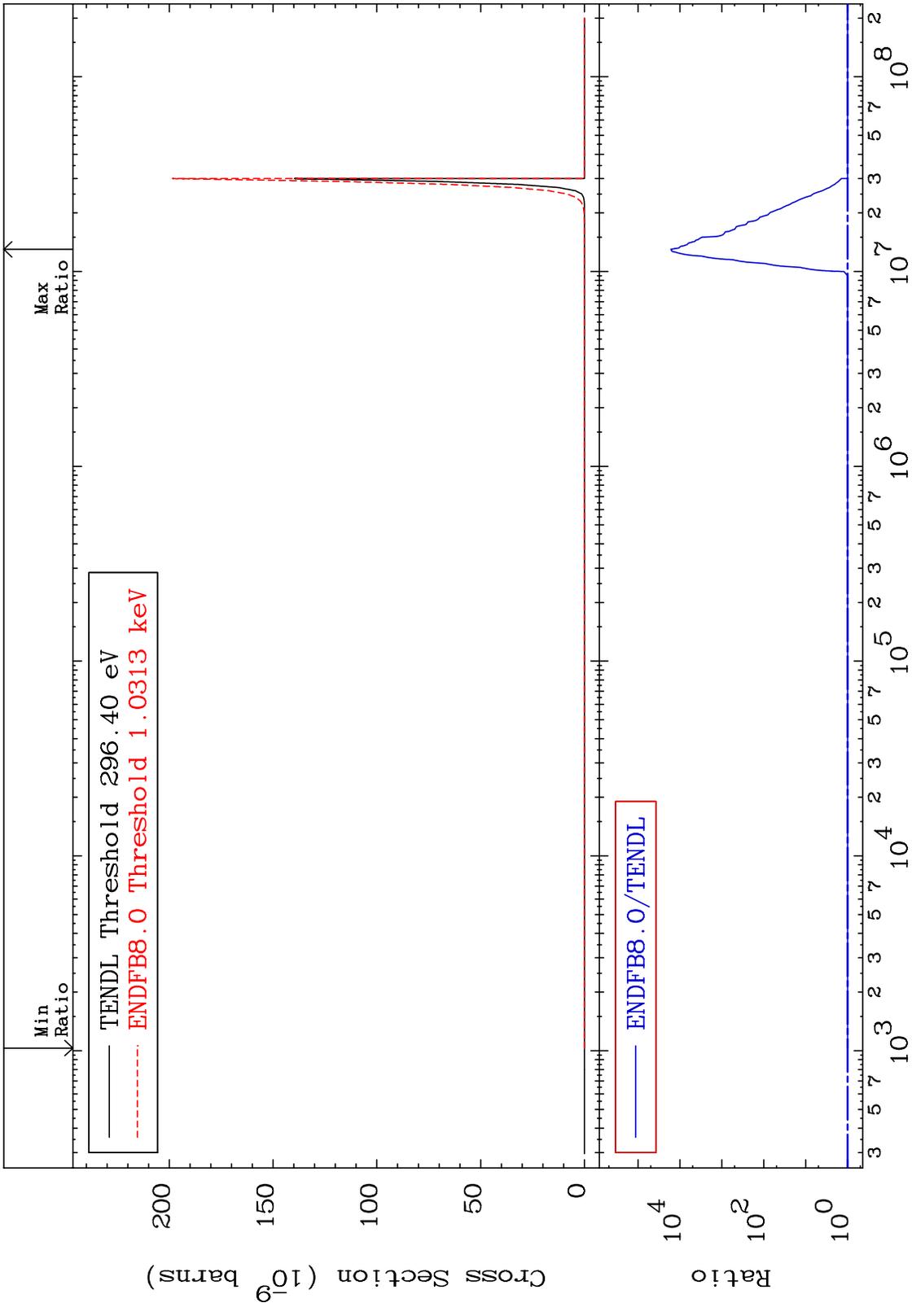


MAT 6143 (n, n') p $^{61}\text{Pm}-145$
 Cross Section -1.915 To 0.004 %

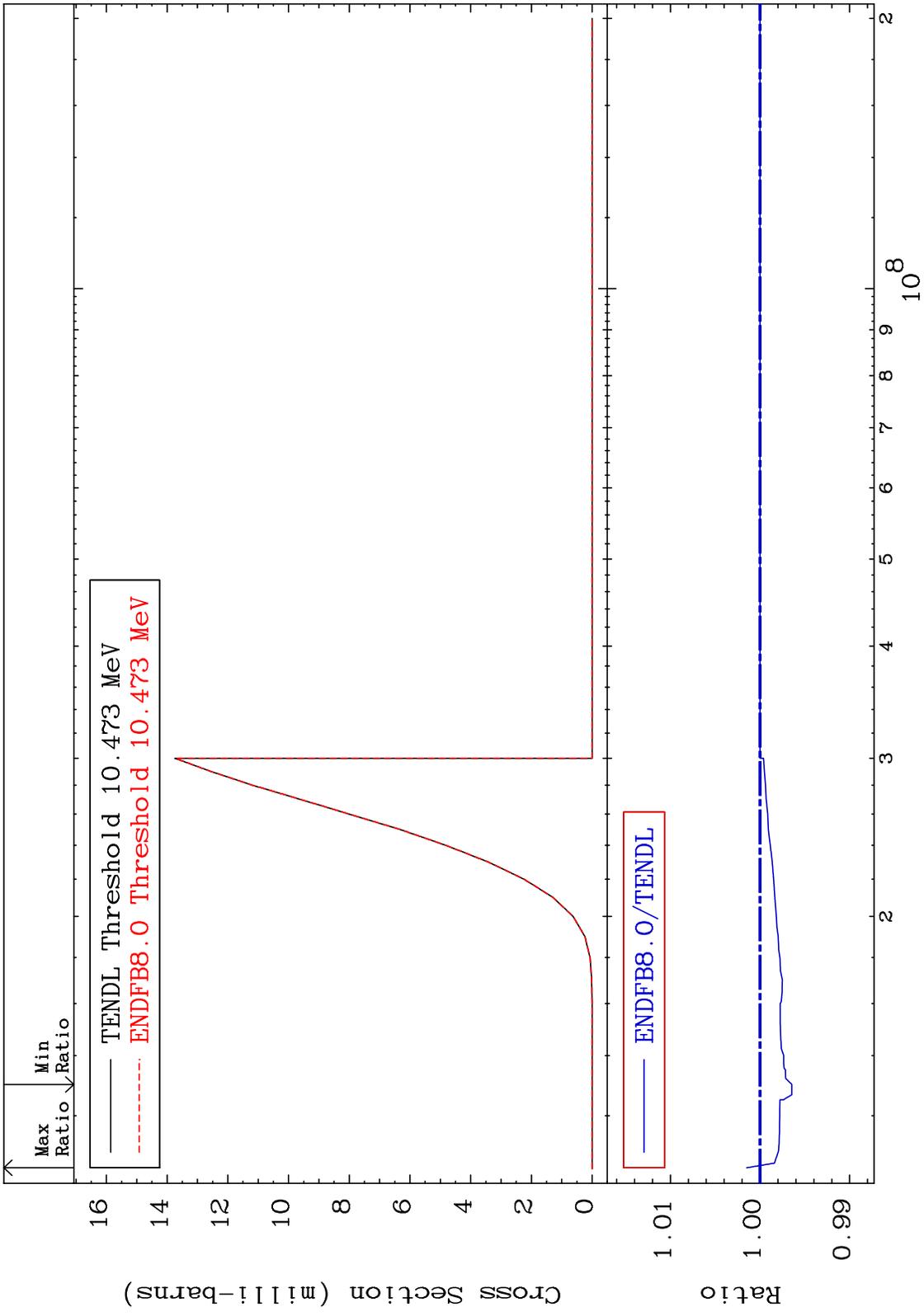


10 Incident Energy (eV) $^{61}\text{Pm}-145$

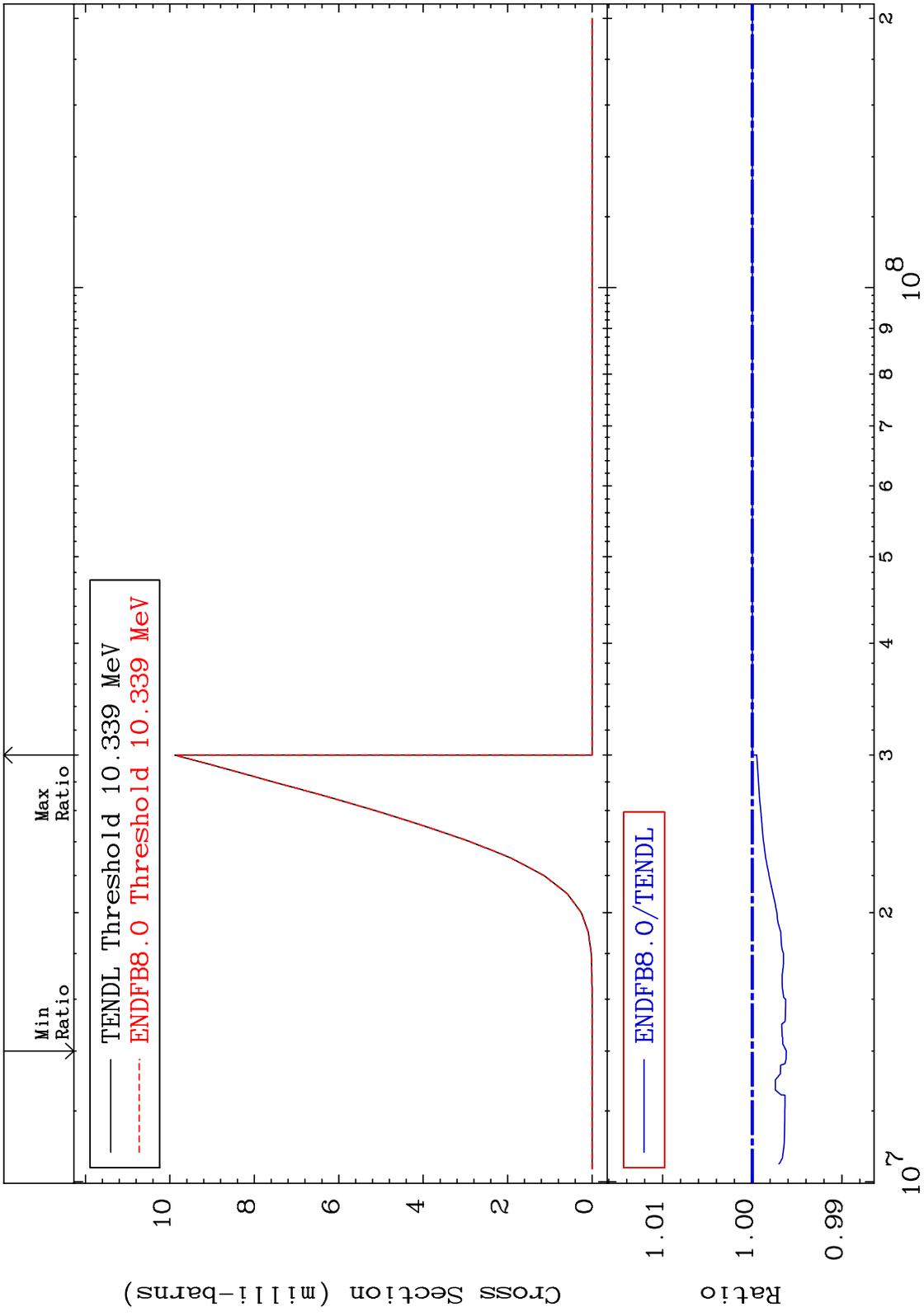
MAT 6143 (n,n') 2α Cross Section 61-Pm-145 To 9999. %



MAT 6143 (n,n') d 61-Pm-145
 Cross Section -0.355 To 0.149 %

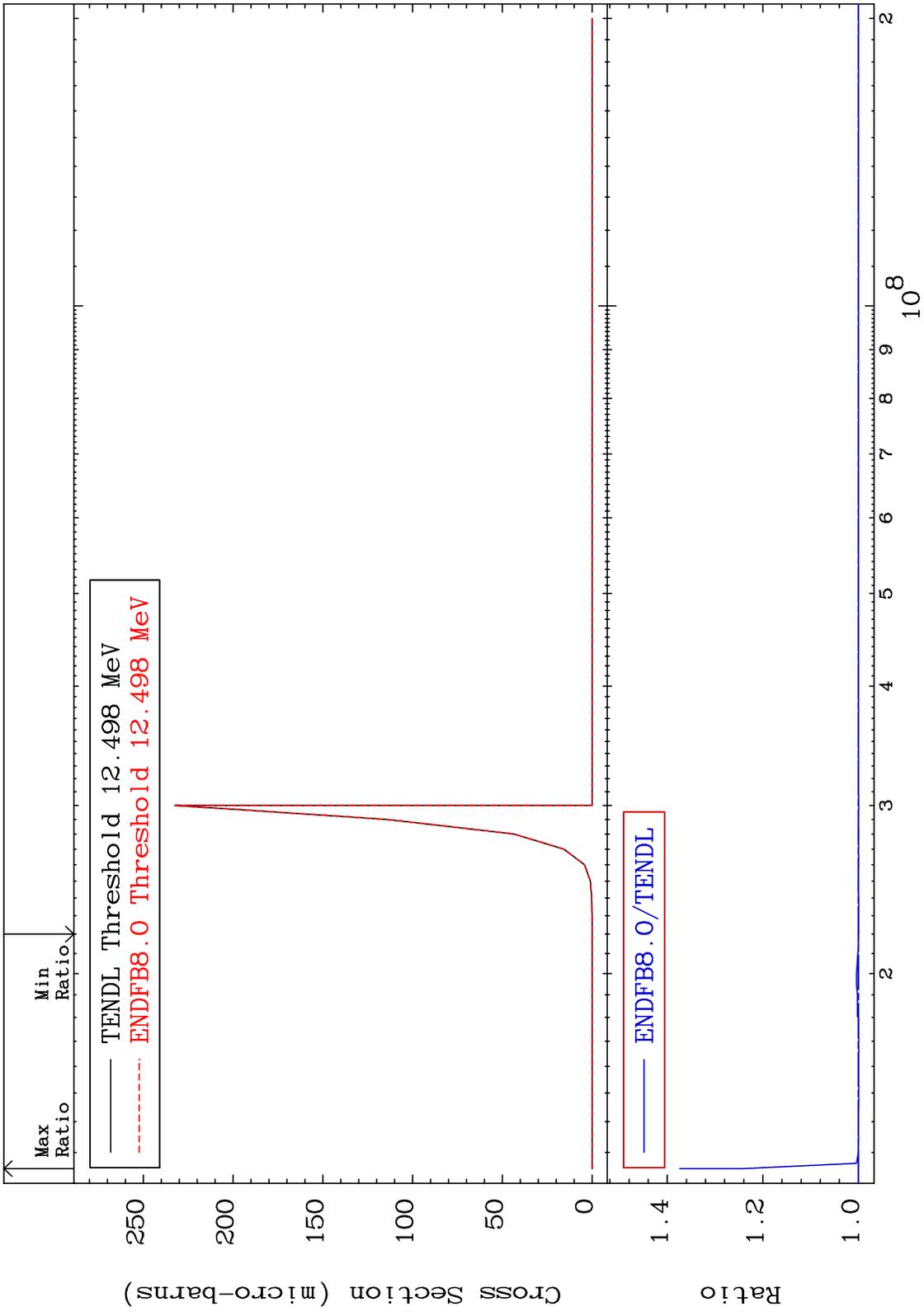


MAT 6143 (n, n') t $^{61}\text{Pm-145}$
 Cross Section -0.380 To 0.000 %

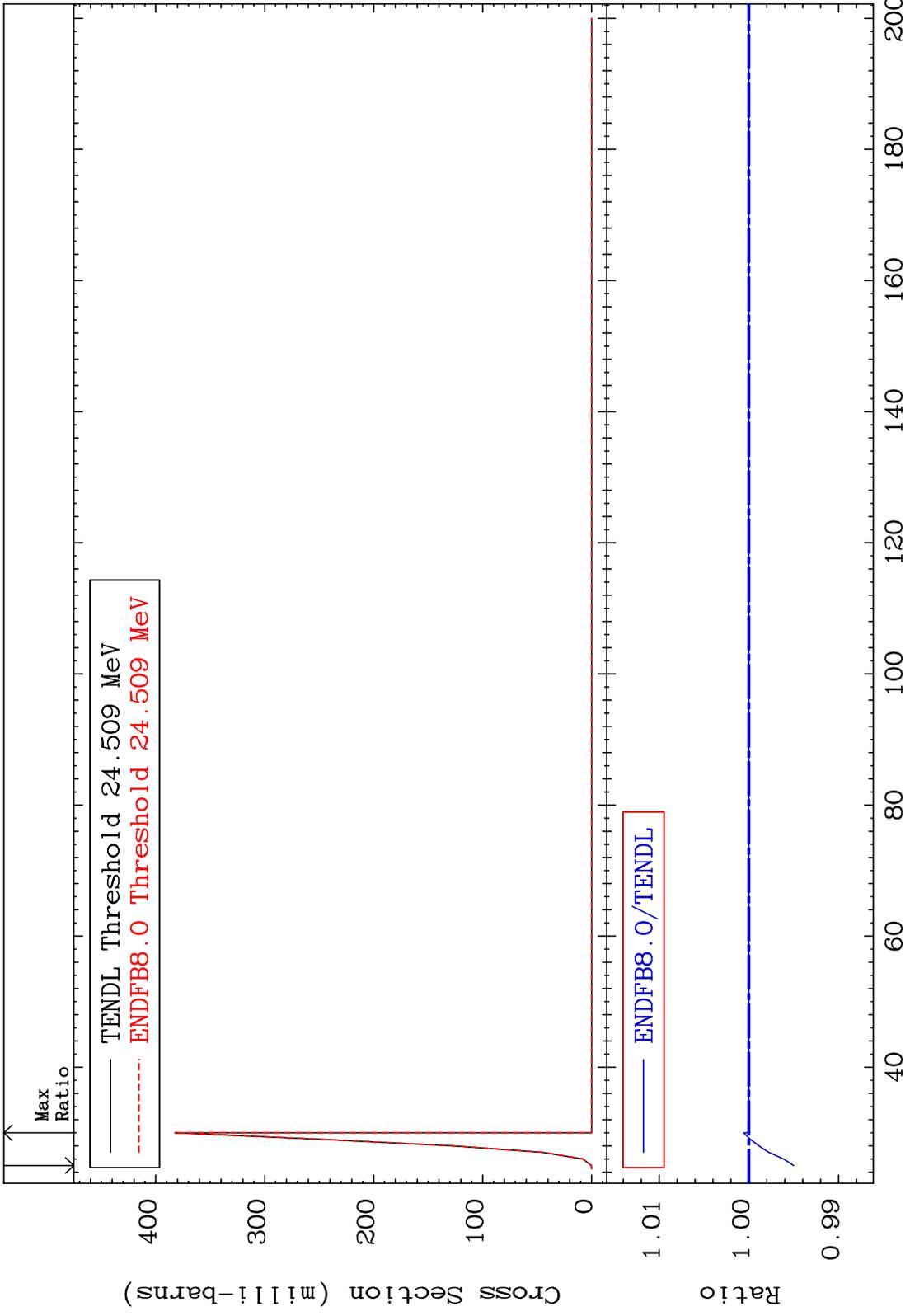


13 $^{61}\text{Pm-145}$

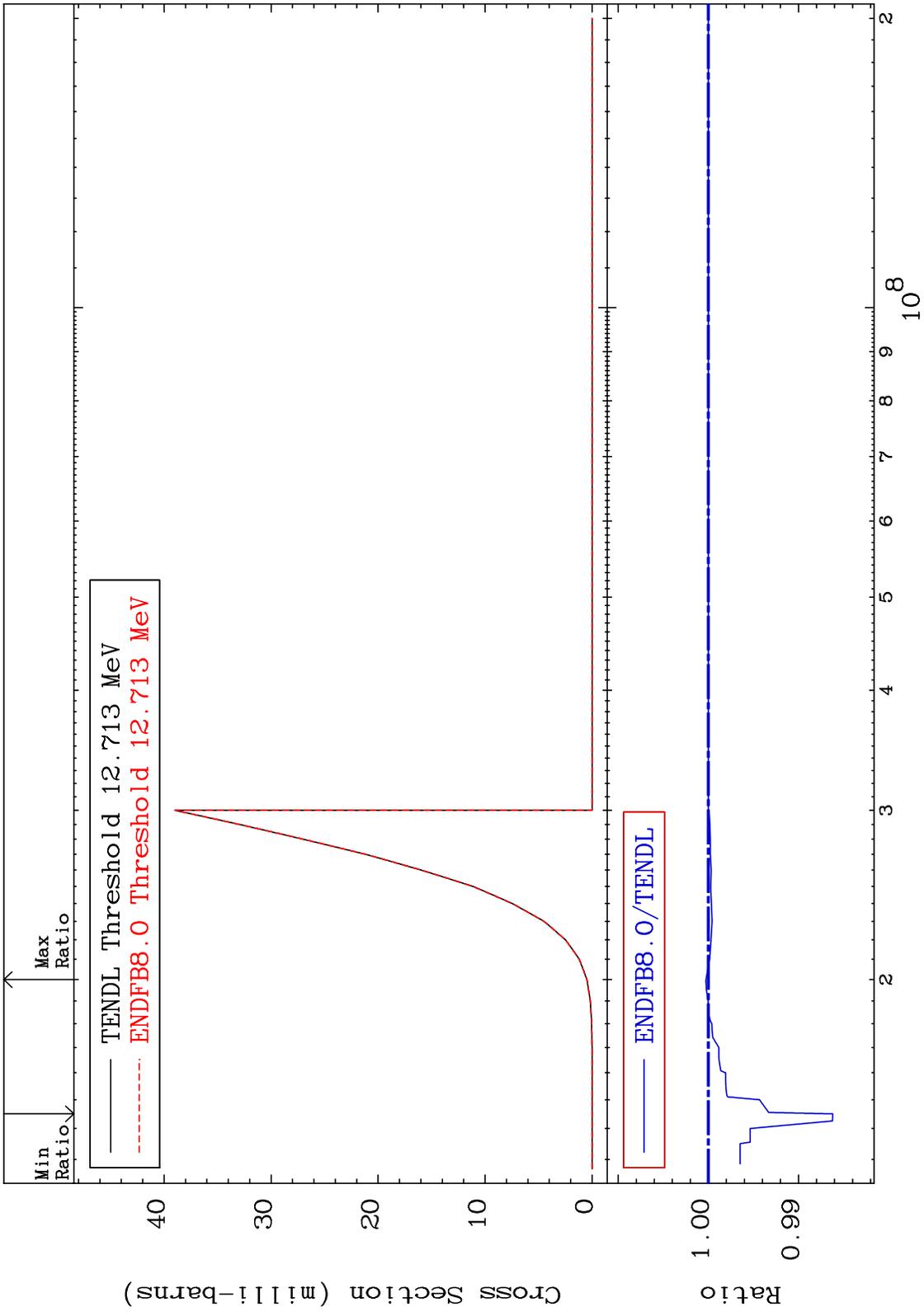
MAT 6143 (n, n') He-3 61-Pm-145
 Cross Section -0.070 To 37.38 %



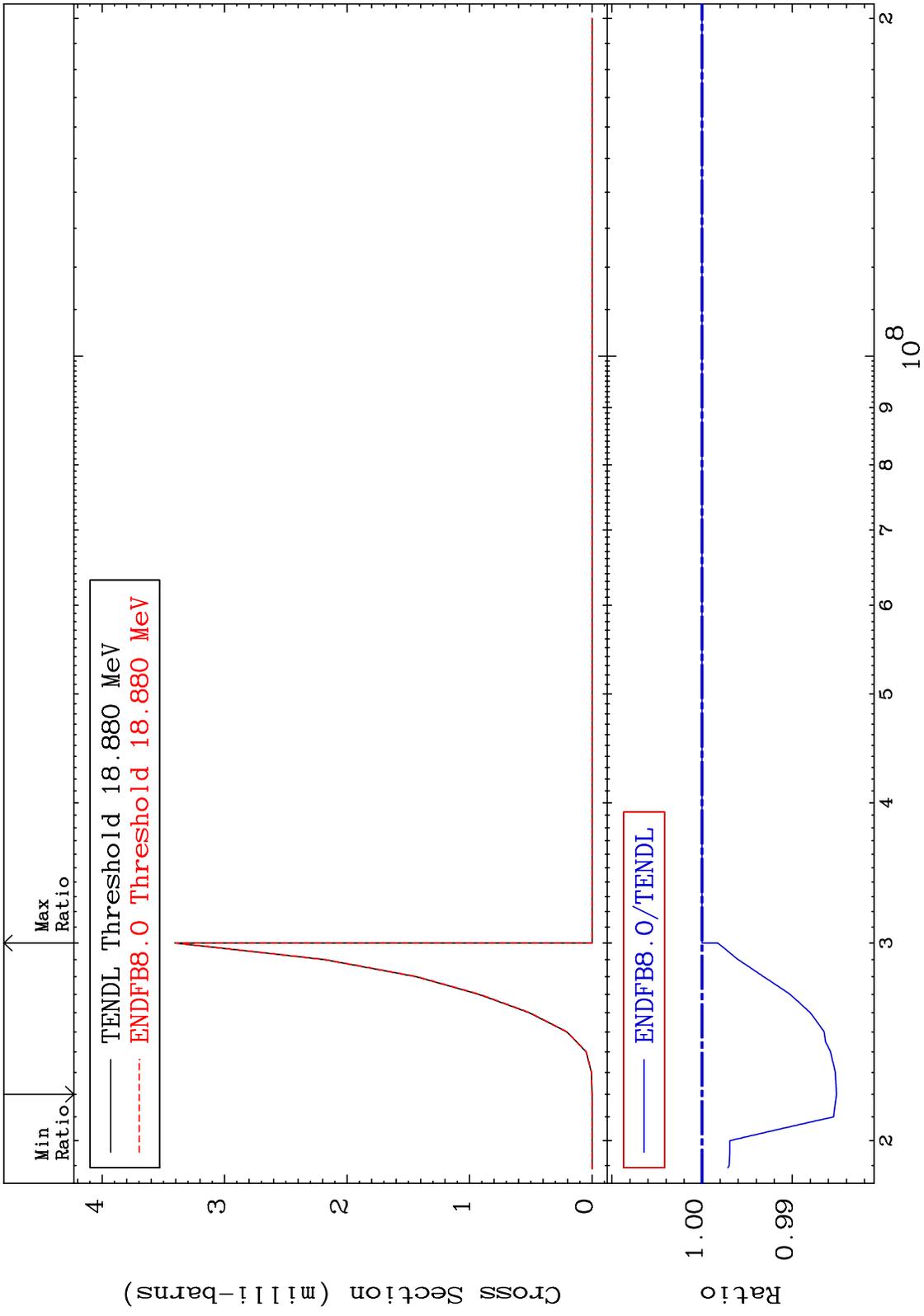
MAT 6143 (n,4n) Cross Section 61-Pm-145 -0.499 To 0.060 %



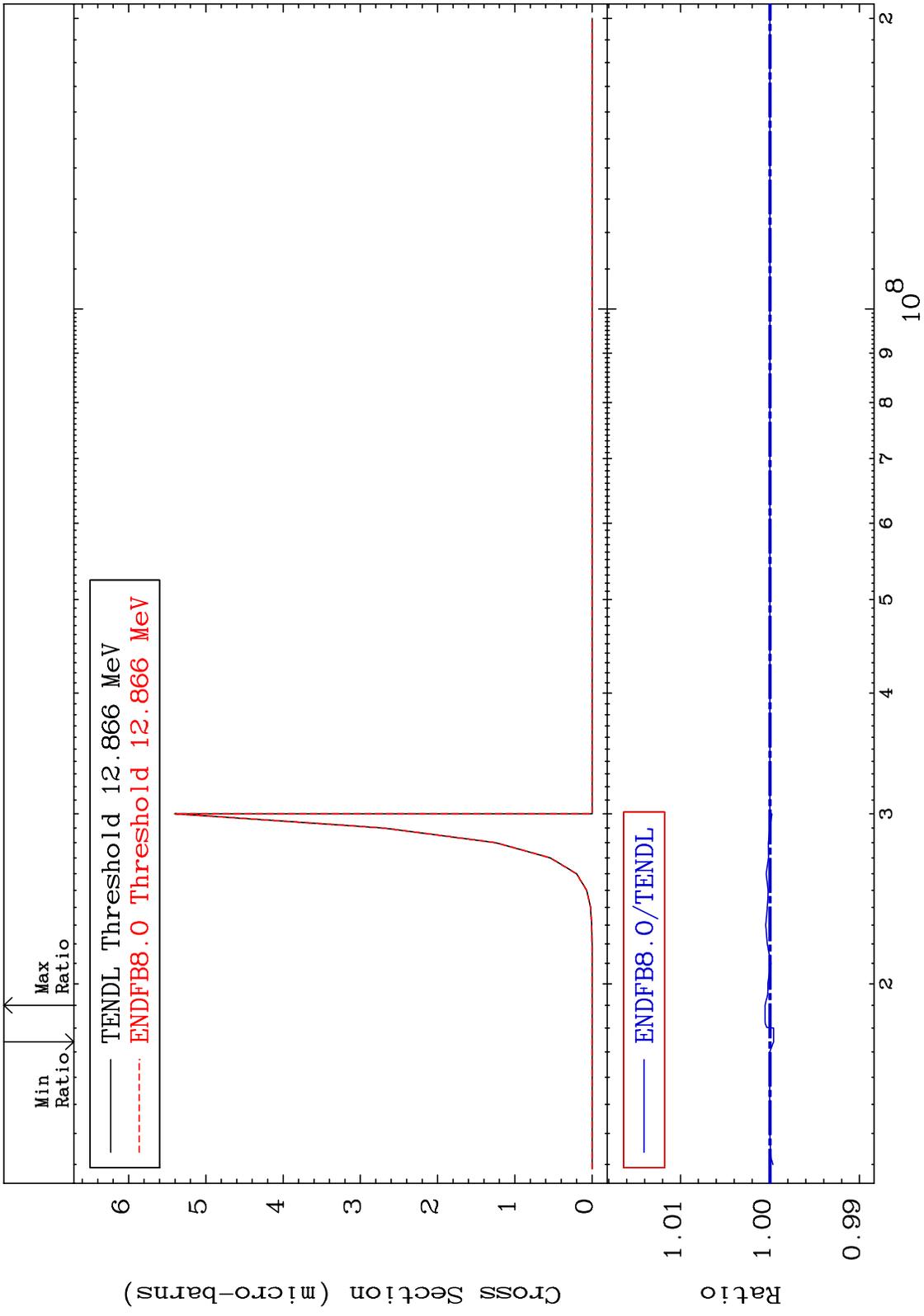
MAT 6143 (n,2n) p 61-Pm-145
 Cross Section -1.379 To 0.026 %



MAT 6143 (n,3n) p 61-Pm-145
 Cross Section -1.490 To 0.000 %



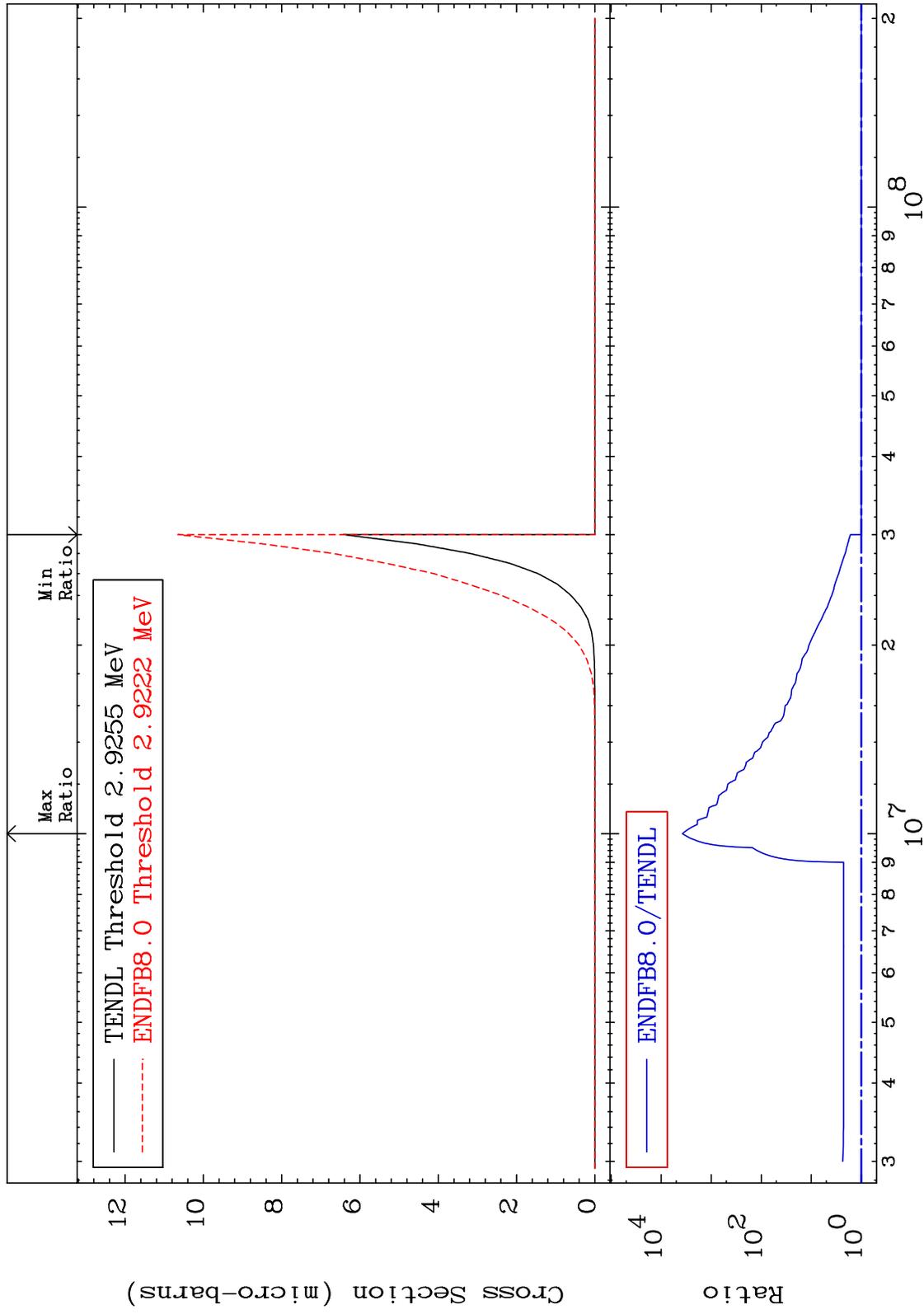
MAT 6143 (n,2n) p 61-Pm-145
 Cross Section -0.040 To 0.056 %



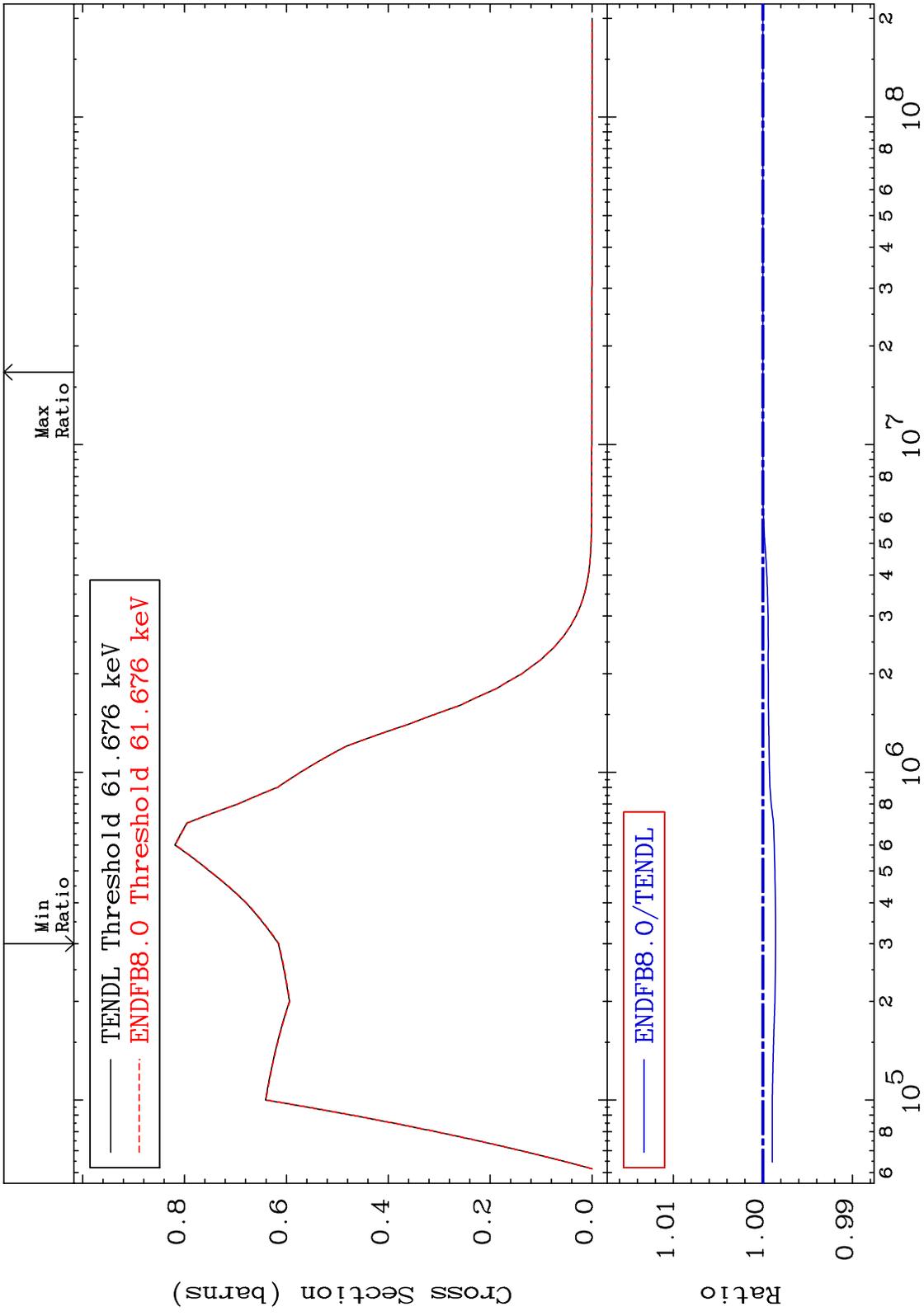
MAT 6143

(n,n') p α
Cross Section

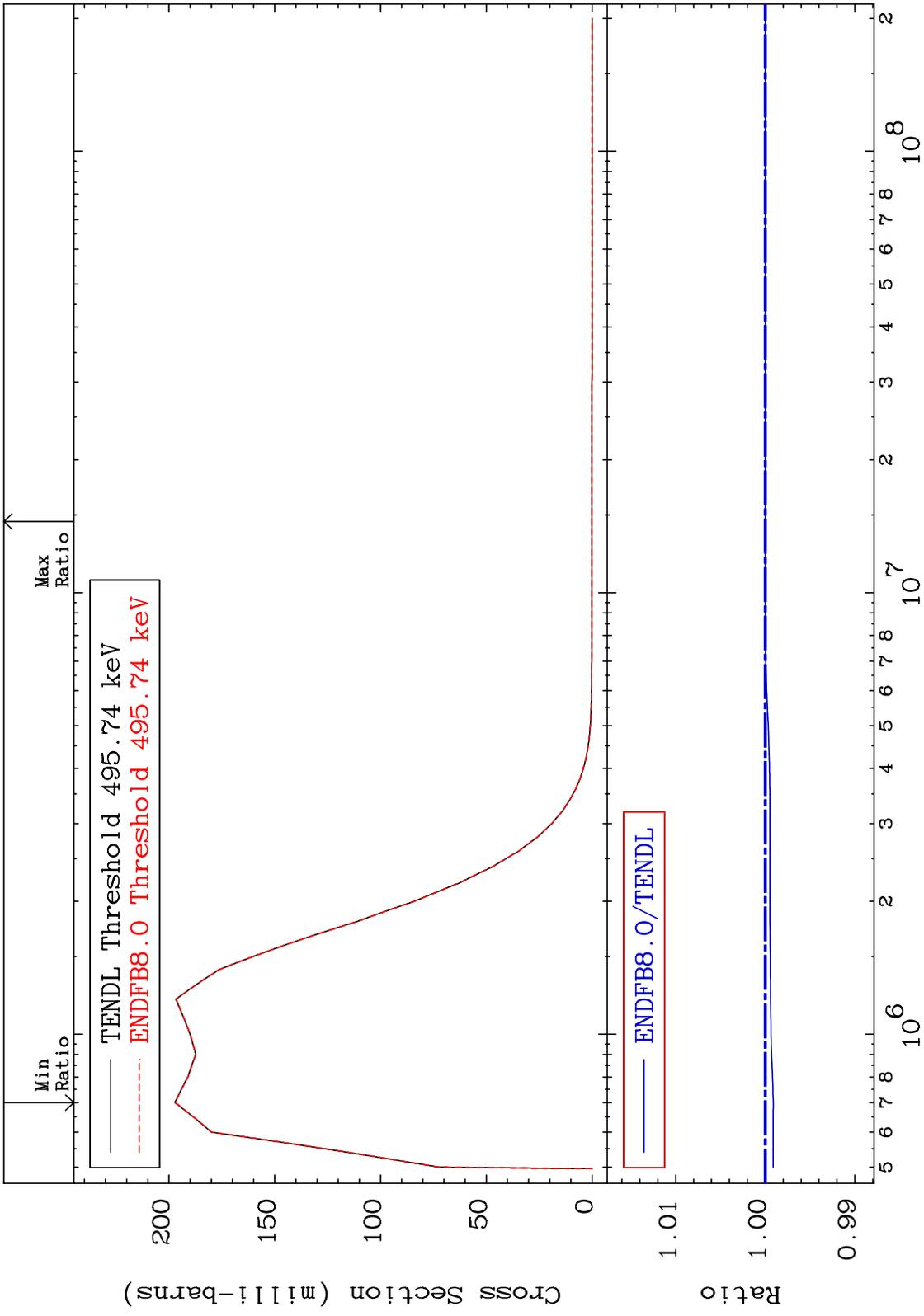
61-Pm-145
To 9999. %
0.000



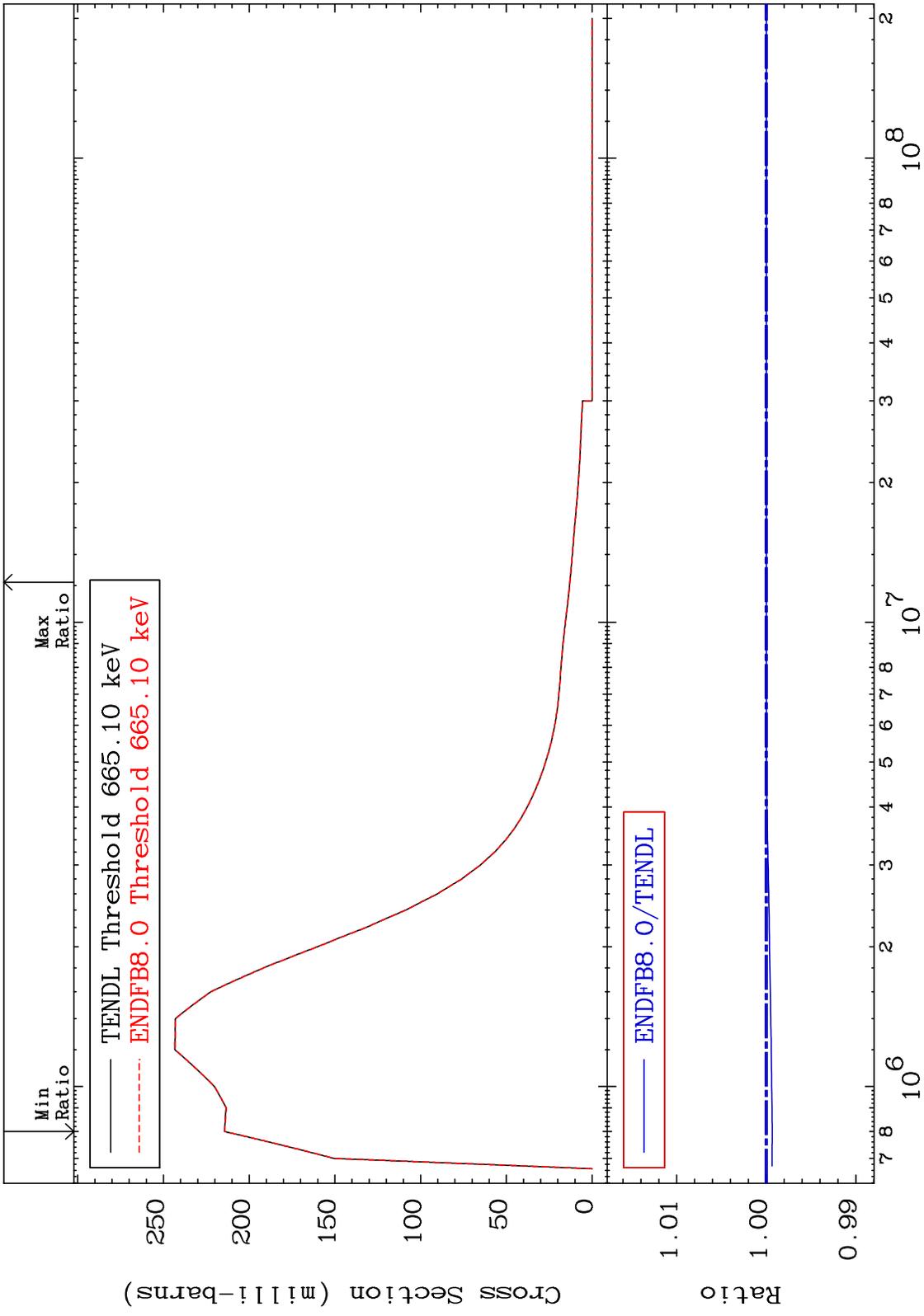
MAT 6143 MT= 51 (n,n') Level Cross Section 61-Pm-145 -0.142 To 0.000 %



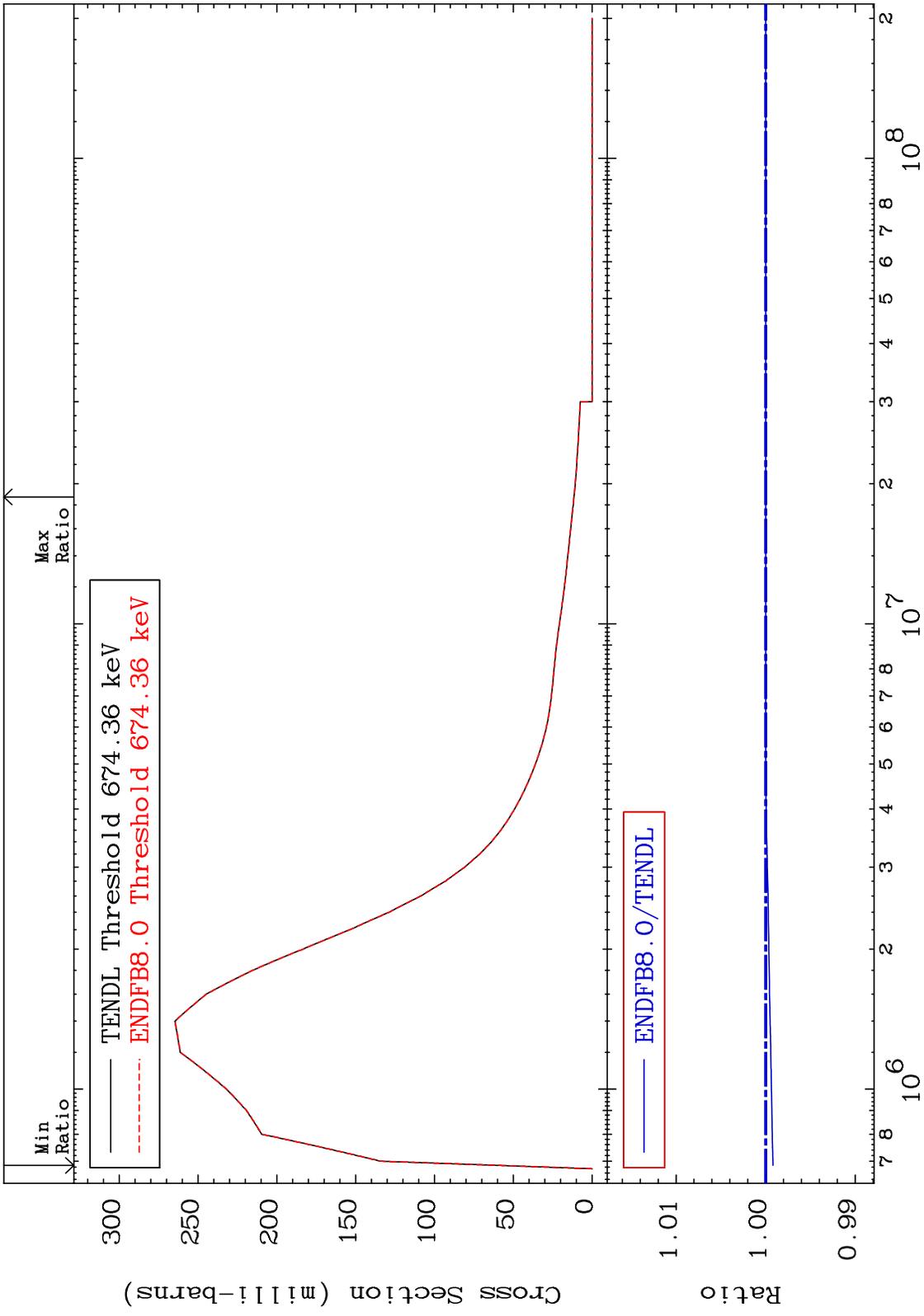
MAT 6143 MT= 52 (n,n') Level Cross Section 61-Pm-145 -0.090 To 0.000 %



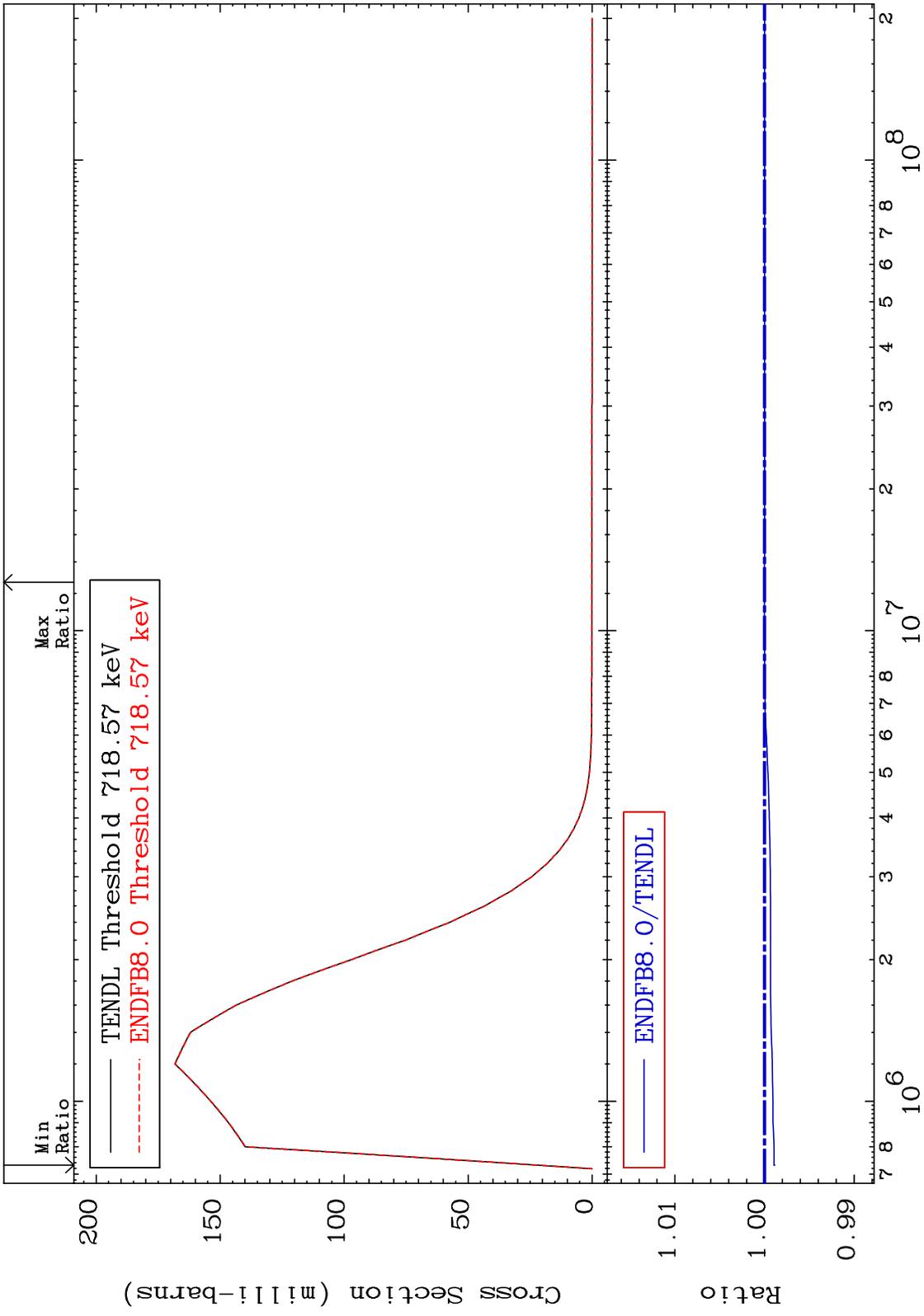
MAT 6143 MT= 53 (n,n') Level Cross Section 61-Pm-145
 -0.067 To 0.000 %



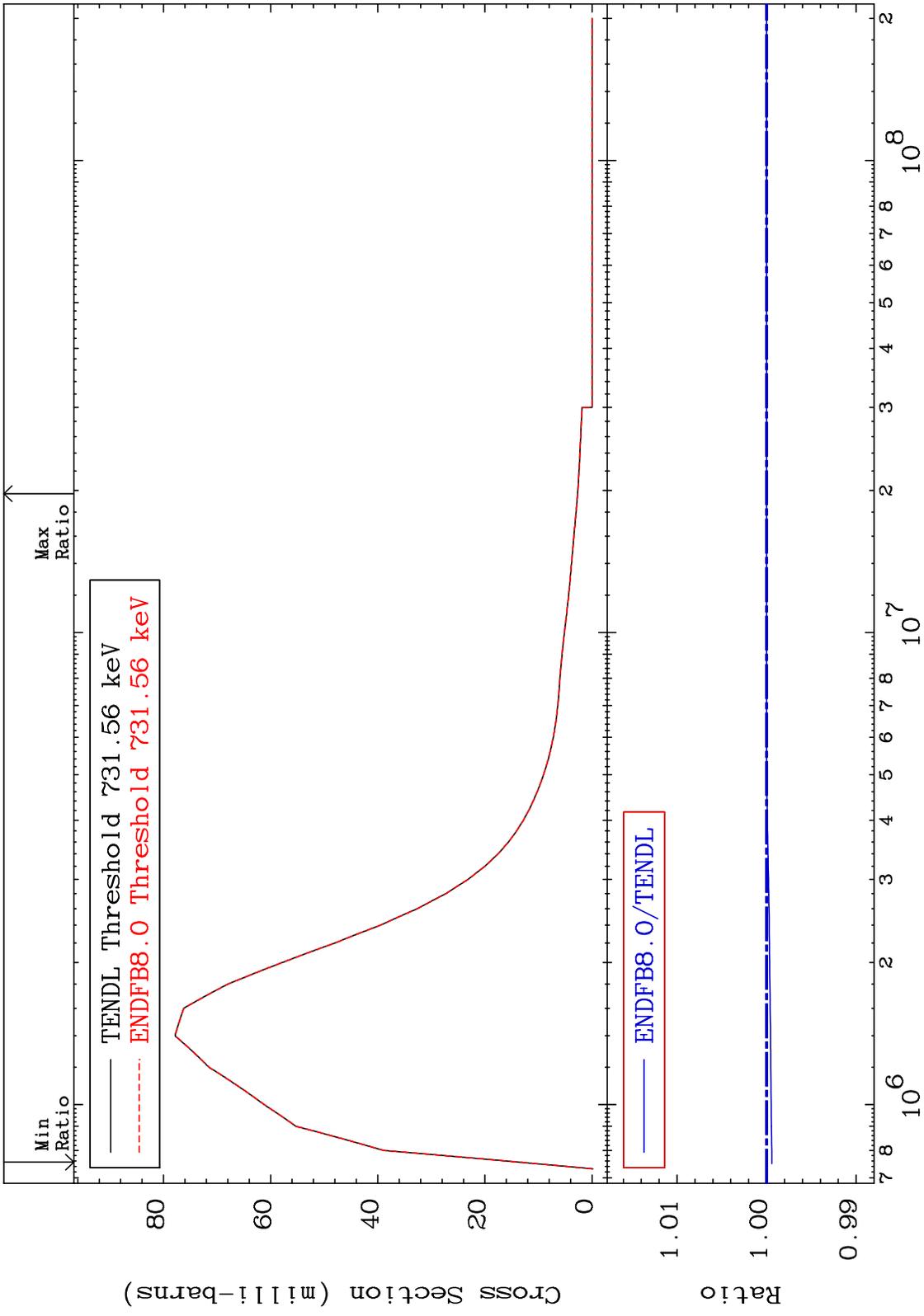
MAT 6143 MT= 54 (n,n') Level Cross Section 61-Pm-145
 -0.081 To 0.000 %



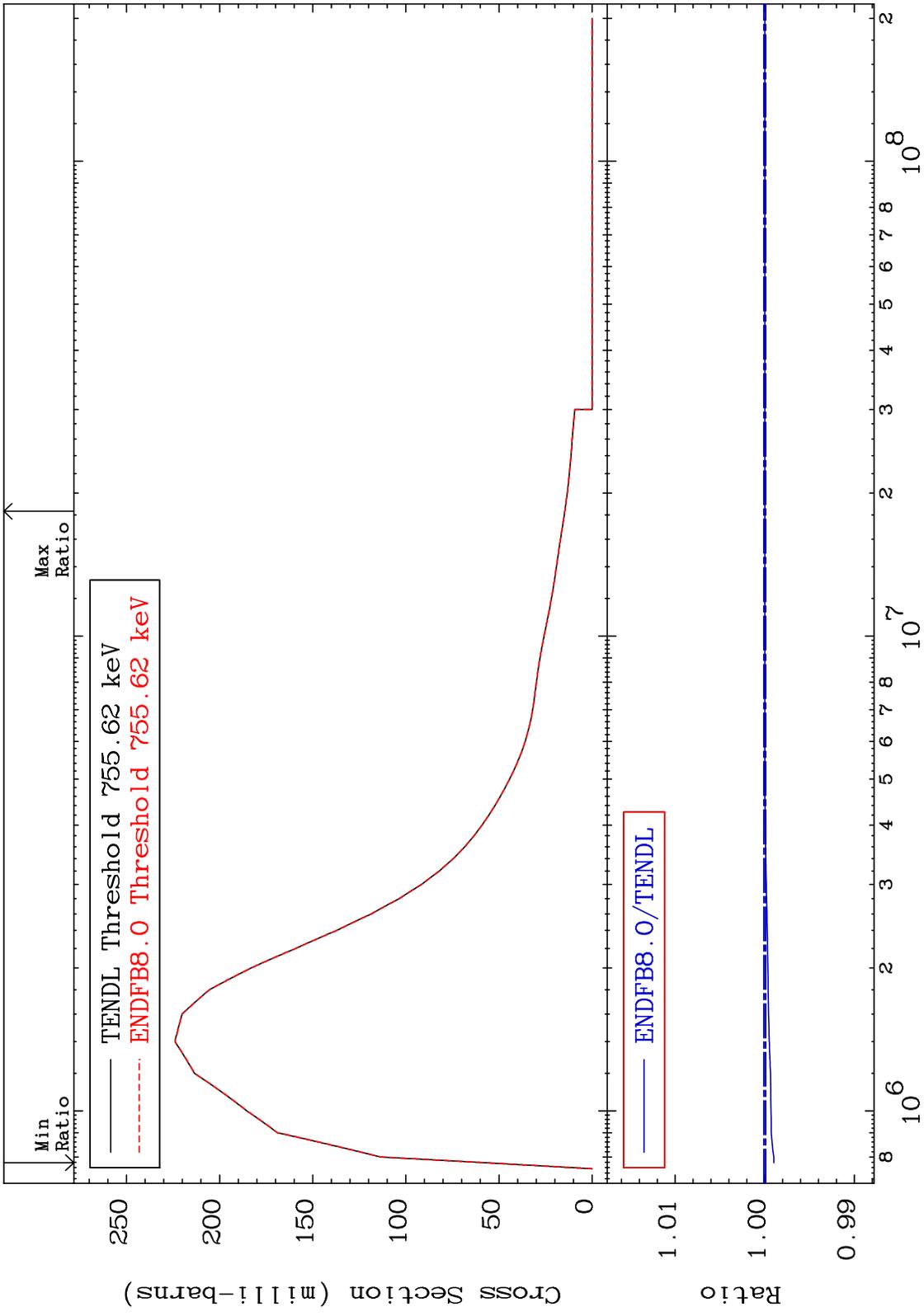
MAT 6143 MT= 55 (n,n') Level Cross Section 61-Pm-145
 -0.107 To 0.000 %



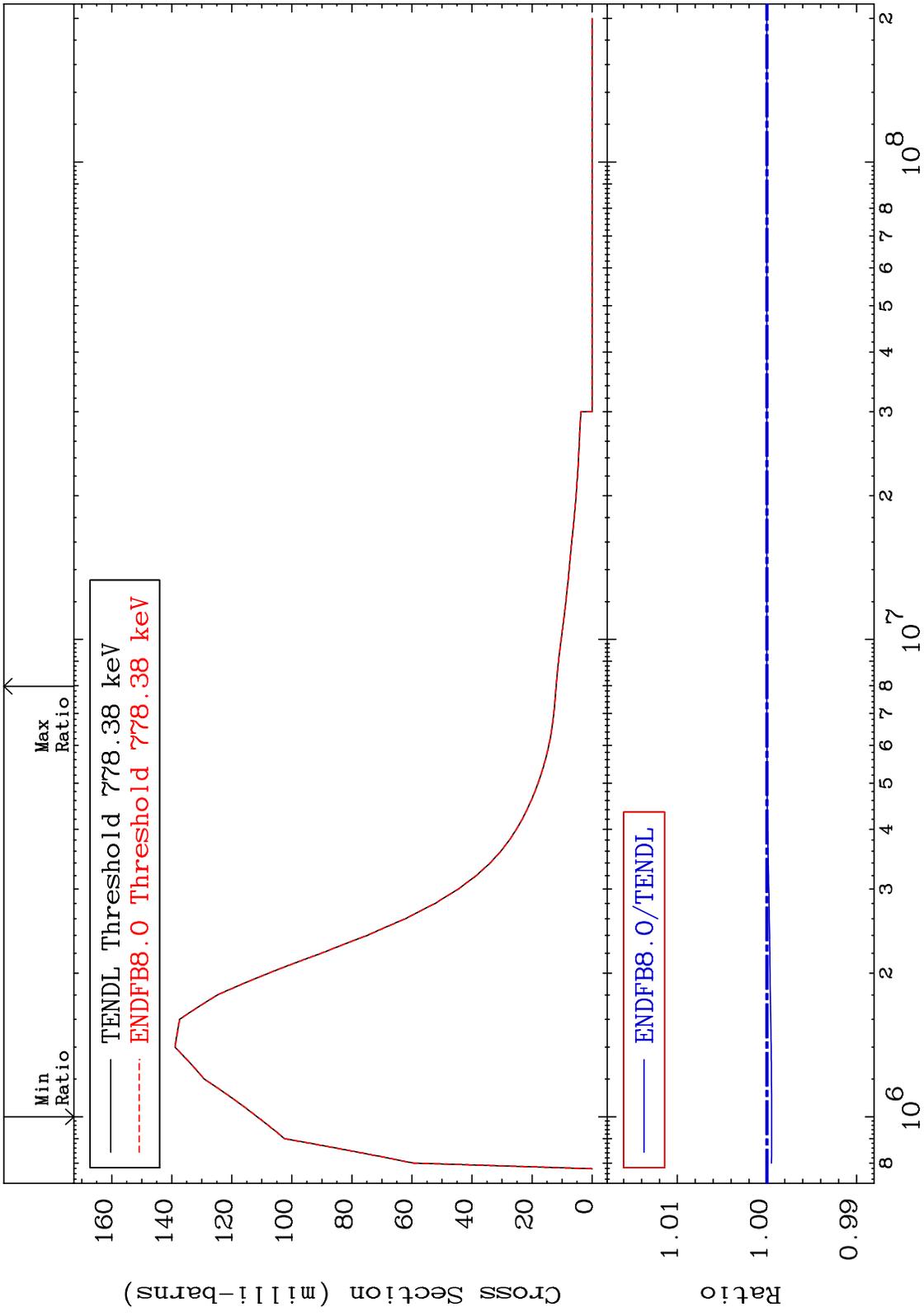
MAT 6143 MT= 56 (n,n') Level Cross Section 61-Pm-145 -0.060 To 0.000 %



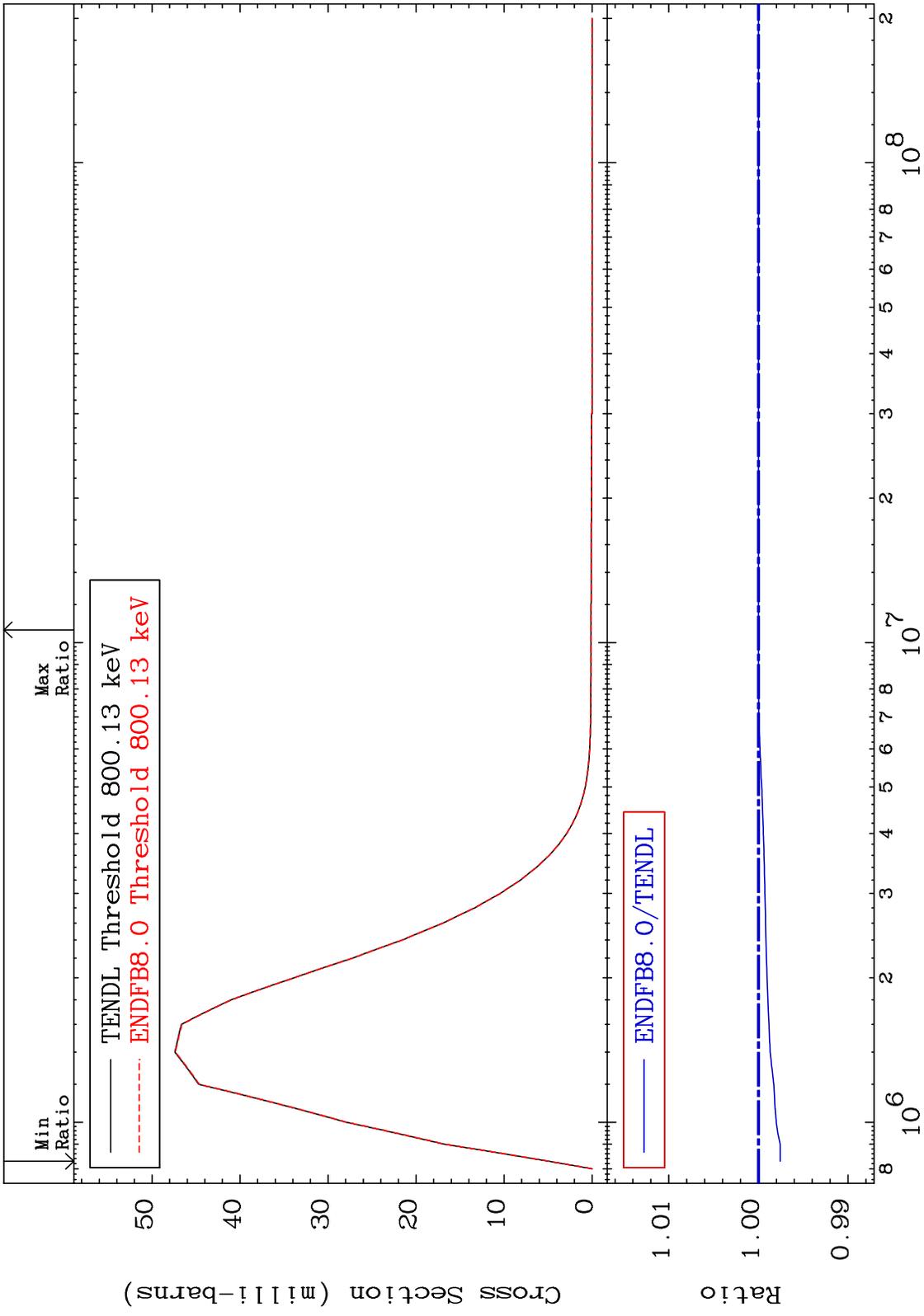
MAT 6143 MT= 57 (n,n') Level Cross Section 61-Pm-145 -0.101 To 0.000 %



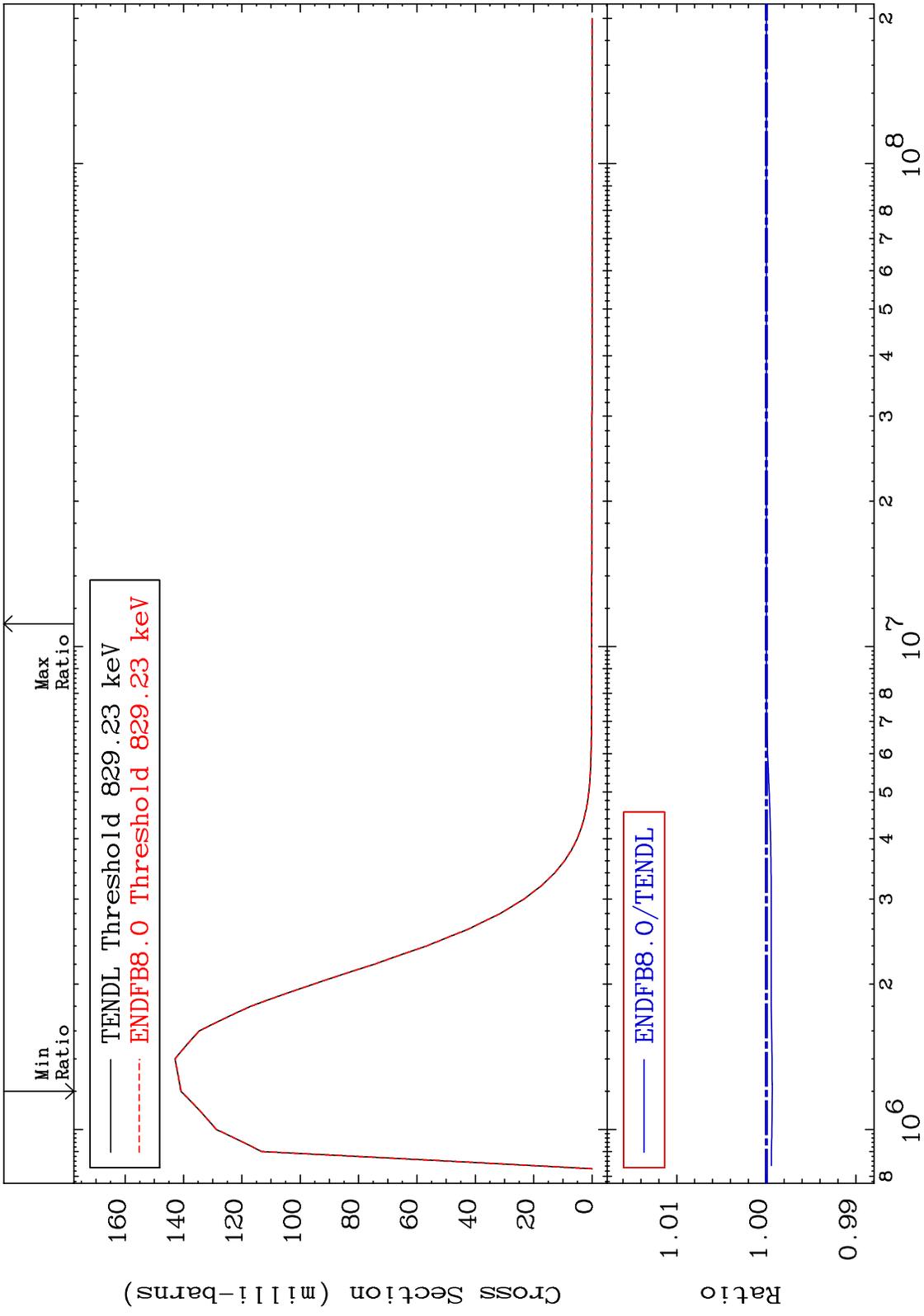
MAT 6143 MT= 58 (n,n') Level Cross Section 61-Pm-145
 -0.053 To 0.000 %



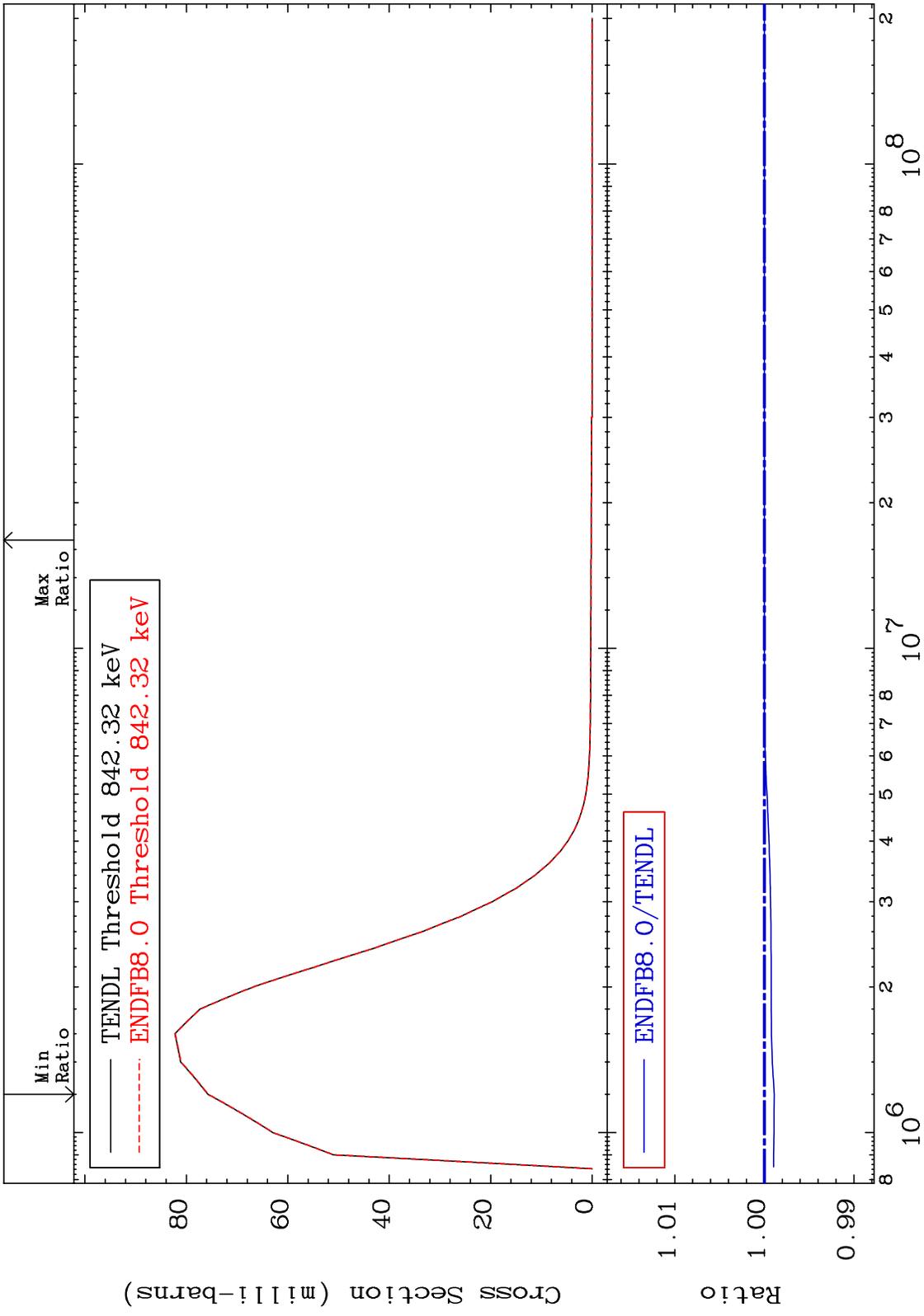
MAT 6143 MT= 59 (n,n') Level Cross Section 61-Pm-145 -0.242 To 0.000 %



MAT 6143 MT= 60 (n,n') Level Cross Section 61-Pm-145 -0.067 To 0.000 %

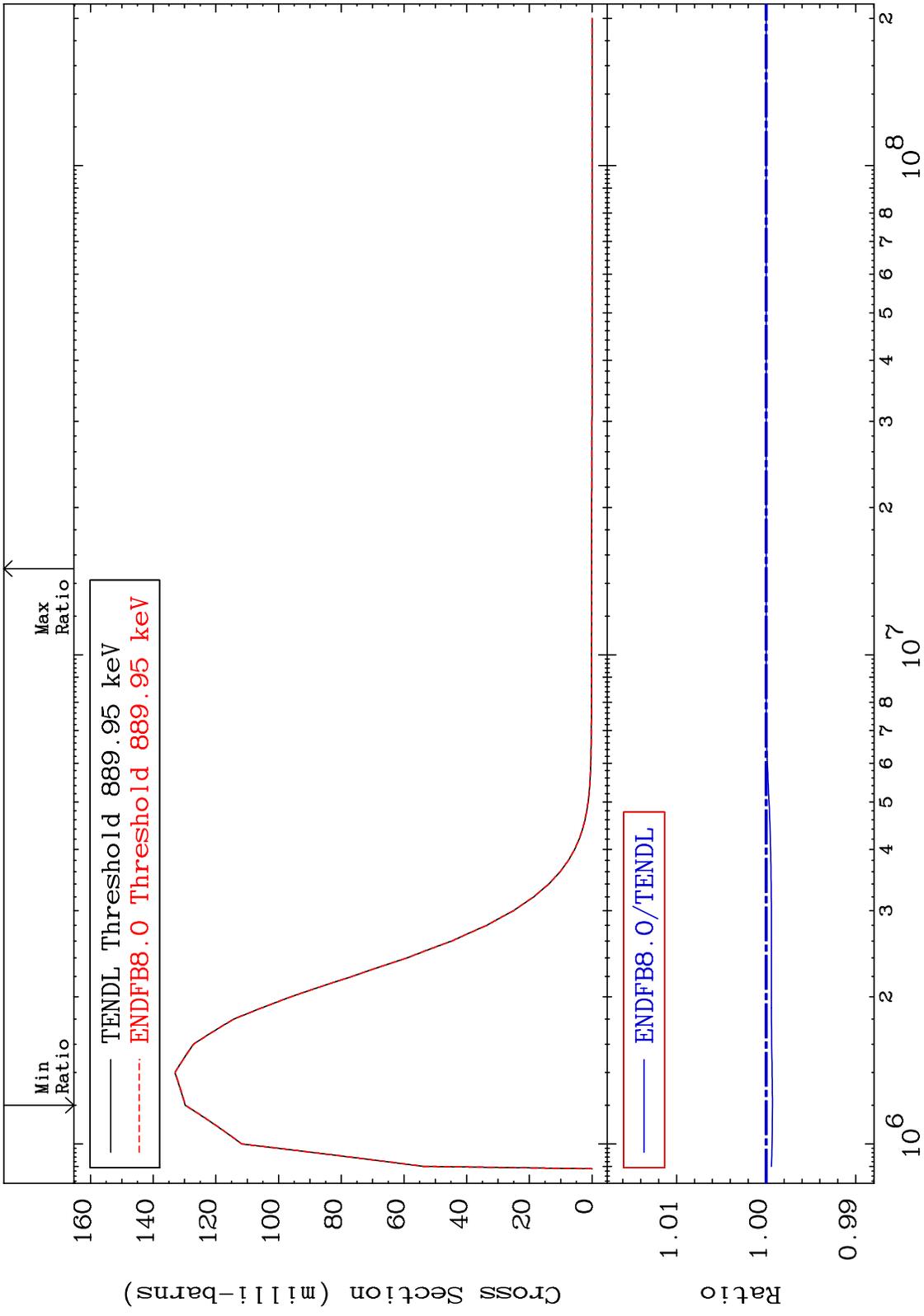


MAT 6143 MT= 61 (n,n') Level Cross Section 61-Pm-145 -0.110 To 0.000 %

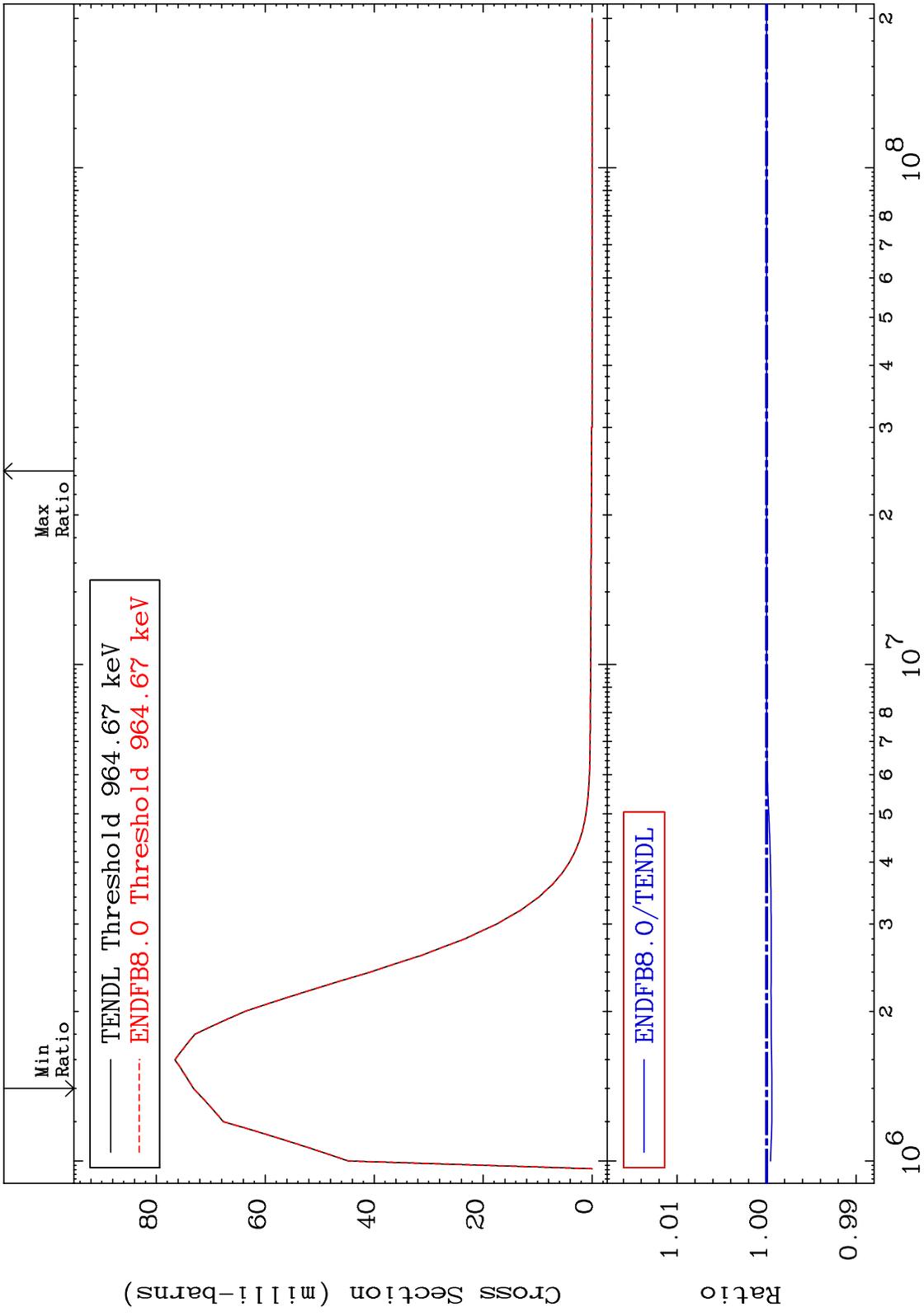


30 Incident Energy (eV) 61-Pm-145

MAT 6143 MT= 62 (n,n') Level Cross Section 61-Pm-145
 -0.071 To 0.000 %

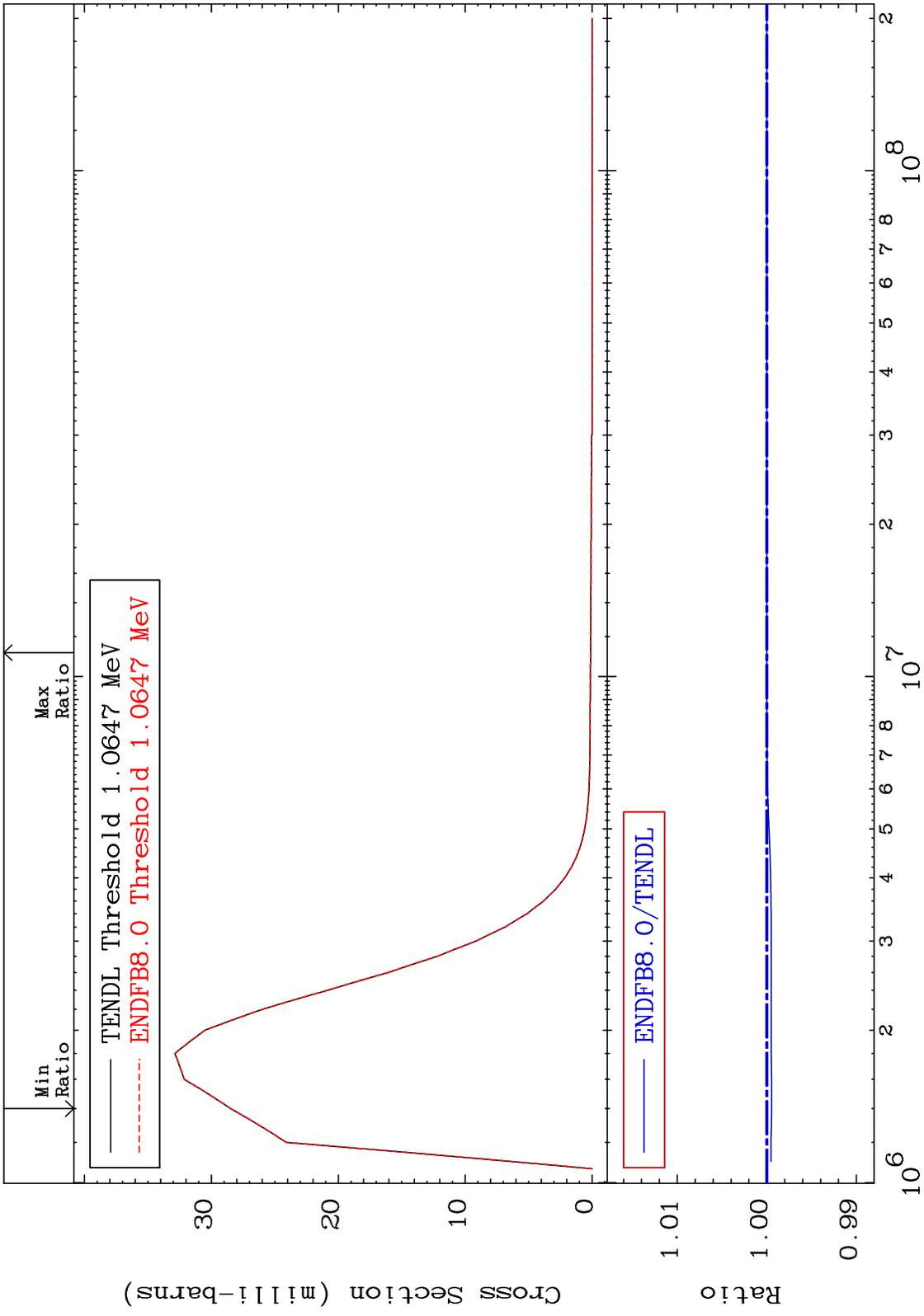


MAT 6143 MT= 63 (n,n') Level Cross Section 61-Pm-145
 -0.060 To 0.000 %

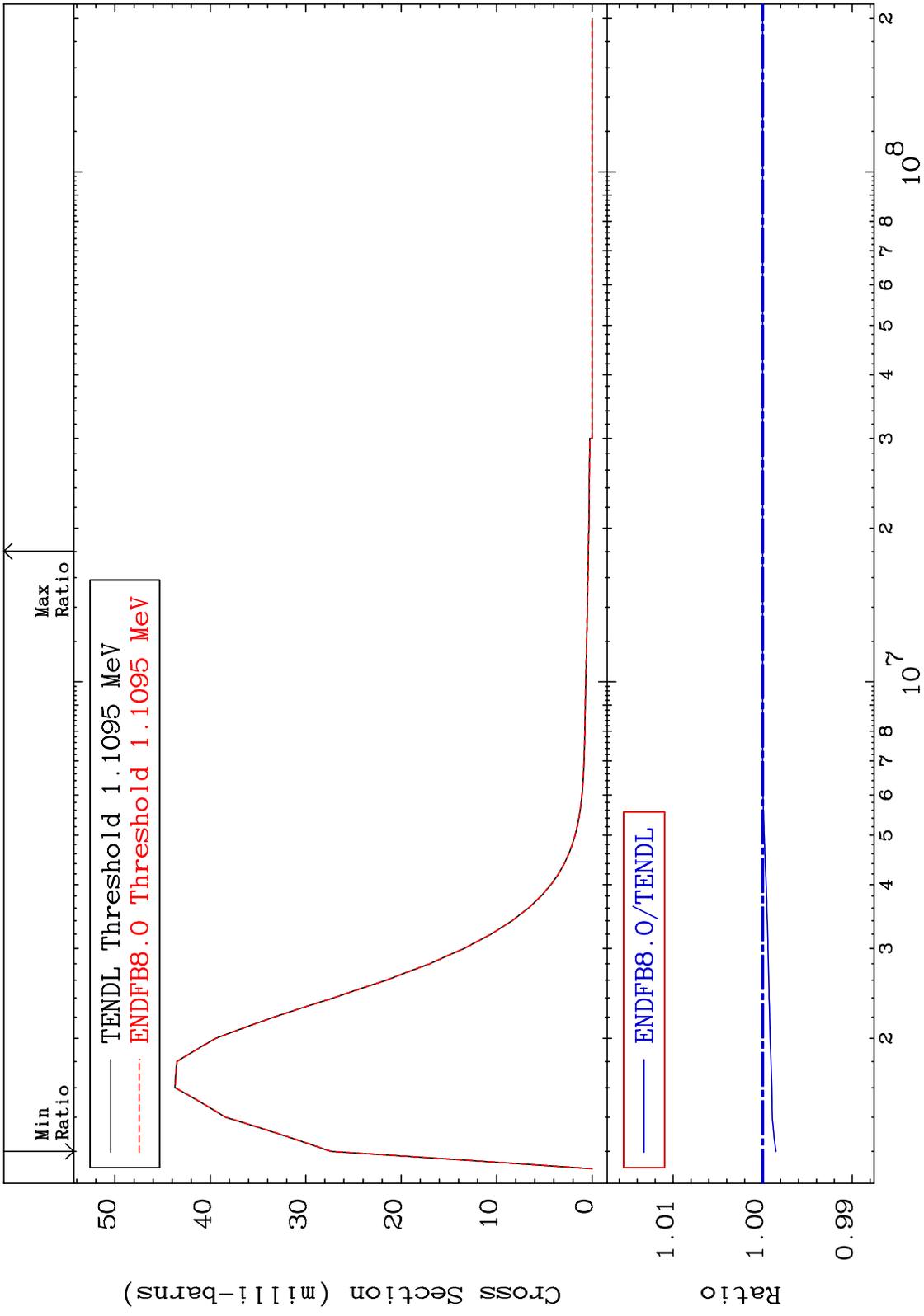


32 Incident Energy (eV) 61-Pm-145

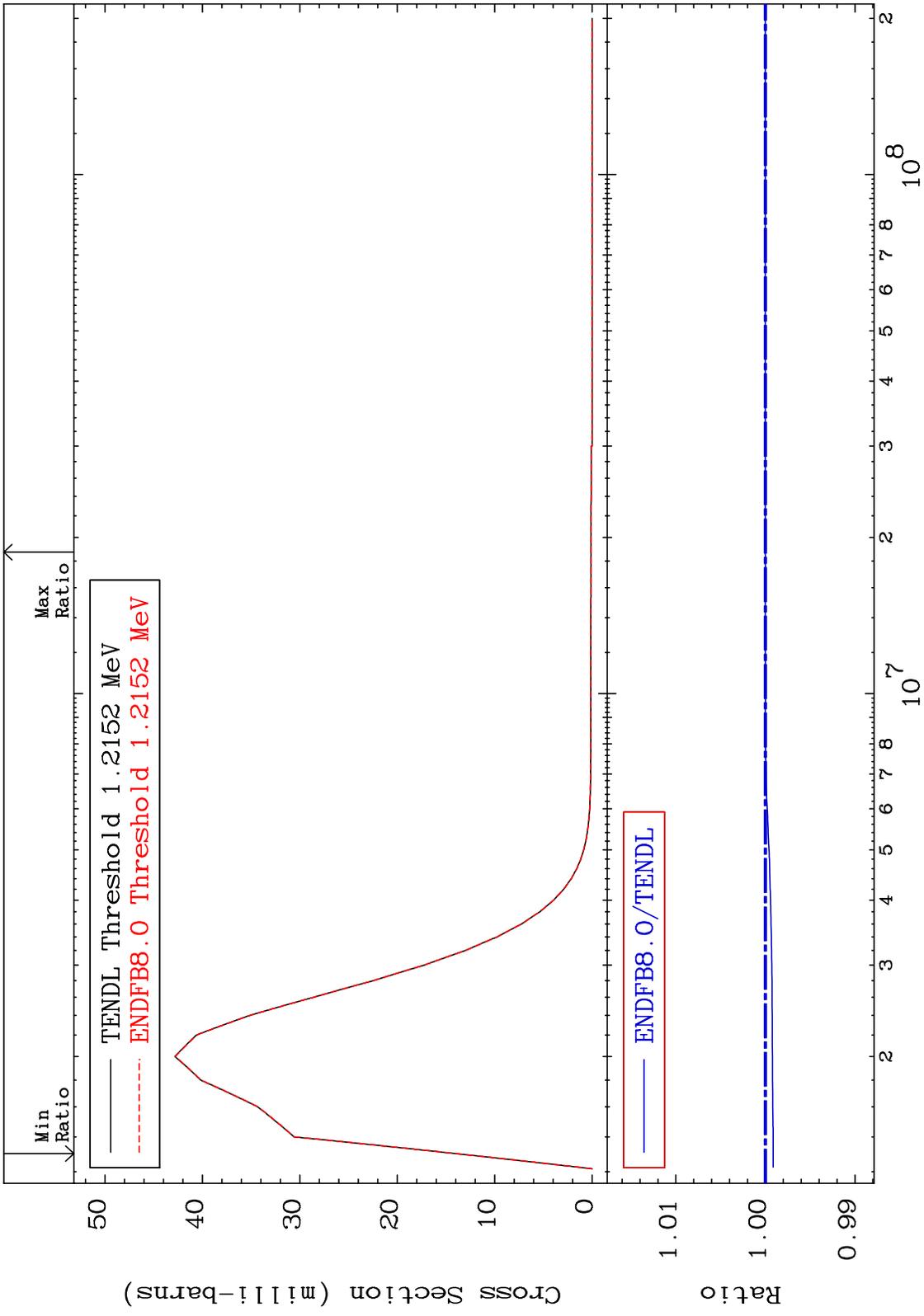
MAT 6143 MT= 64 (n,n') Level Cross Section 61-Pm-145 -0.054 To 0.000 %



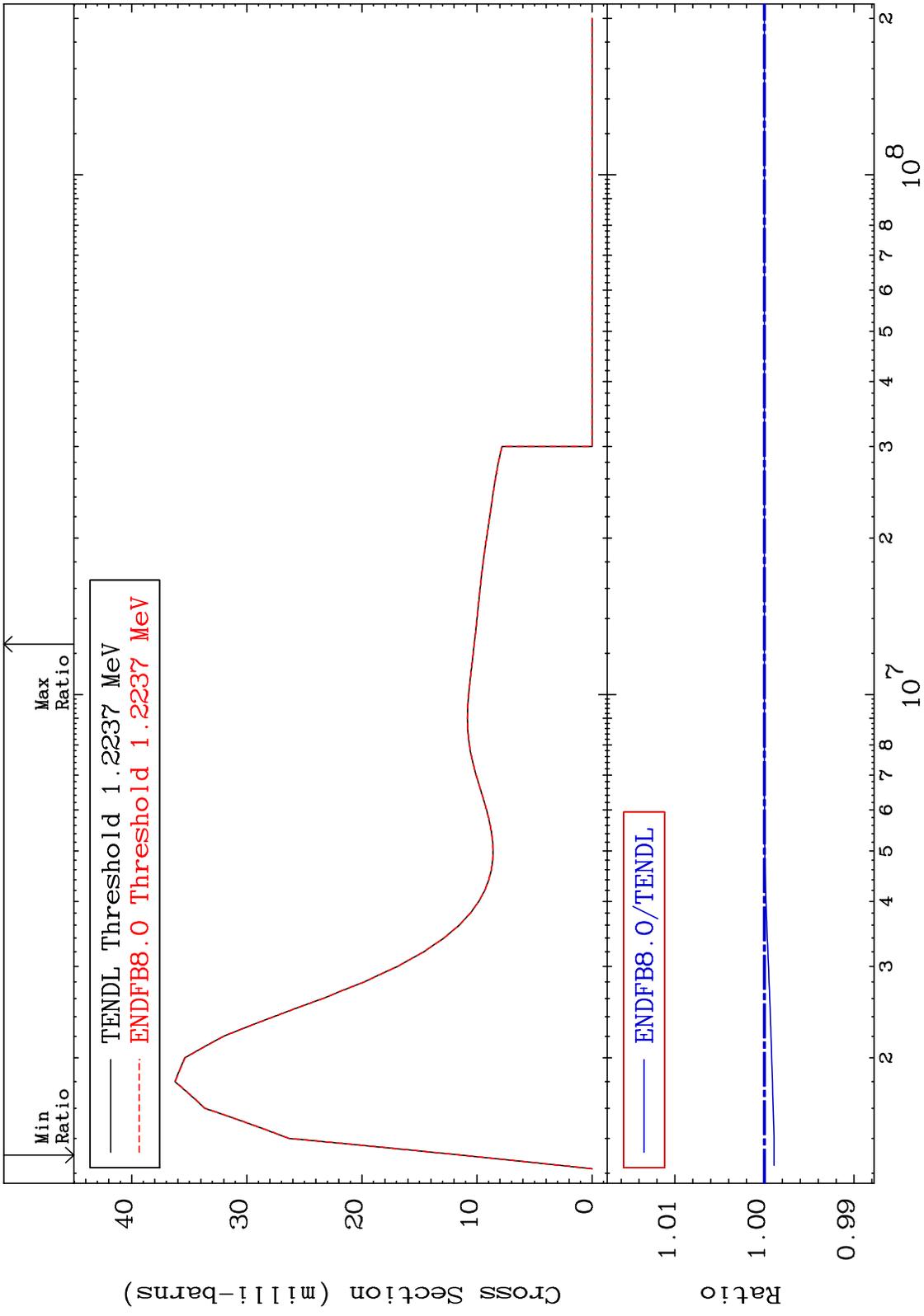
MAT 6143 MT= 65 (n,n') Level Cross Section 61-Pm-145
 -0.148 To 0.000 %



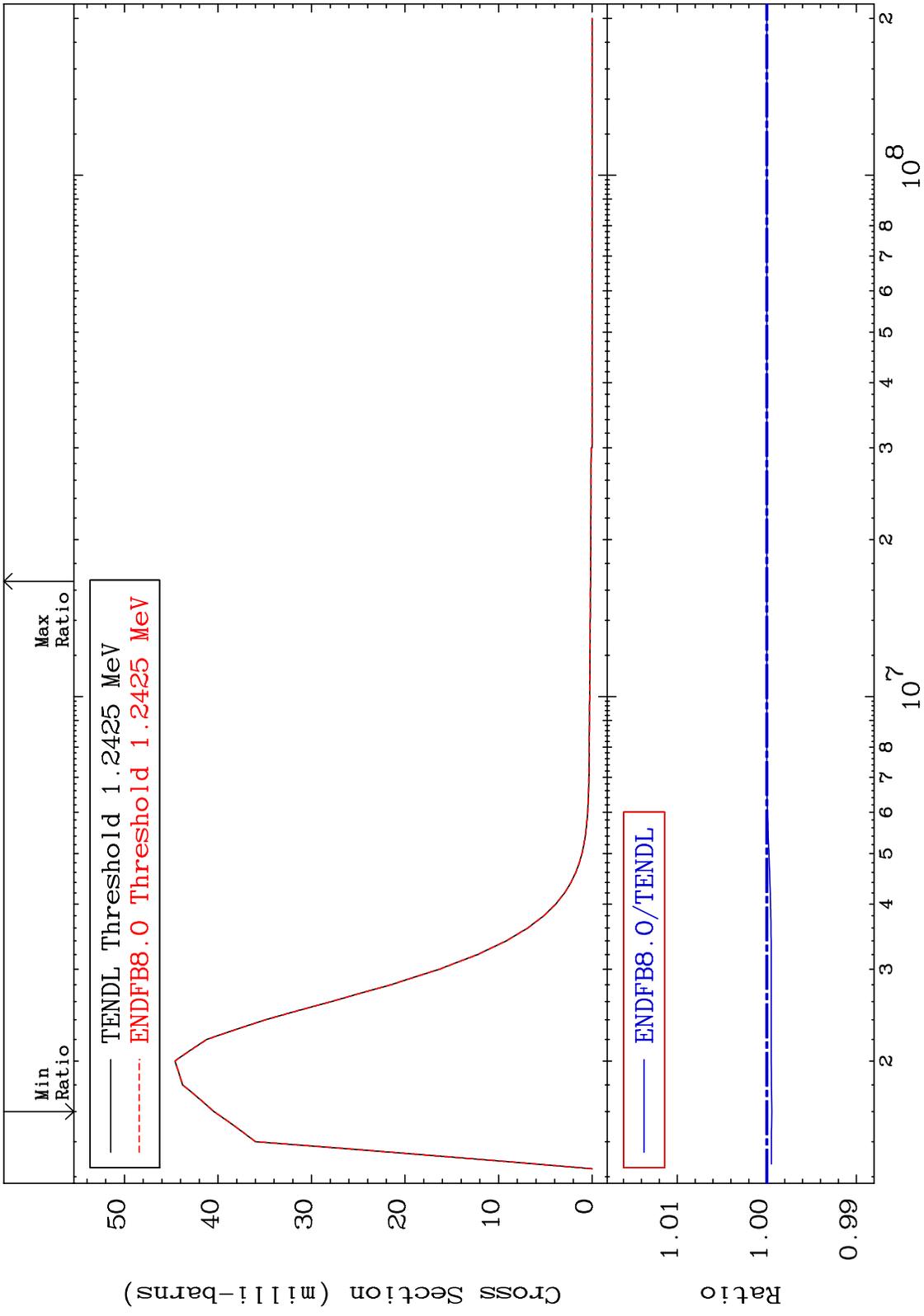
MAT 6143 MT= 66 (n,n') Level Cross Section 61-Pm-145 -0.087 To 0.000 %



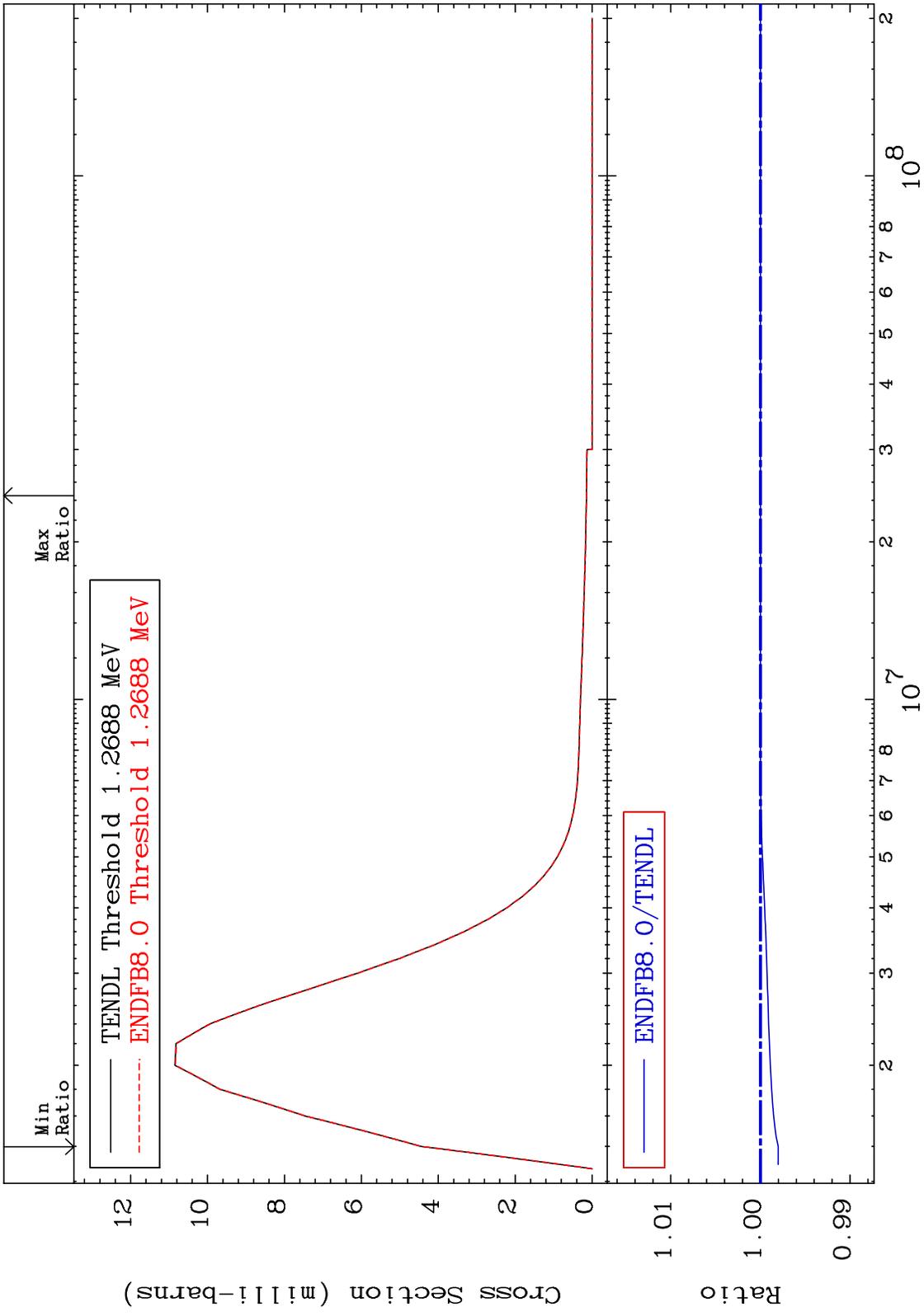
MAT 6143 MT= 67 (n,n') Level Cross Section 61-Pm-145 -0.107 To 0.000 %



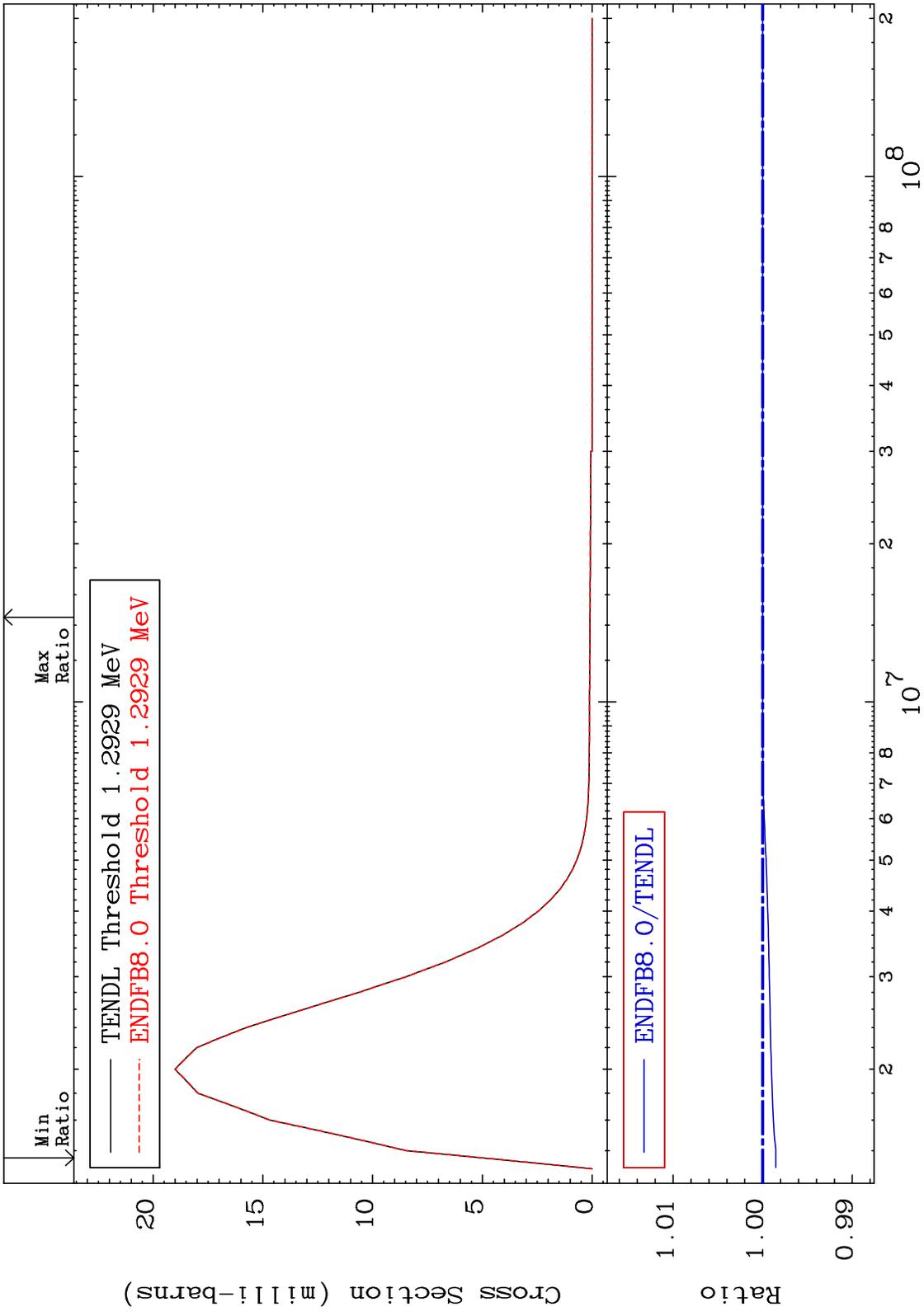
MAT 6143 MT= 68 (n,n') Level Cross Section 61-Pm-145 -0.056 To 0.000 %



MAT 6143 MT= 69 (n,n') Level Cross Section 61-Pm-145 -0.198 To 0.000 %



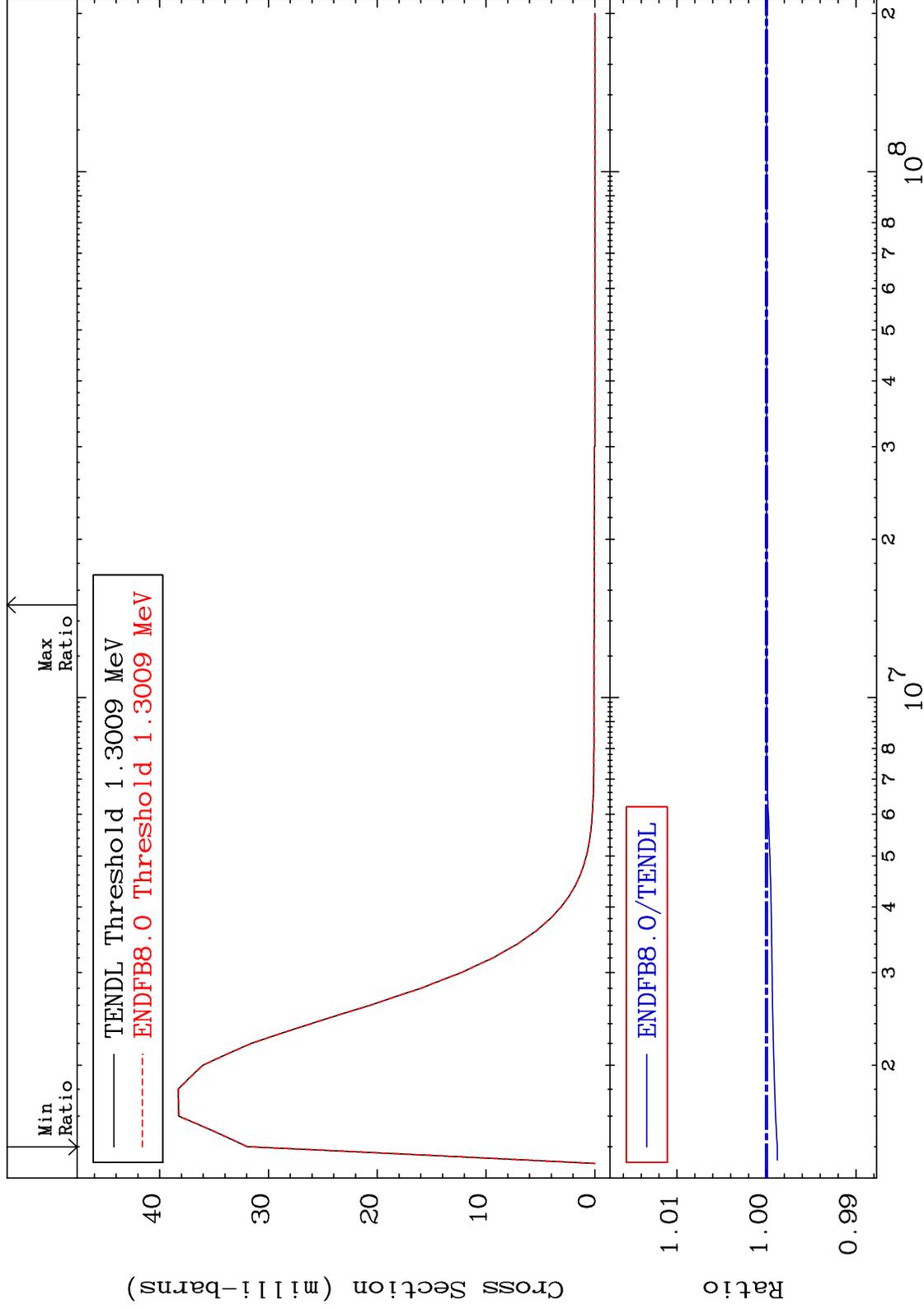
MAT 6143 MT= 70 (n,n') Level Cross Section 61-Pm-145 -0.147 To 0.000 %



MAT 6143

MT= 71 (n,n') Level
Cross Section

61-Pm-145
-0.121 To 0.000 %

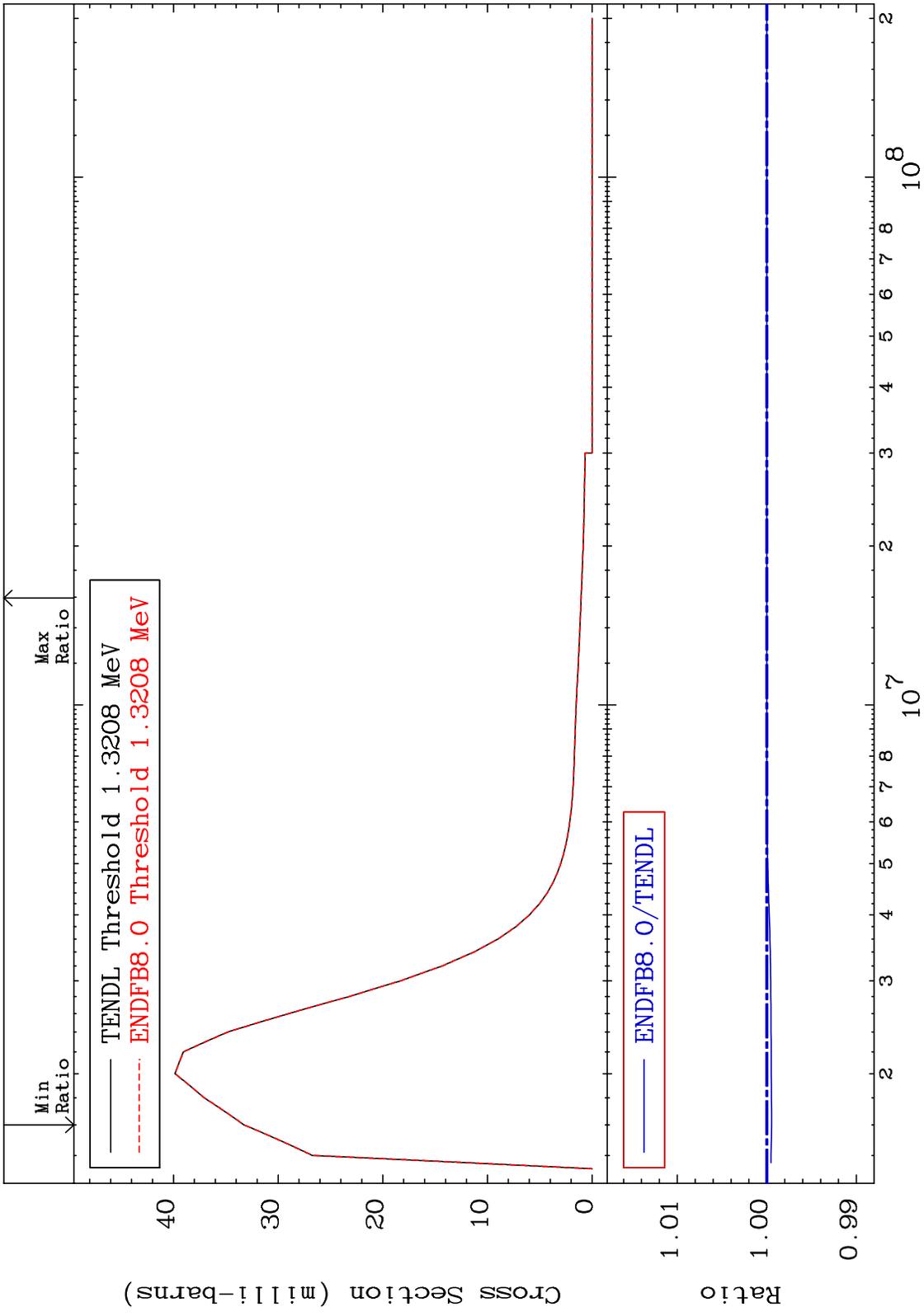


40

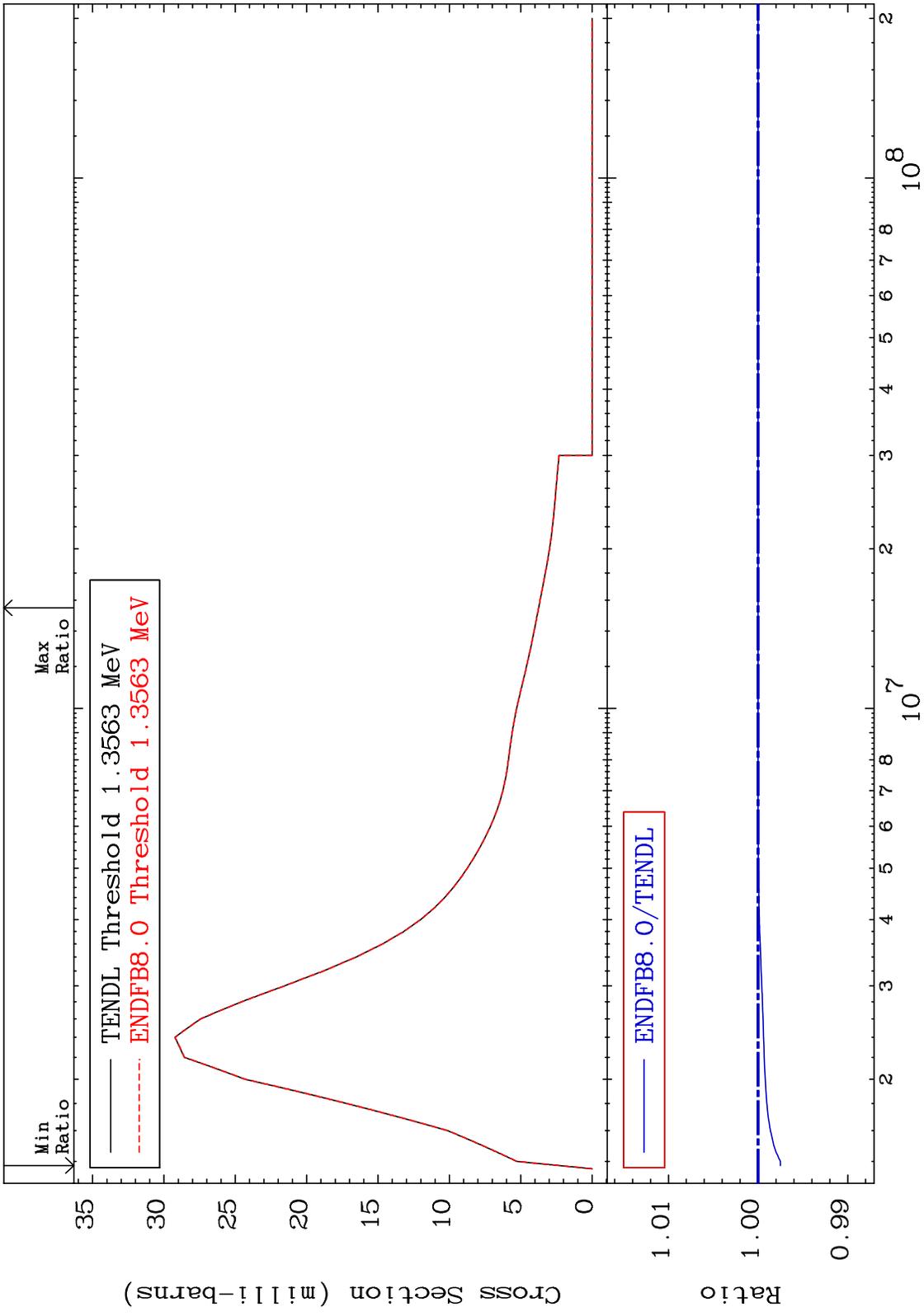
Incident Energy (eV)

61-Pm-145

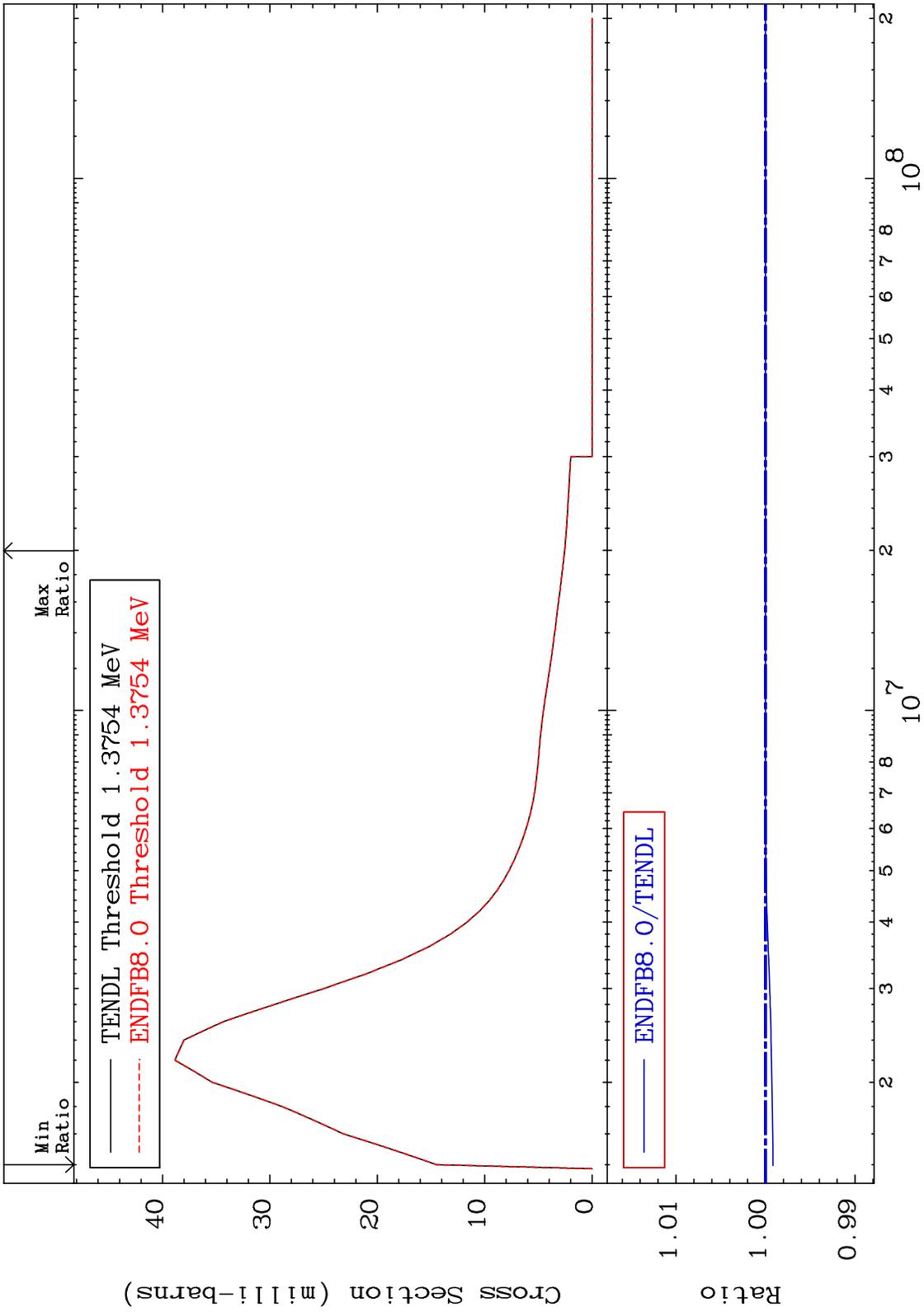
MAT 6143 MT= 72 (n,n') Level Cross Section 61-Pm-145
 -0.054 To 0.000 %



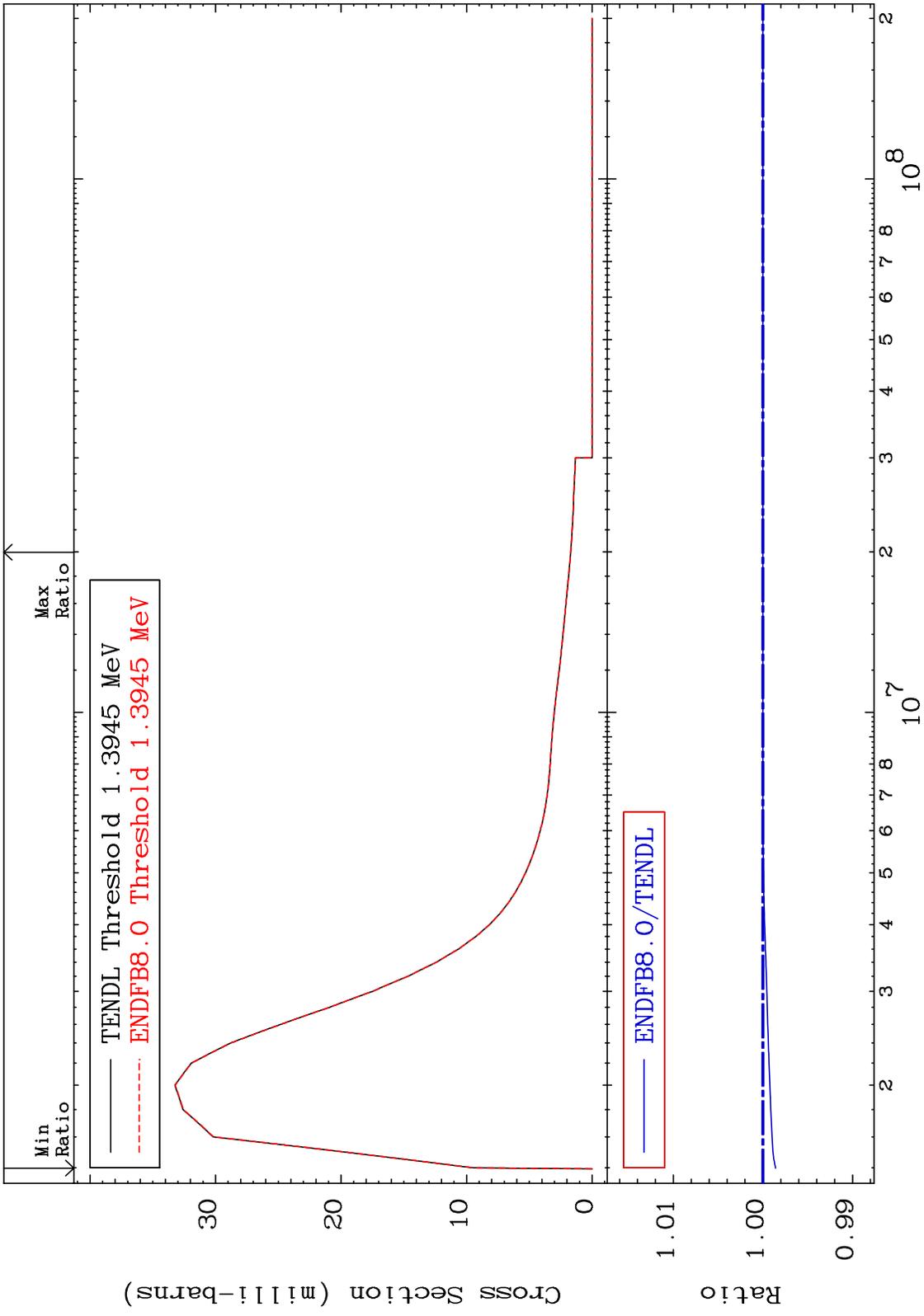
MAT 6143 MT= 73 (n,n') Level Cross Section 61-Pm-145 -0.250 To 0.000 %



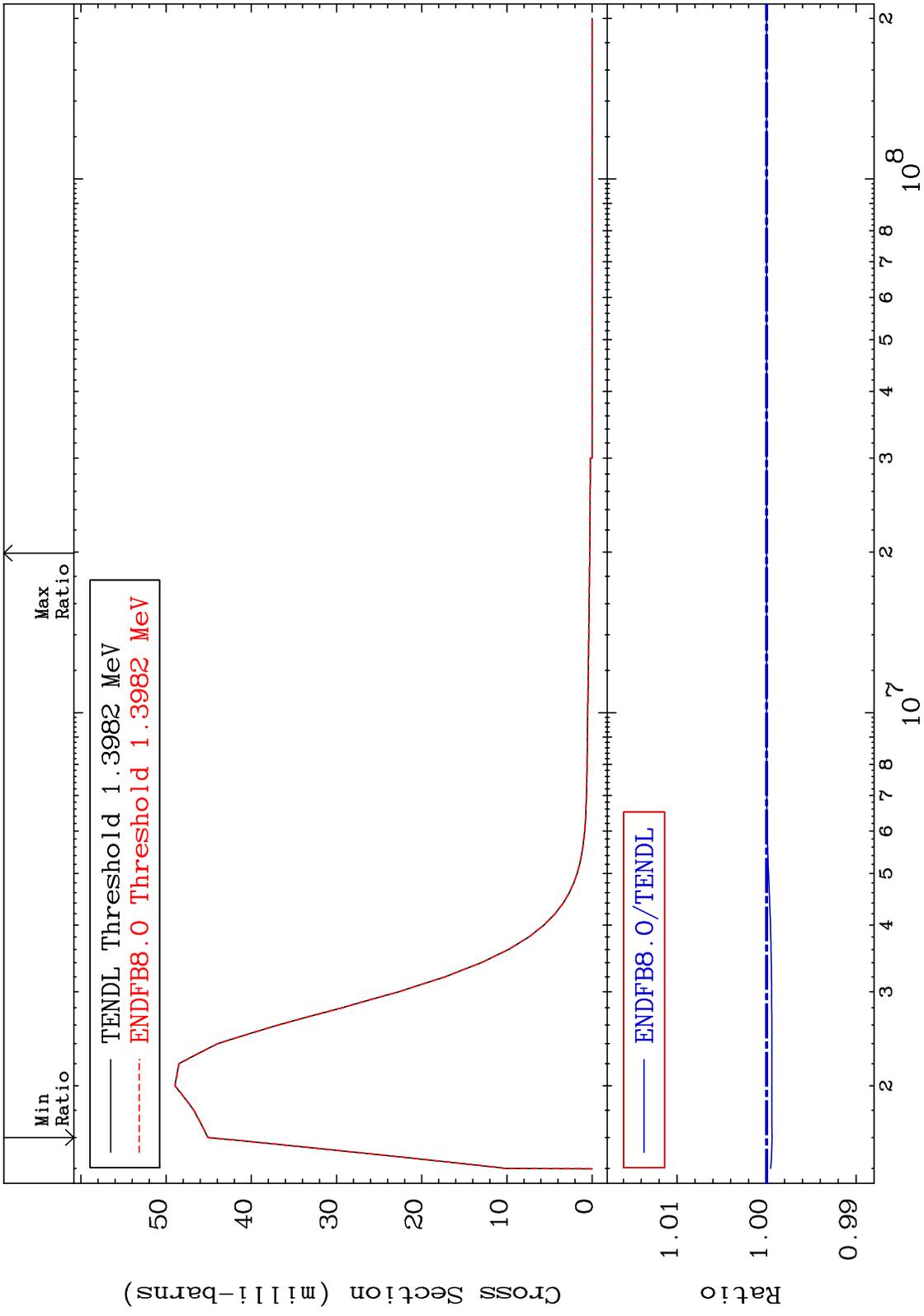
MAT 6143 MT= 74 (n,n') Level Cross Section 61-Pm-145
 -0.083 To 0.000 %



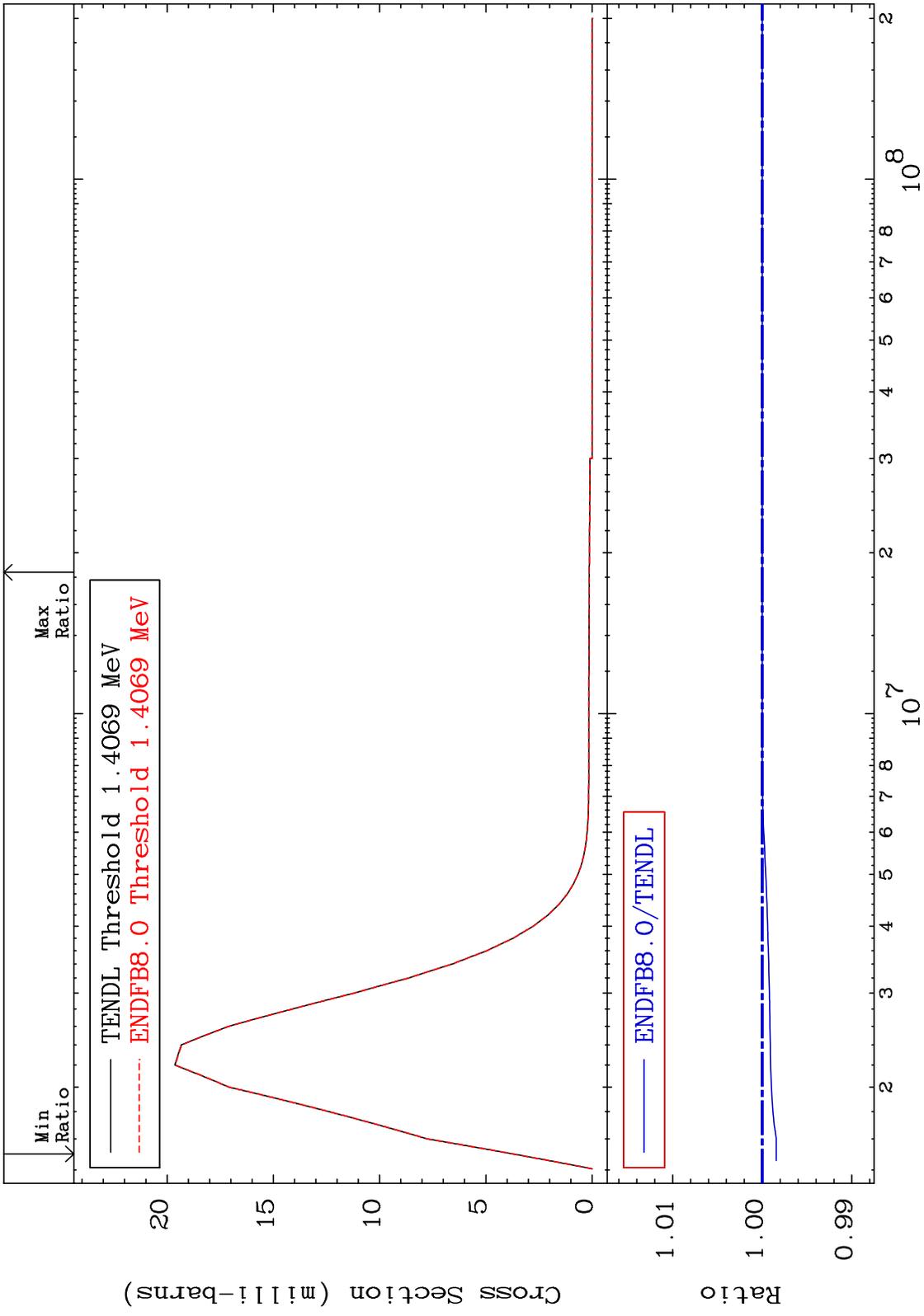
MAT 6143 MT= 75 (n,n') Level Cross Section 61-Pm-145
 -0.141 To 0.000 %



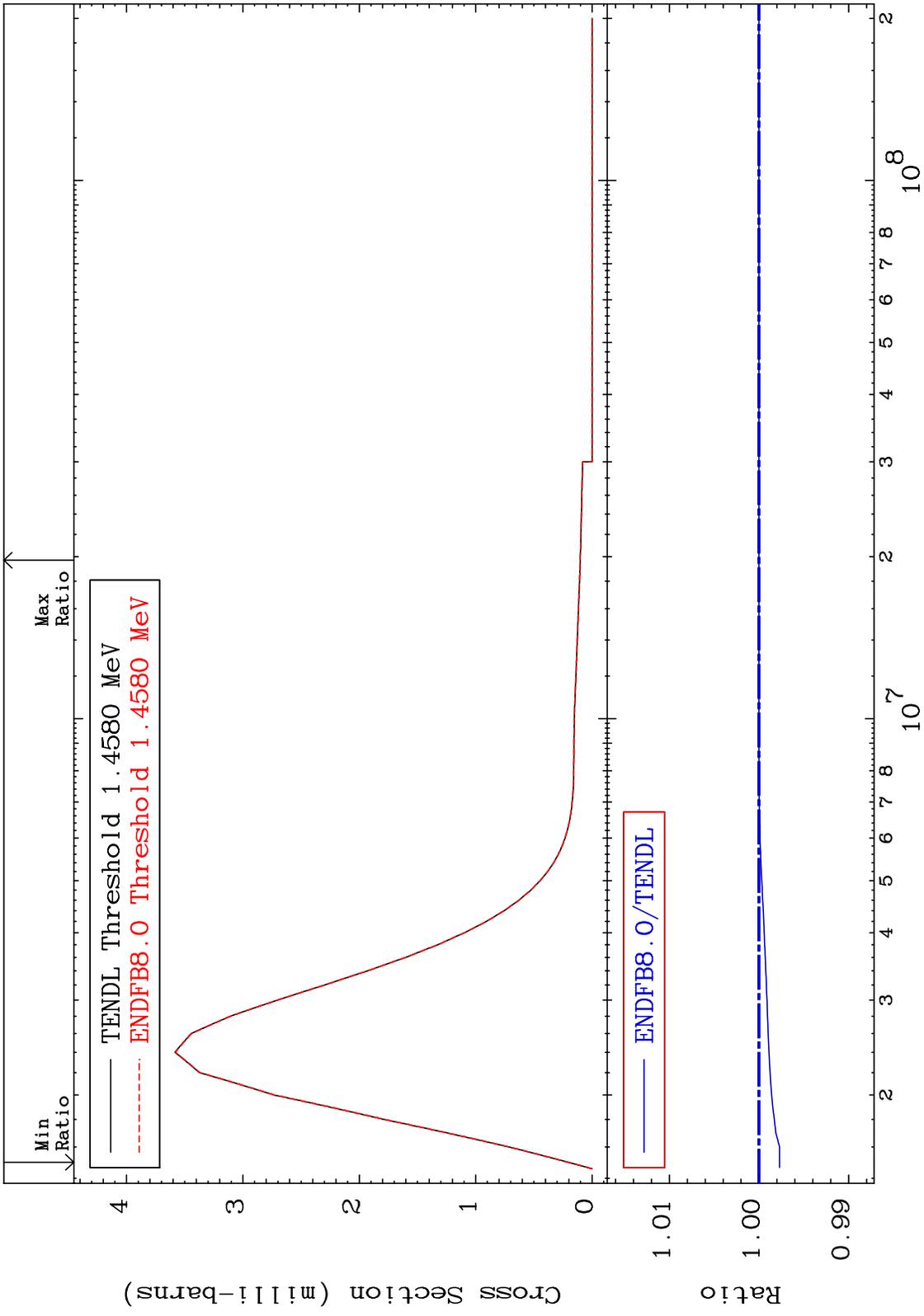
MAT 6143 MT= 76 (n,n') Level Cross Section 61-Pm-145
 -0.060 To 0.000 %



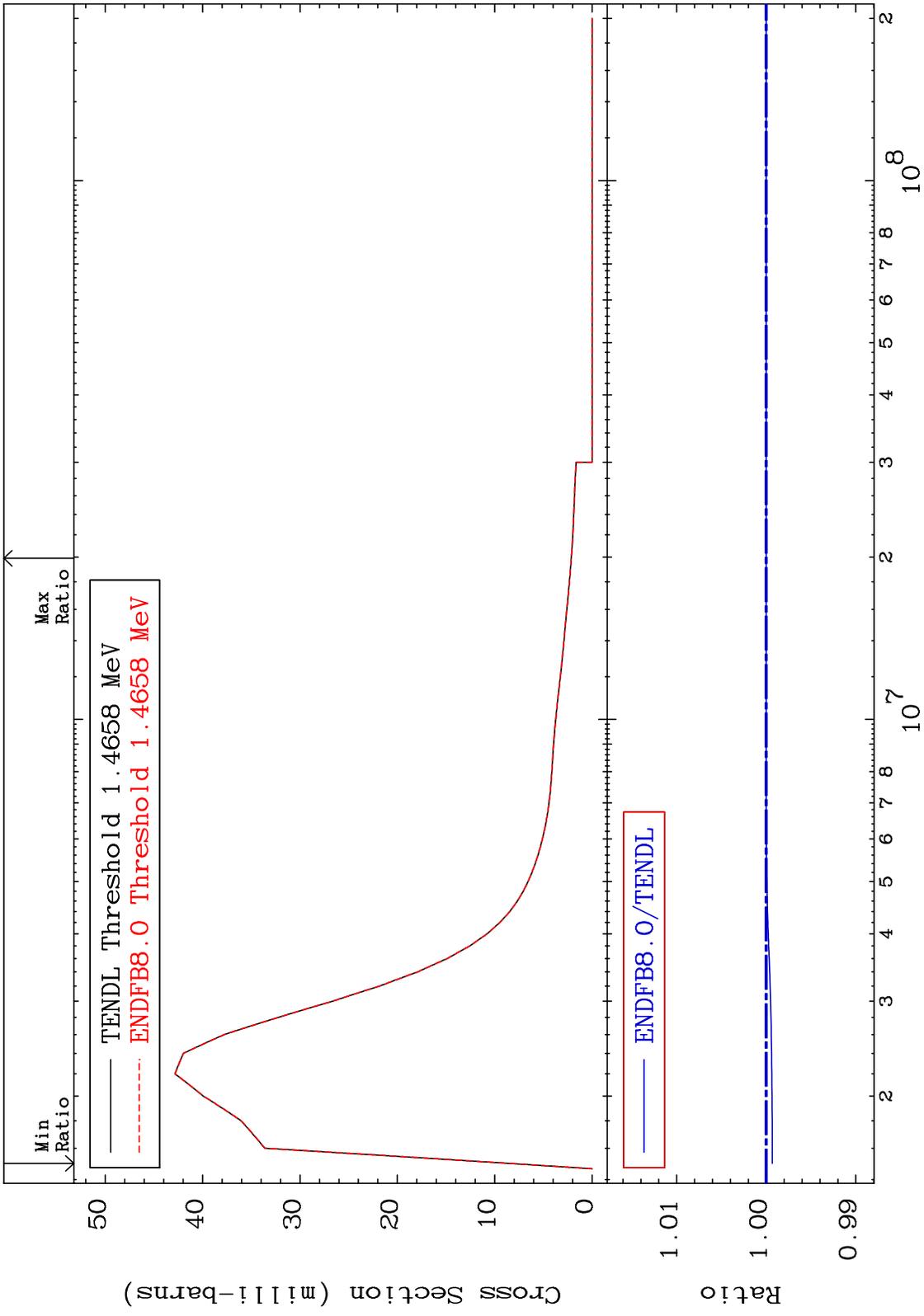
MAT 6143 MT= 77 (n,n') Level Cross Section 61-Pm-145
 -0.157 To 0.000 %



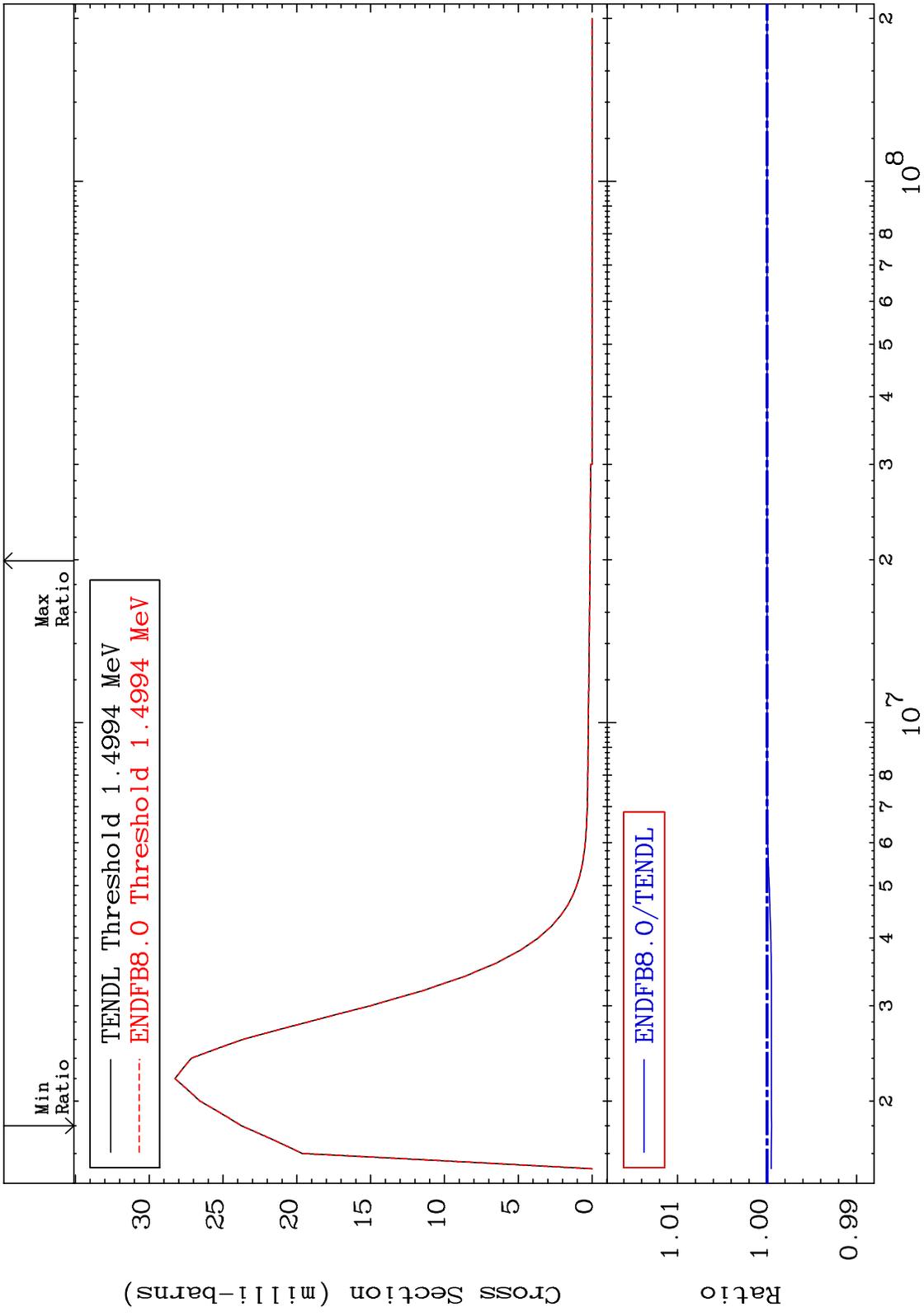
MAT 6143 MT= 78 (n,n') Level Cross Section 61-Pm-145 -0.229 To 0.000 %



MAT 6143 MT= 79 (n,n') Level Cross Section 61-Pm-145 -0.068 To 0.000 %



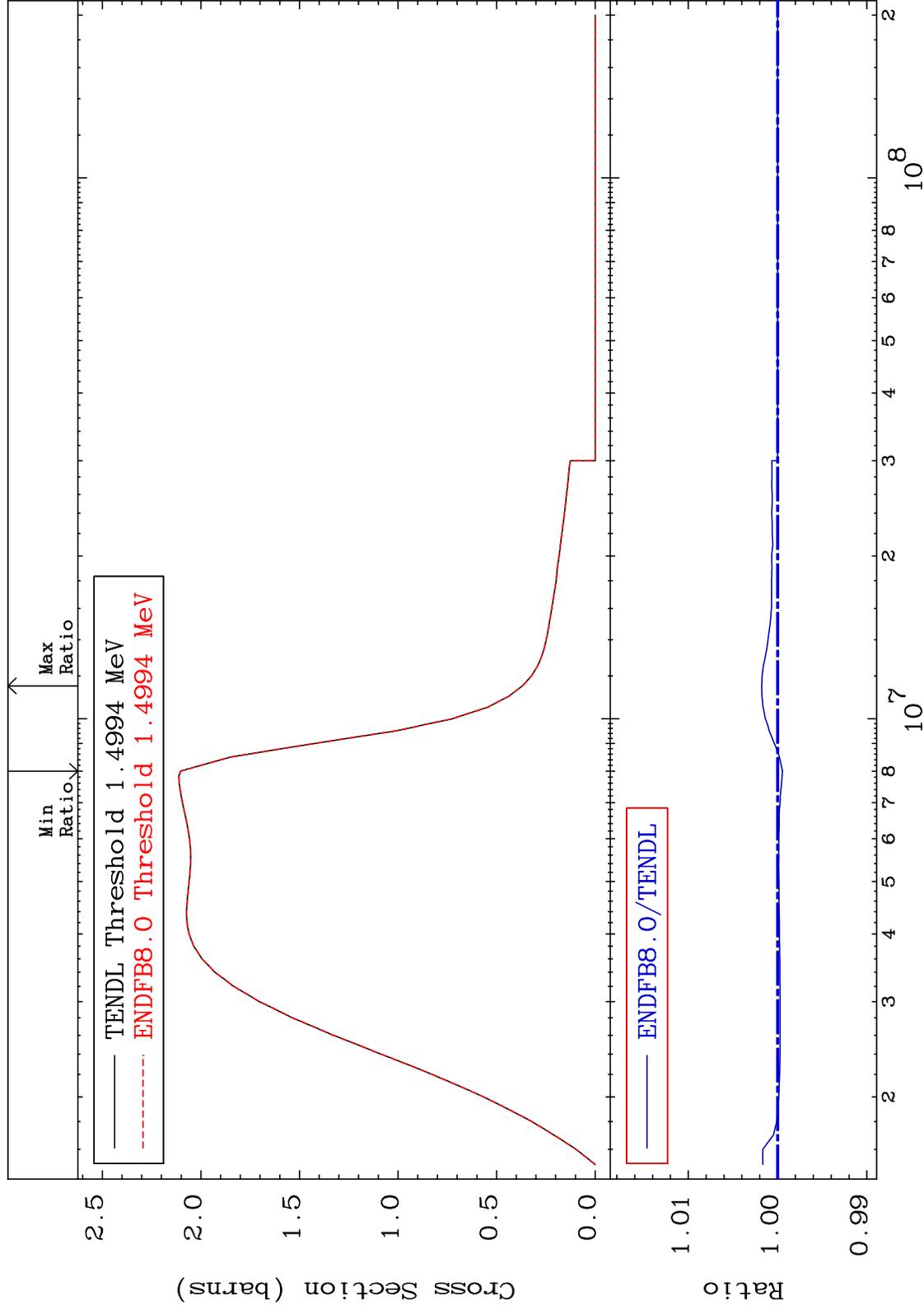
MAT 6143 MT= 80 (n,n') Level Cross Section 61-Pm-145
 -0.050 To 0.000 %



MAT 6143

(n, n') Continuum
Cross Section

61-Pm-145
-0.054 To 0.179 %



50

Incident Energy (eV)

61-Pm-145

MAT 6143

(n, γ)

61-Pm-145

-99.94 To 9999. %

Cross Section

Min Ratio

Max Ratio

— TENDL
- - ENDFB8.0

Cross Section (barns)
 10^4
 10^3
 10^2
 10^1
 10^0
 10^{-1}
 10^{-2}
 10^{-3}

— ENDFB8.0/TENDL

Ratio
 10^6
 10^3
 10^0
 10^{-3}

Incident Energy (eV)
 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

Incident Energy (eV)

61-Pm-145

51

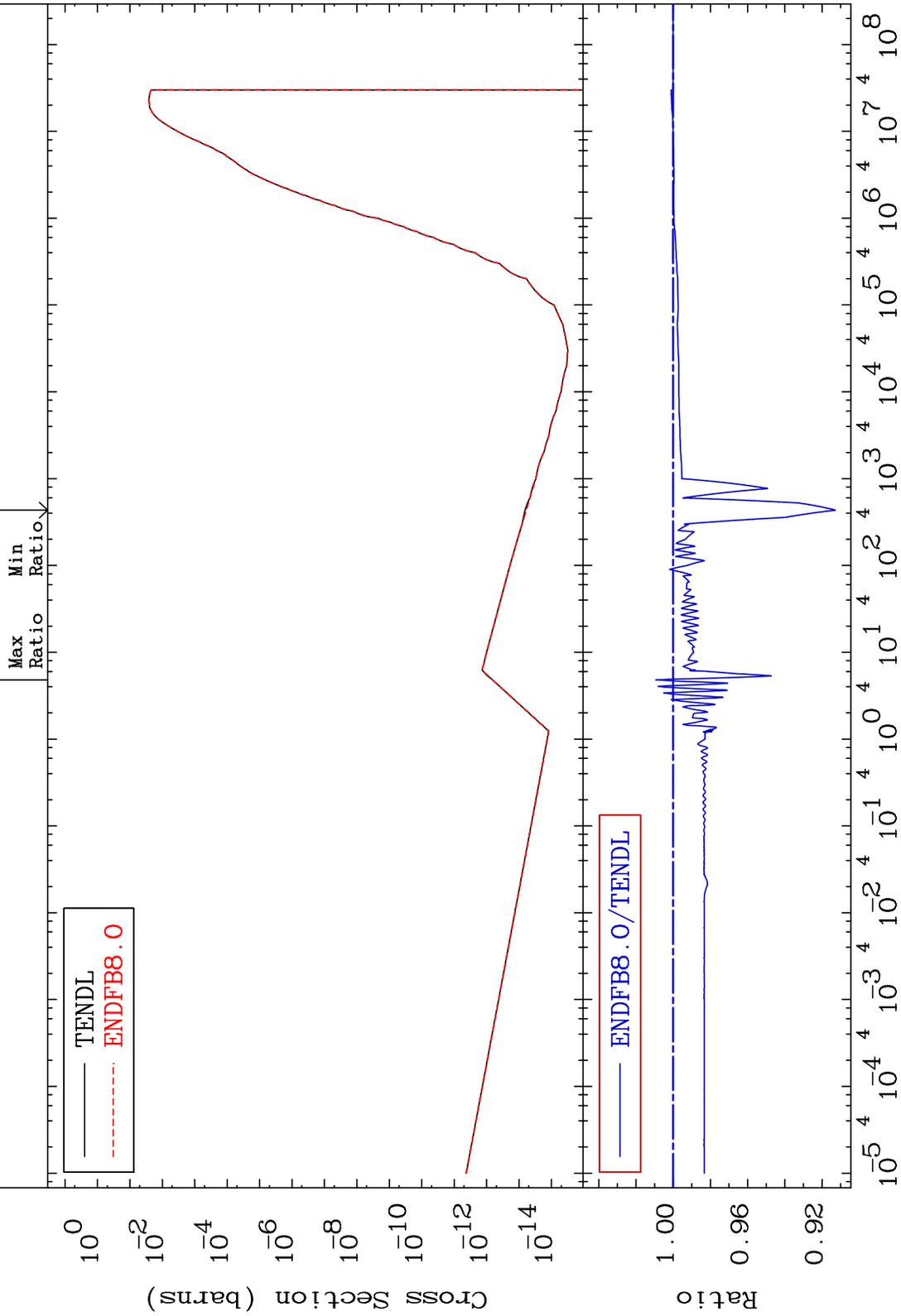
MAT 6143

(n,p)

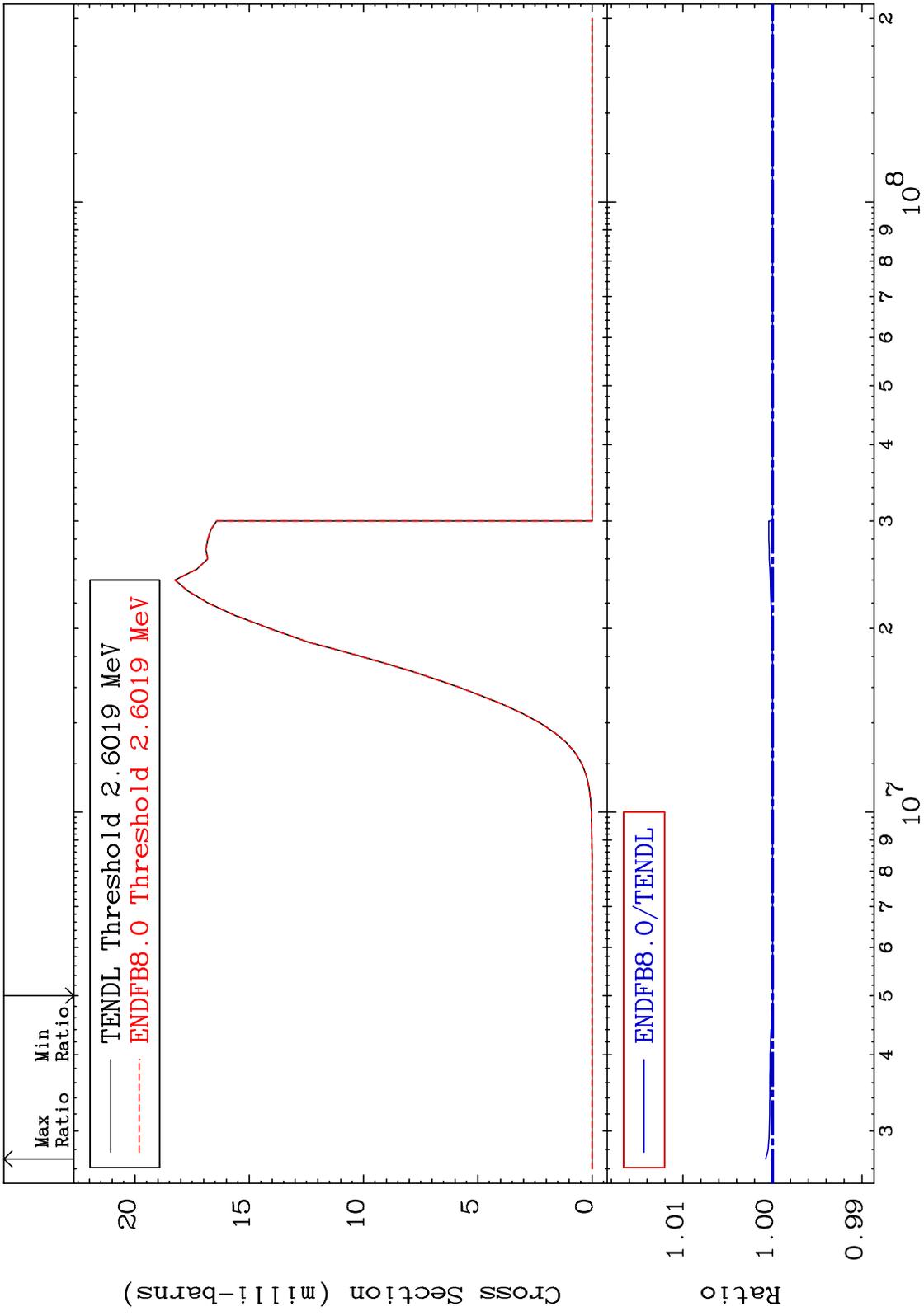
61-Pm-145

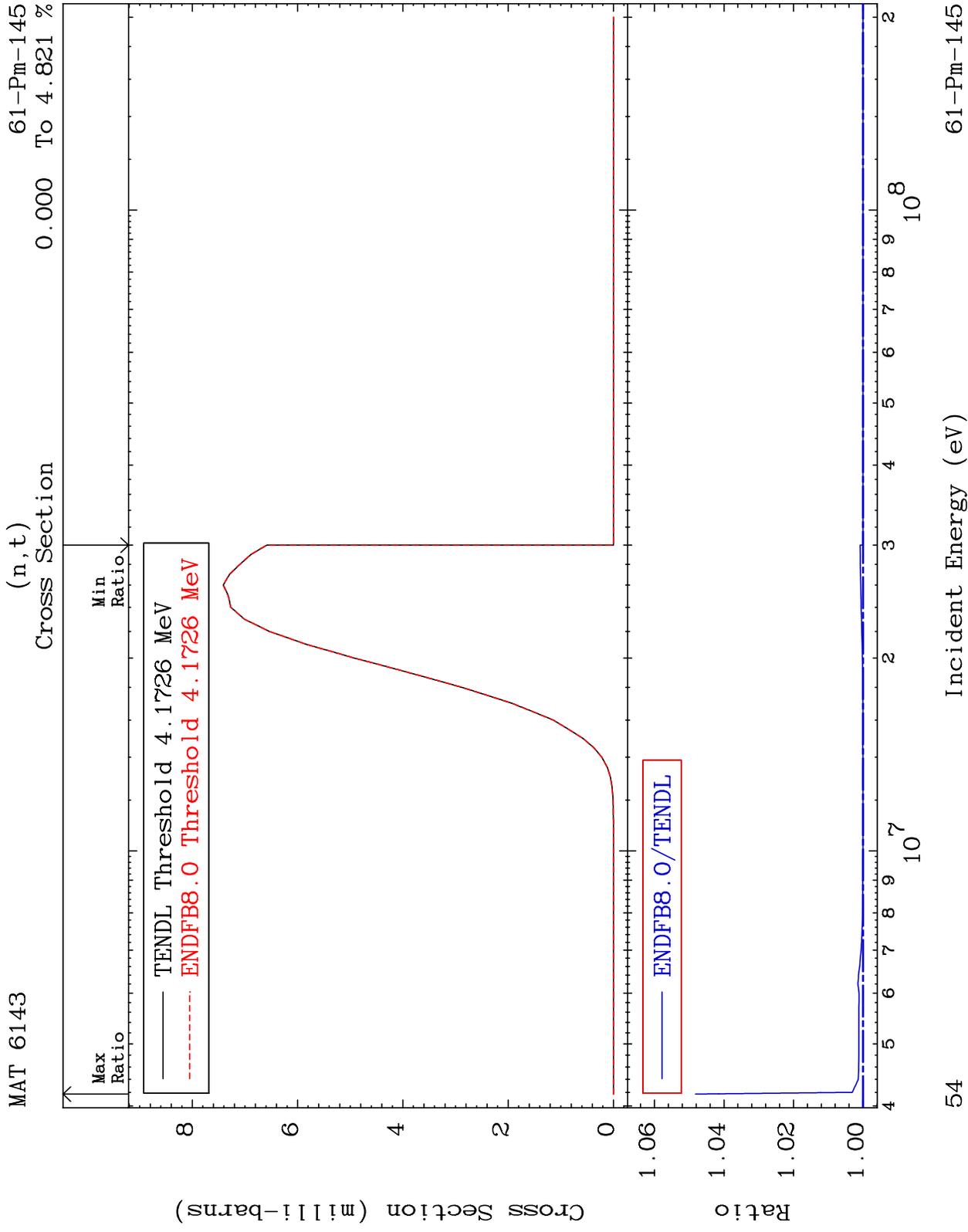
-8.727 To 0.932 %

Cross Section

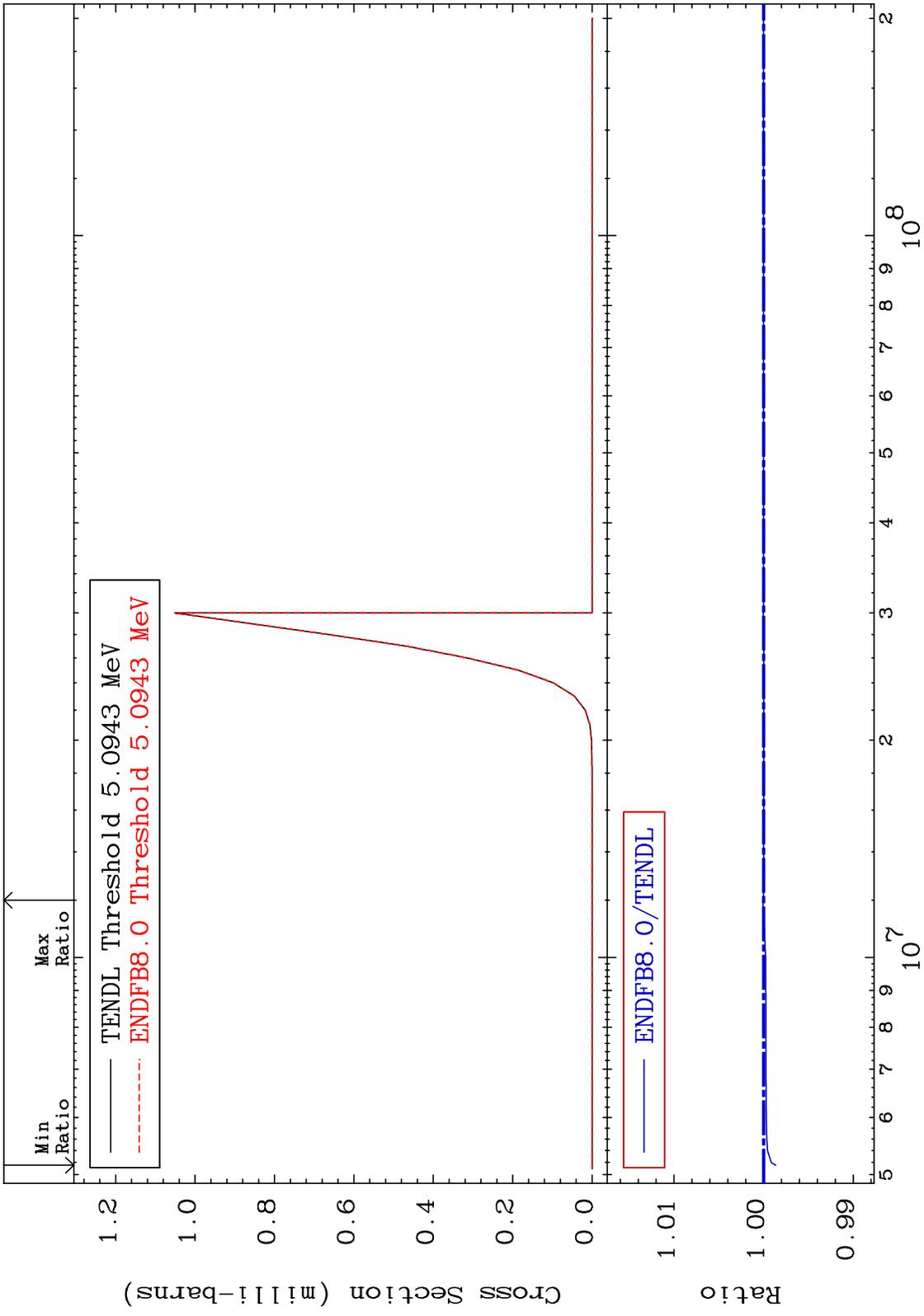


MAT 6143 (n,d) Cross Section 61-Pm-145 -0.003 To 0.074 %





MAT 6143 (n, He-3) 61-Pm-145
 Cross Section -0.135 To 0.009 %



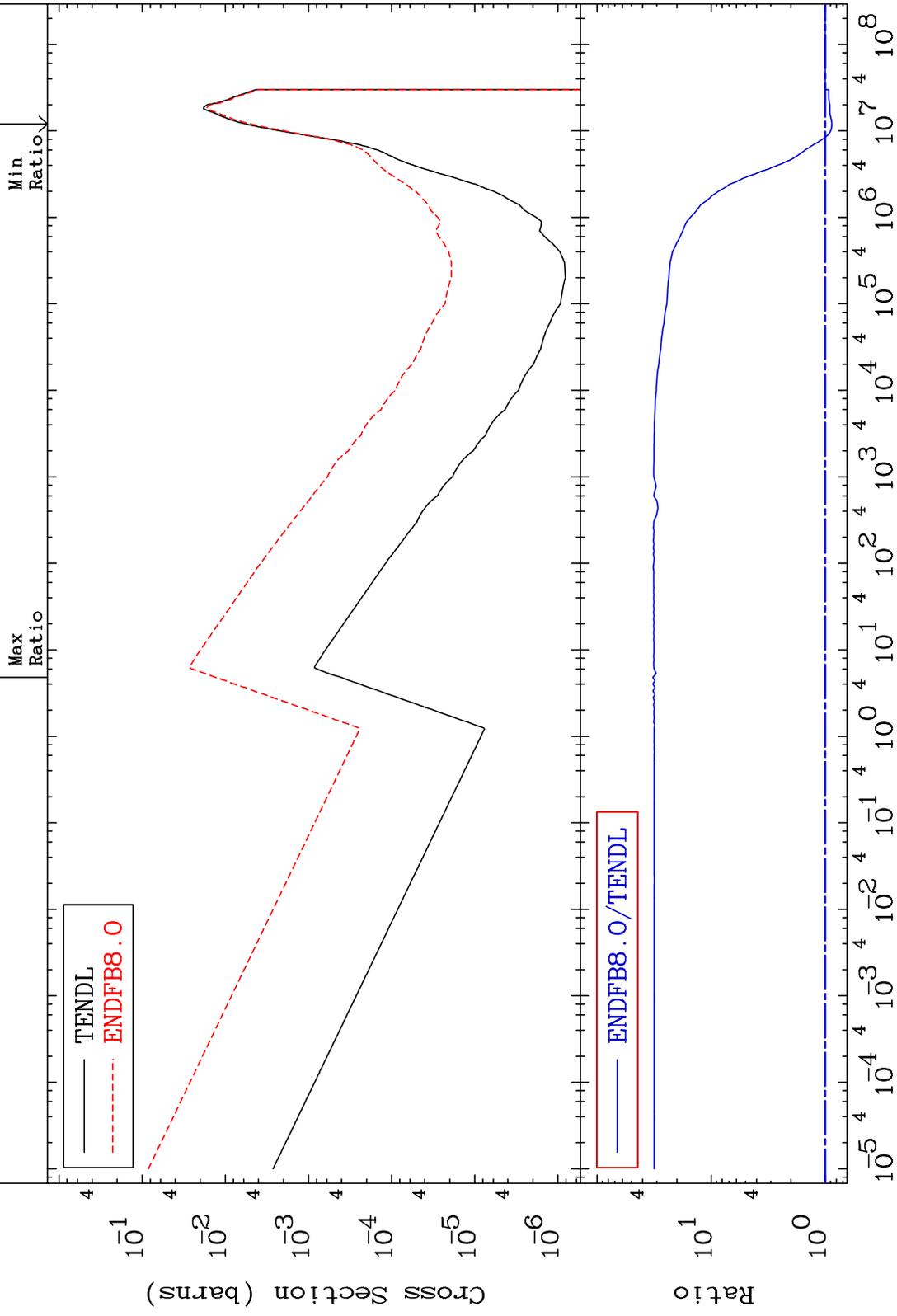
MAT 6143

(n, α)

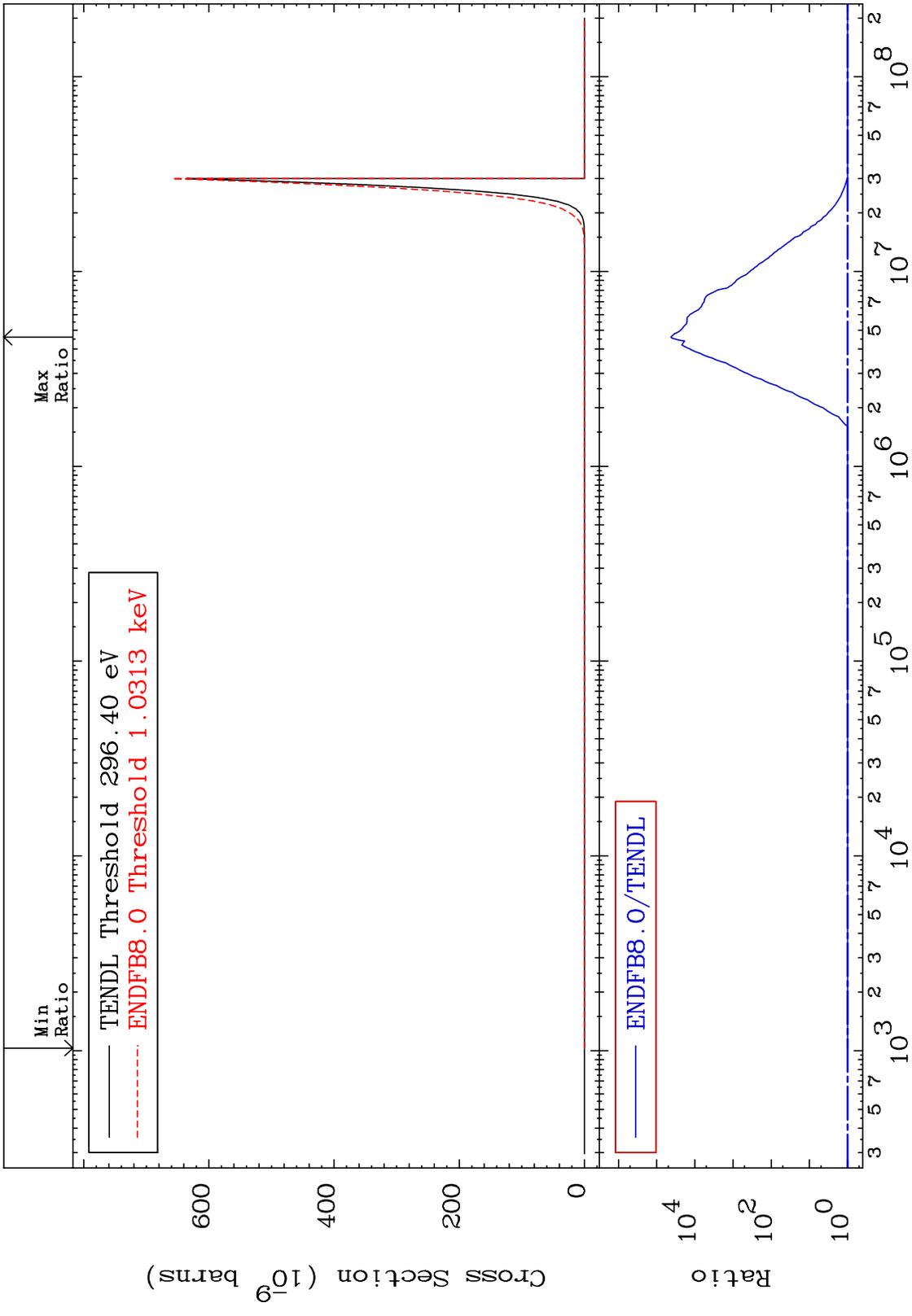
61-Pm-145

-12.34 To 3141. %

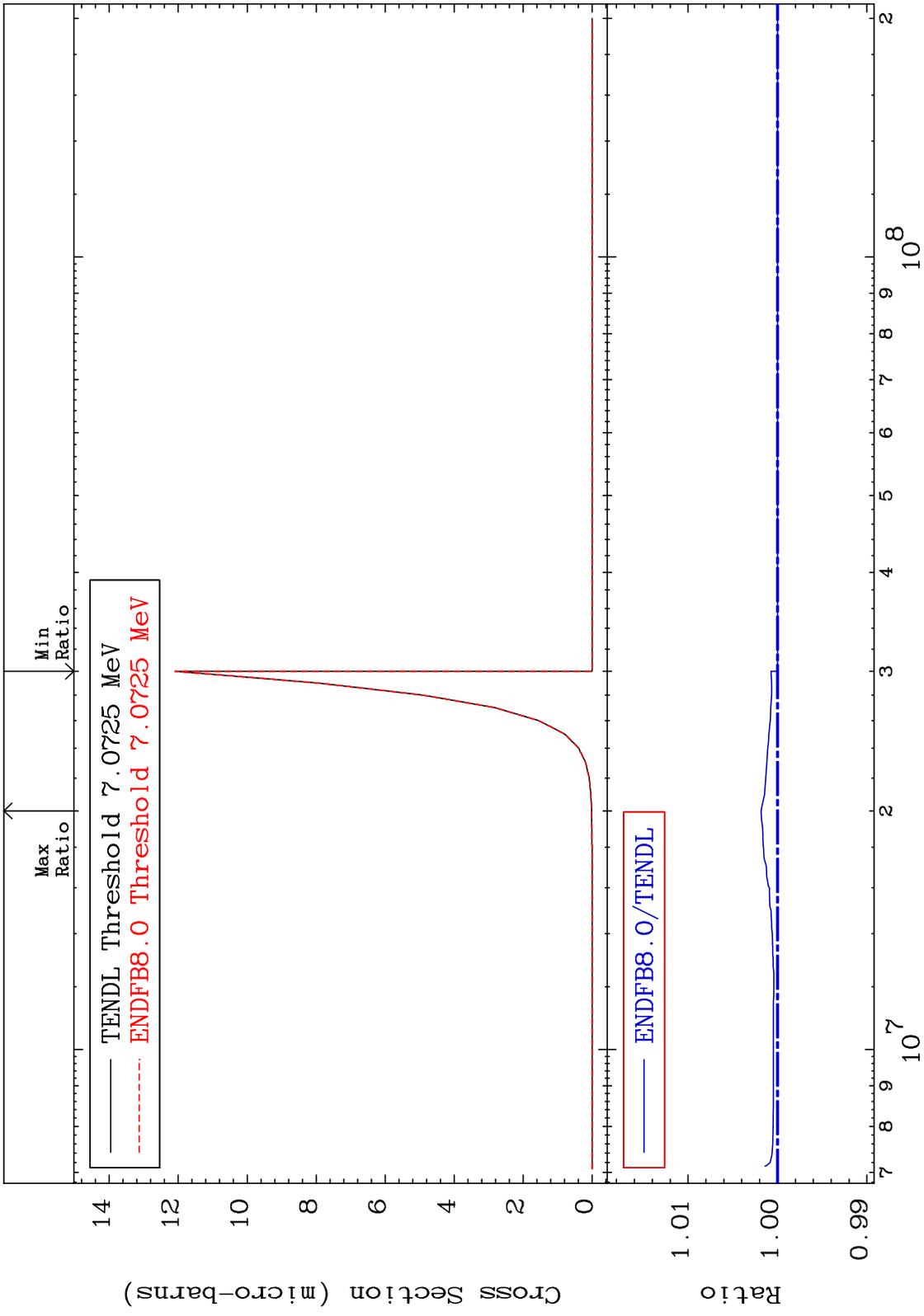
Cross Section



MAT 6143 61-Pm-145
To 9999. %
 (n,2α) 0.000
 Cross Section Max Ratio

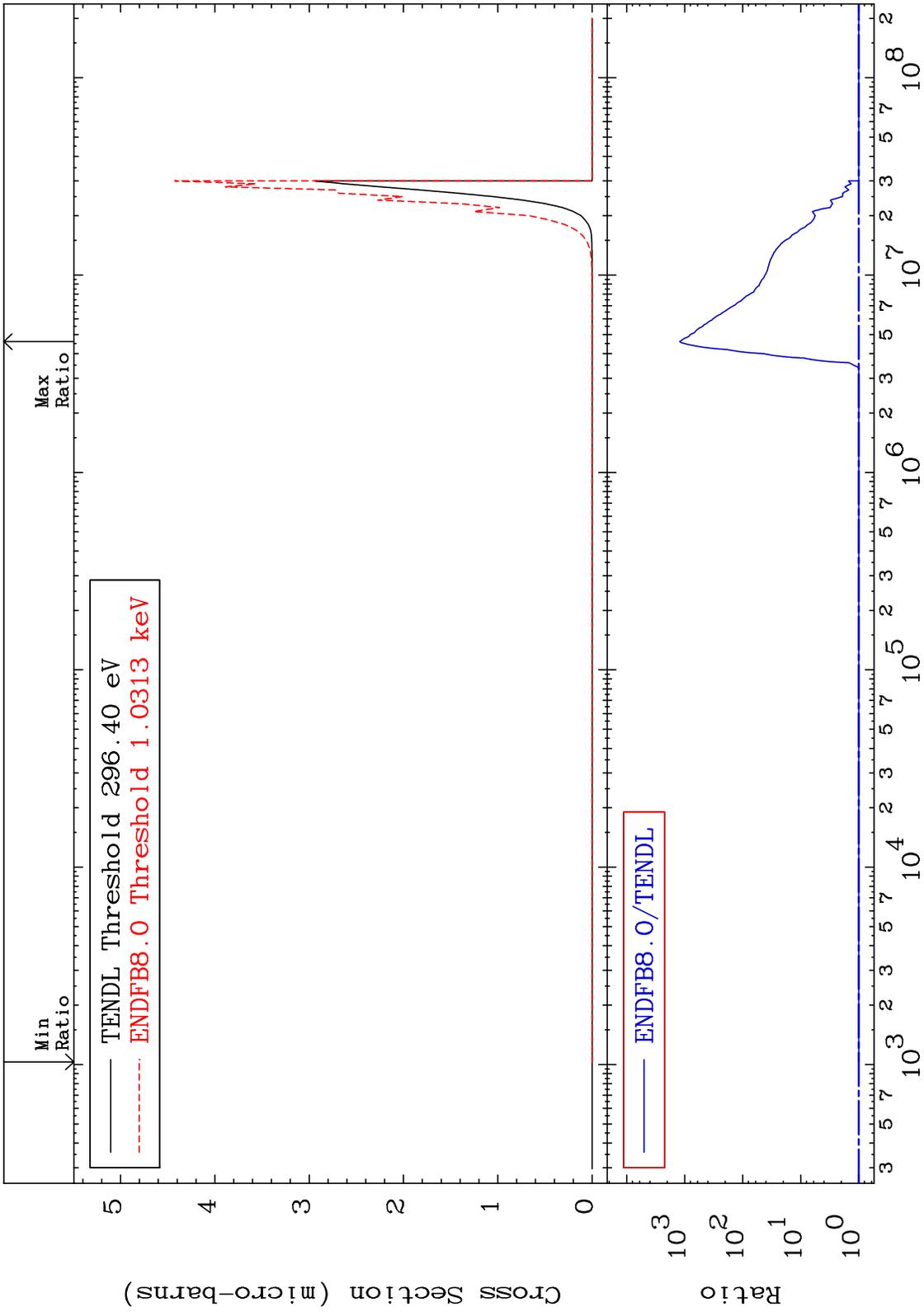


MAT 6143 (n,2p) Cross Section 61-Pm-145 To 0.184 %



58 Incident Energy (eV) 61-Pm-145

MAT 6143 (n,p) α 61-Pm-145
 Cross Section To 9999. %



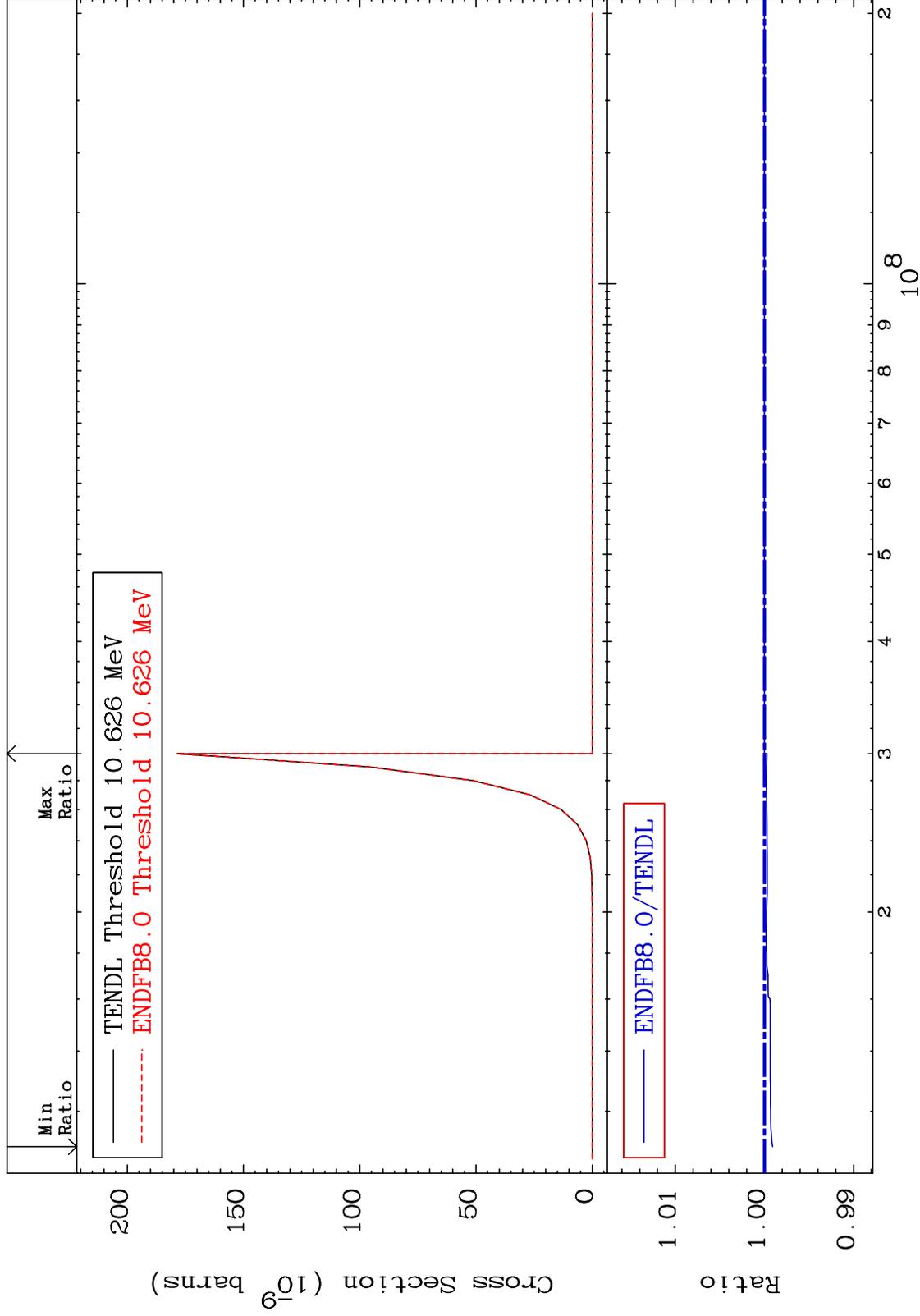
MAT 6143

(n,p) d

61-Pm-145

Cross Section

-0.092 To 0.000 %

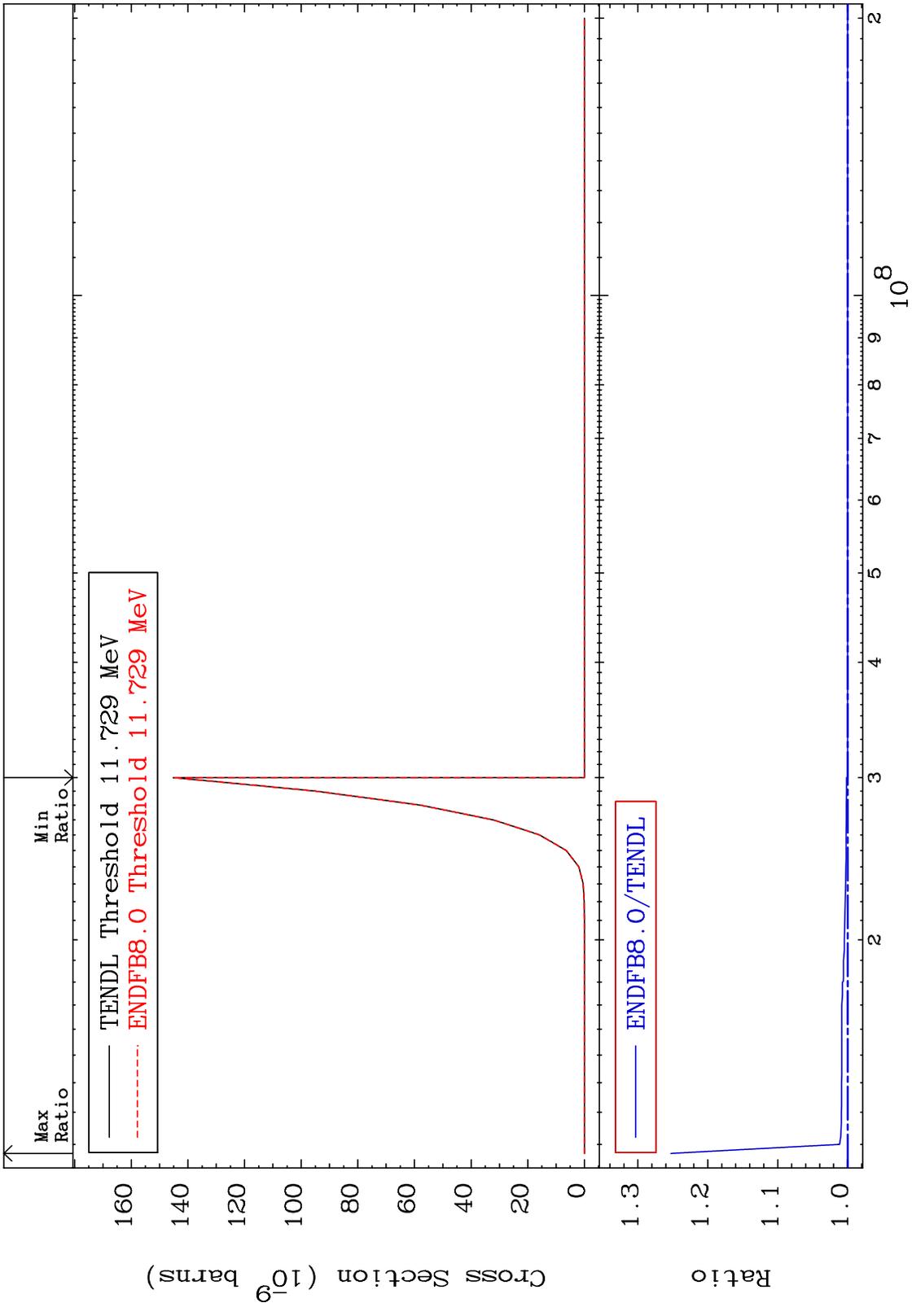


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Incident Energy (eV)

61-Pm-145

MAT 6143 (n,p) t 61-Pm-145
 Cross Section 0.000 To 25.28 %



MAT 6143

(n,d) α

61-Pm-145

-35.23 To 9999. %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 685.43 keV
ENDFB8.0 Threshold 682.17 keV

2.0

1.5

1.0

0.5

0.0

Cross Section (micro-barns)

ENDFB8.0/TENDL

Ratio

10^2

10^0

10^6

10^7

10^8

2

3

4

5

6

7

8

9

10

11

12

13

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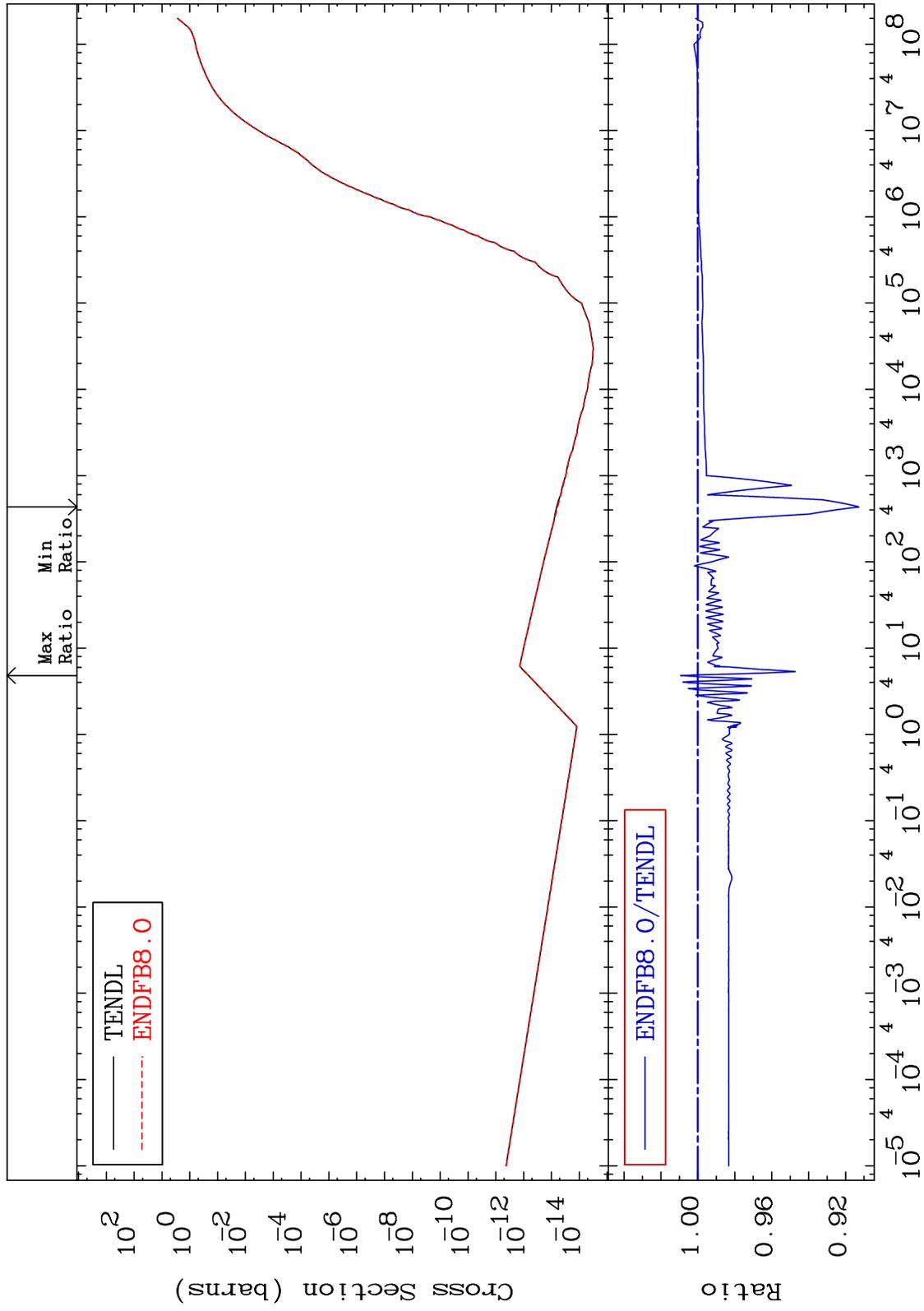
311

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MAT 6143

Hydrogen Production
Cross Section

61-Pm-145
-8.727 To 0.932 %



63

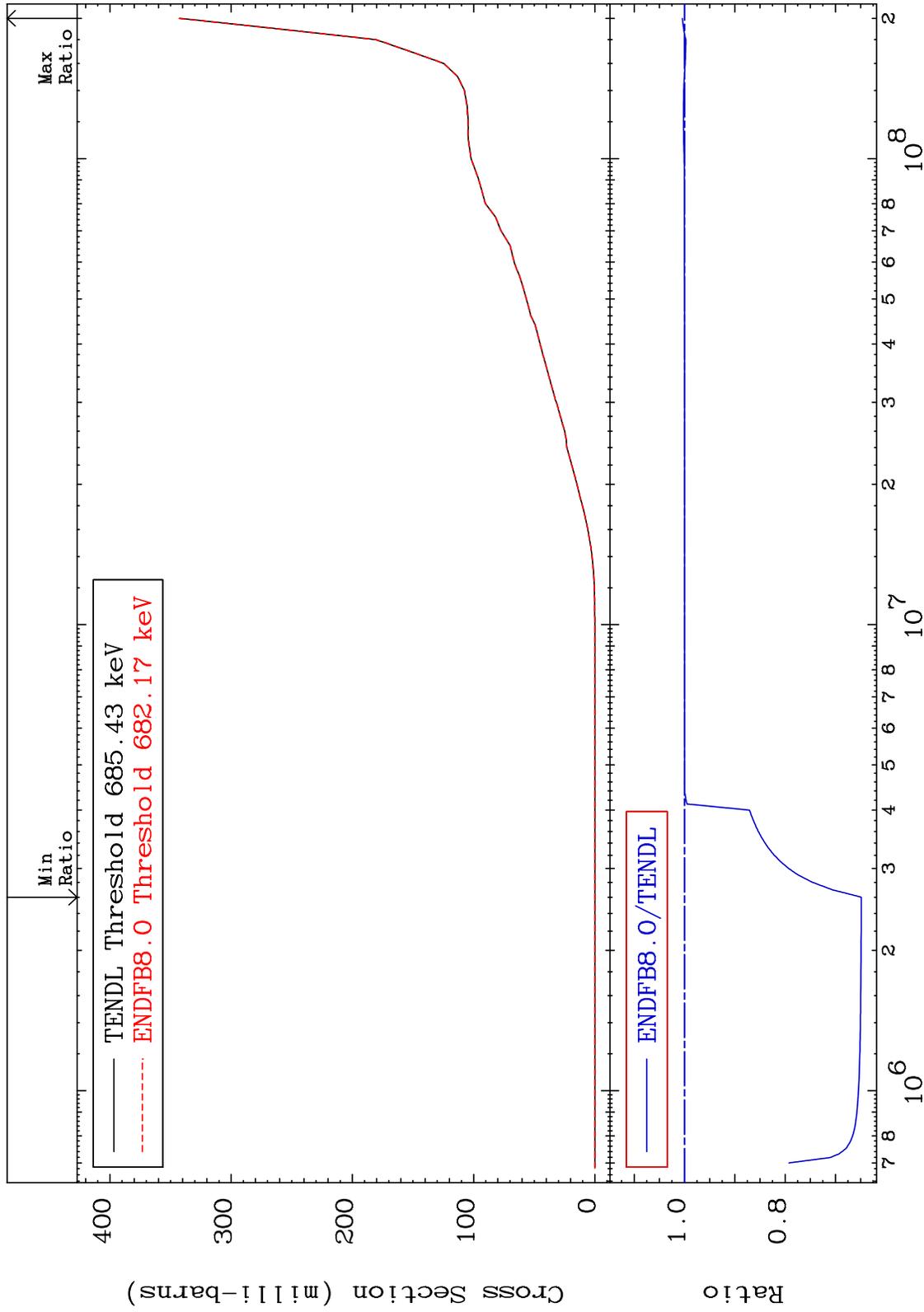
Incident Energy (eV)

61-Pm-145

MAT 6143

Deuterium Production
Cross Section

61-Pm-145
-35.15 To 0.407 %



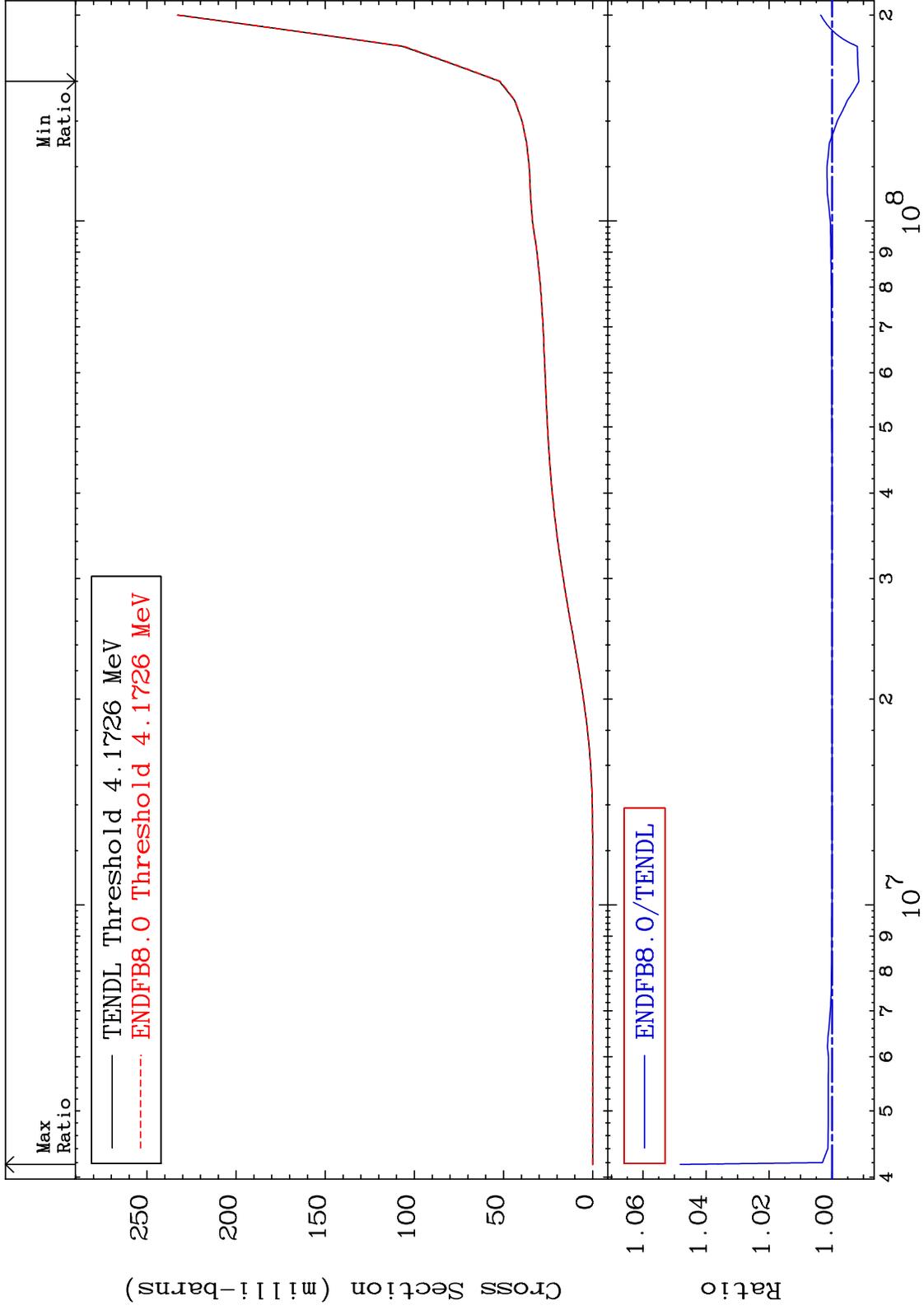
64

61-Pm-145

MAT 6143

Tritium Production
Cross Section

61-Pm-145
-0.853 To 4.821 %



65

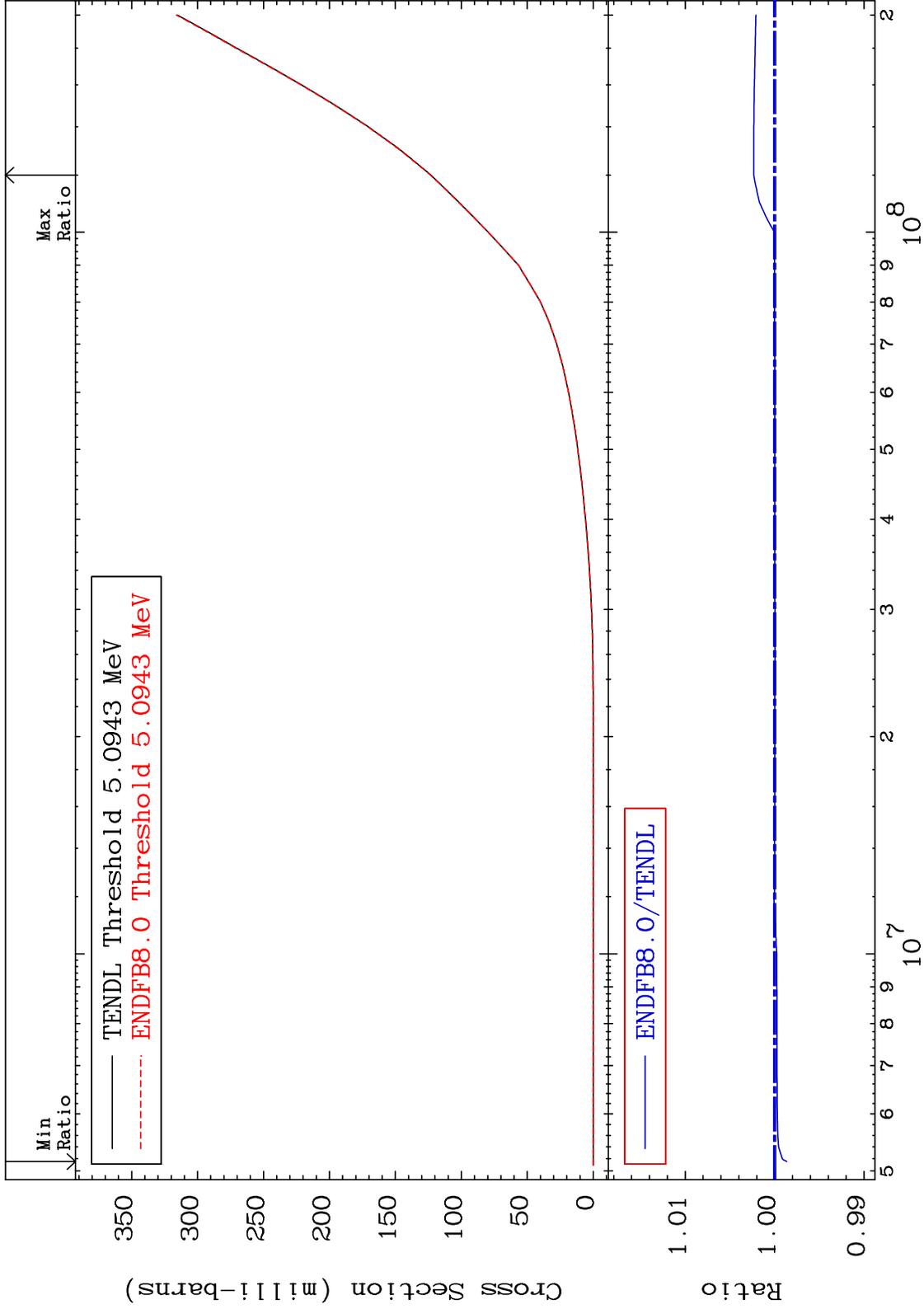
Incident Energy (eV)

61-Pm-145

MAT 6143

He-3 Production
Cross Section

61-Pm-145
-0.135 To 0.234 %



66

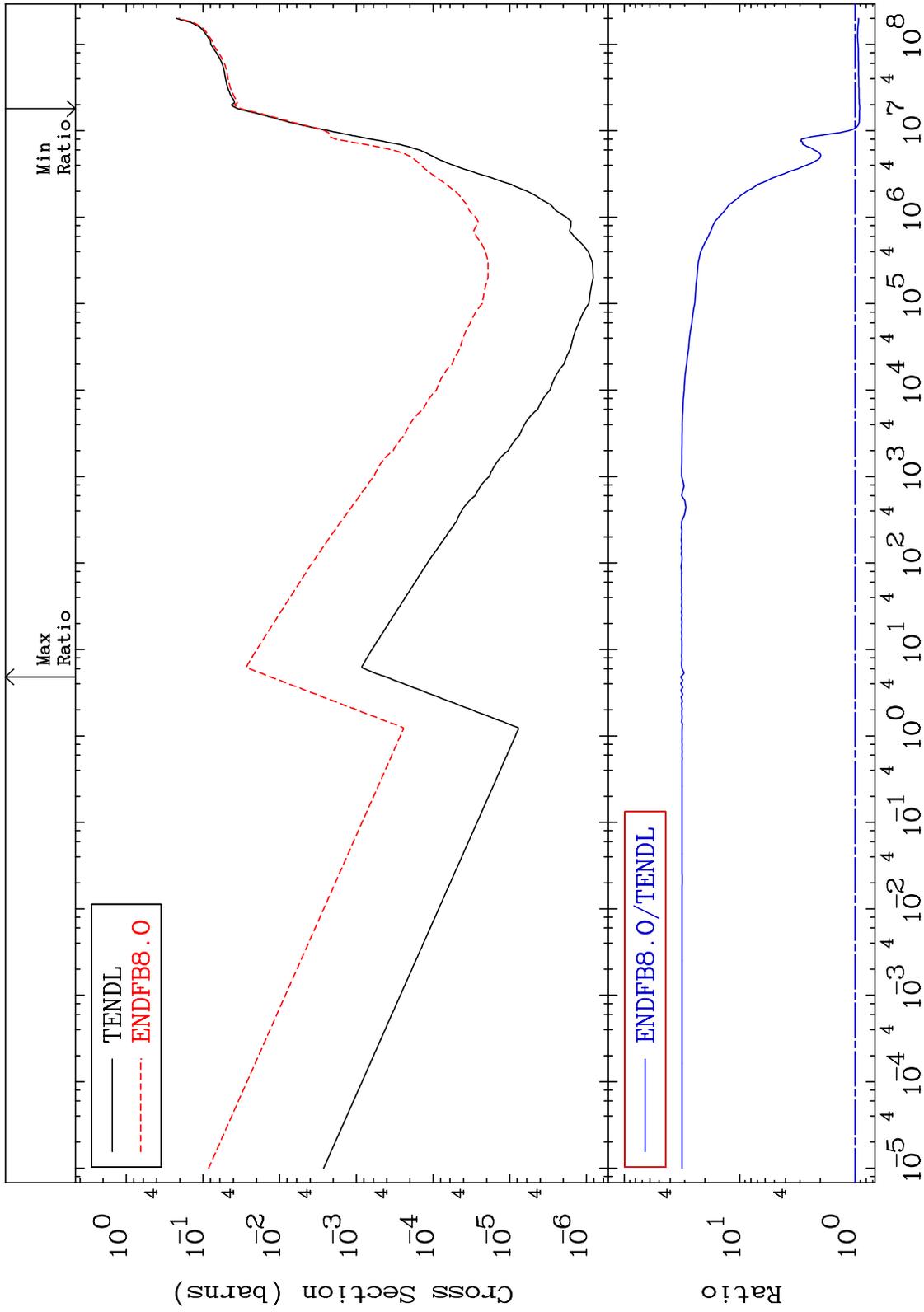
Incident Energy (eV)

61-Pm-145

MAT 6143

He-4 Production
Cross Section

61-Pm-145
-8.986 To 3141. %

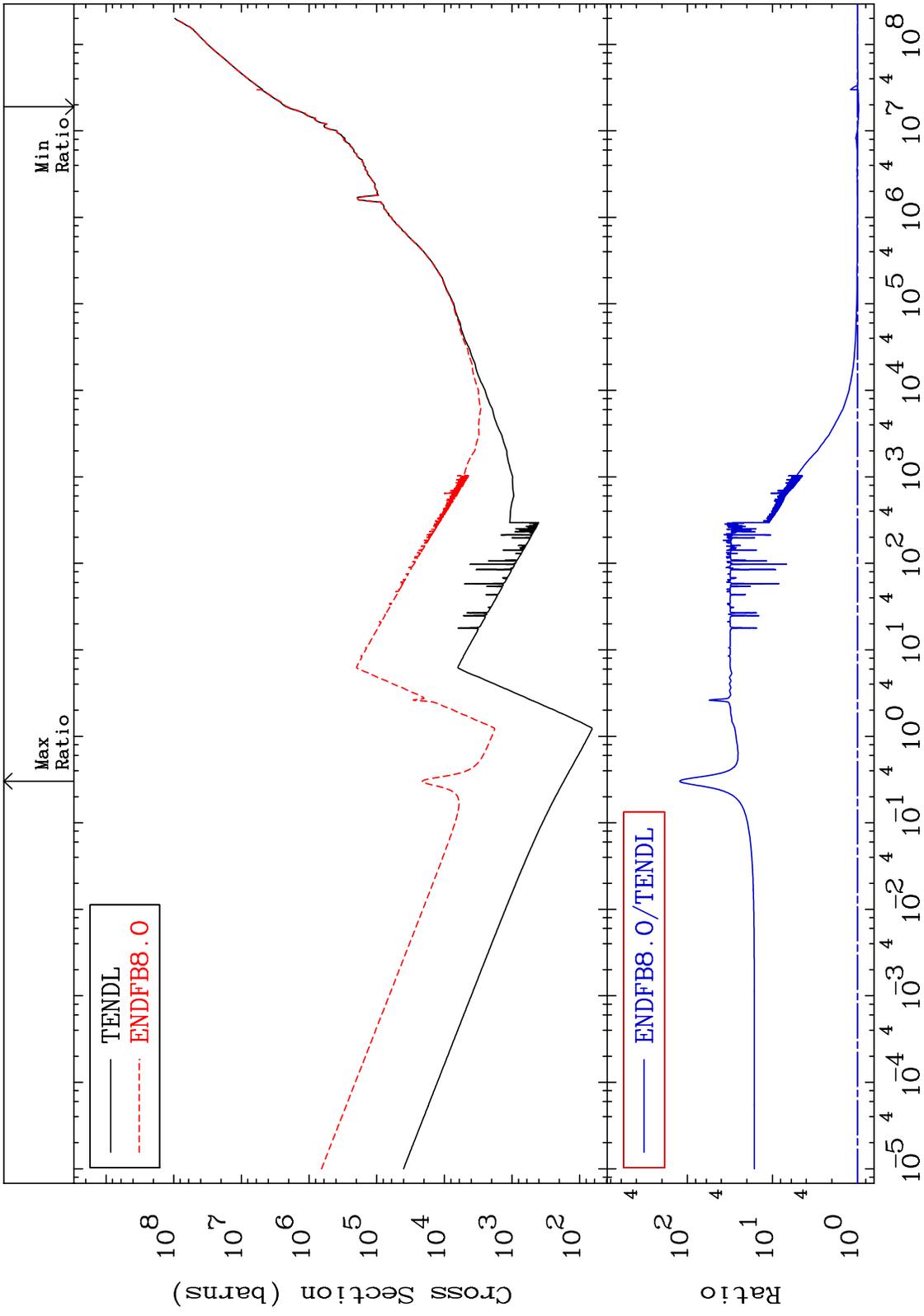


67

Incident Energy (eV)

61-Pm-145

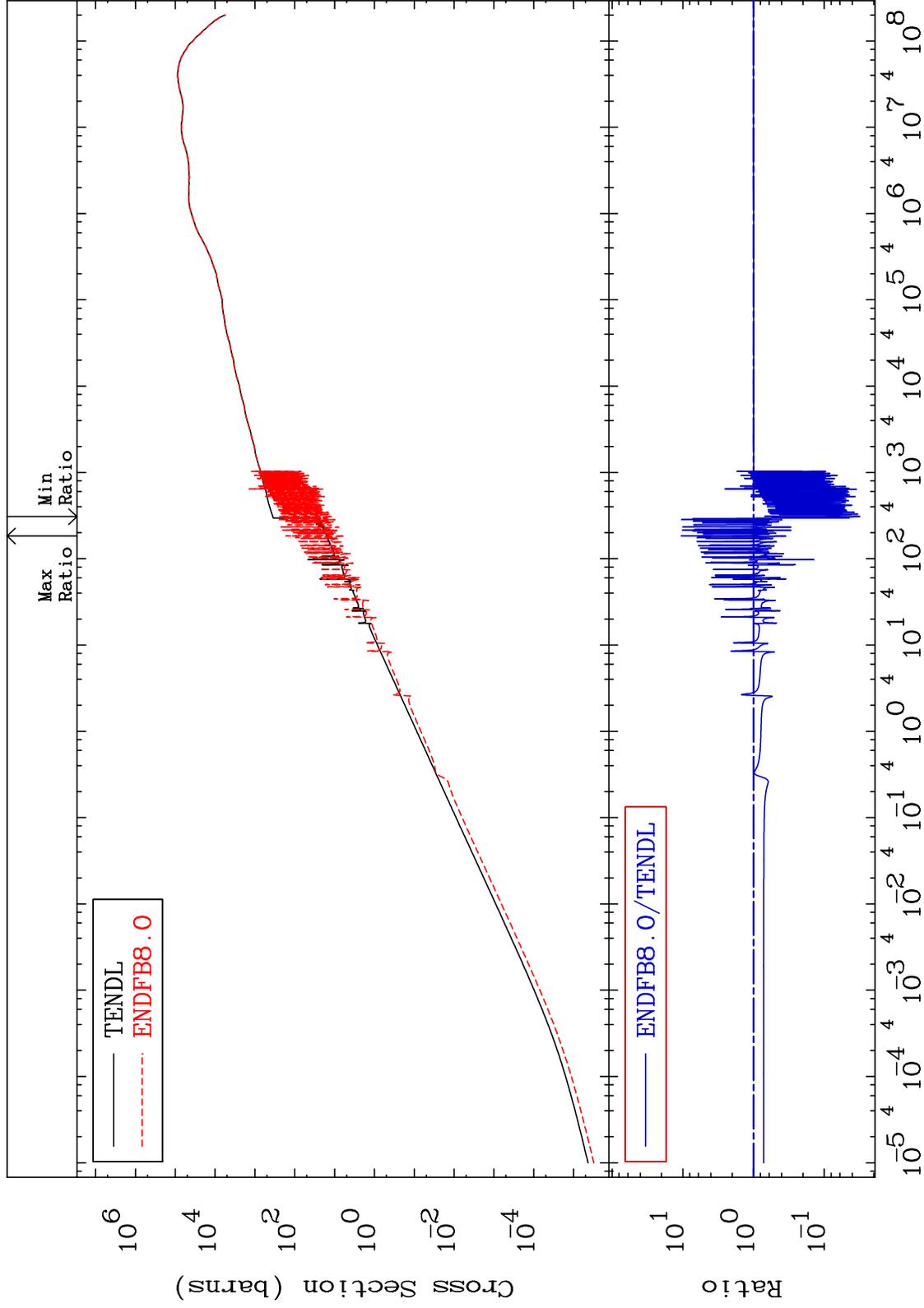
MAT 6143 Kerma total (eV-barns) 61-Pm-145
 Cross Section -3.585 To 9999. %



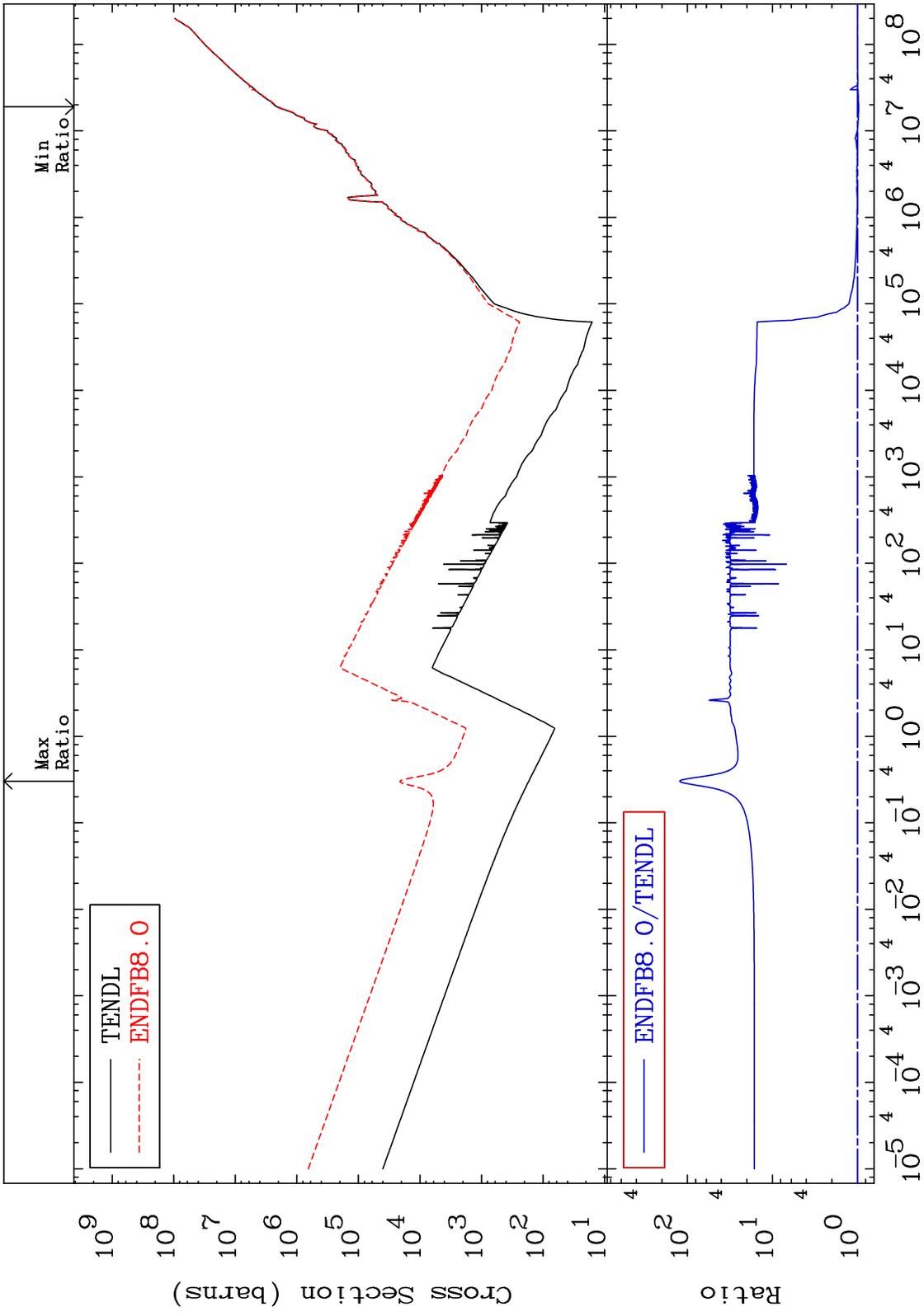
MAT 6143

Kerma elastic
Cross Section

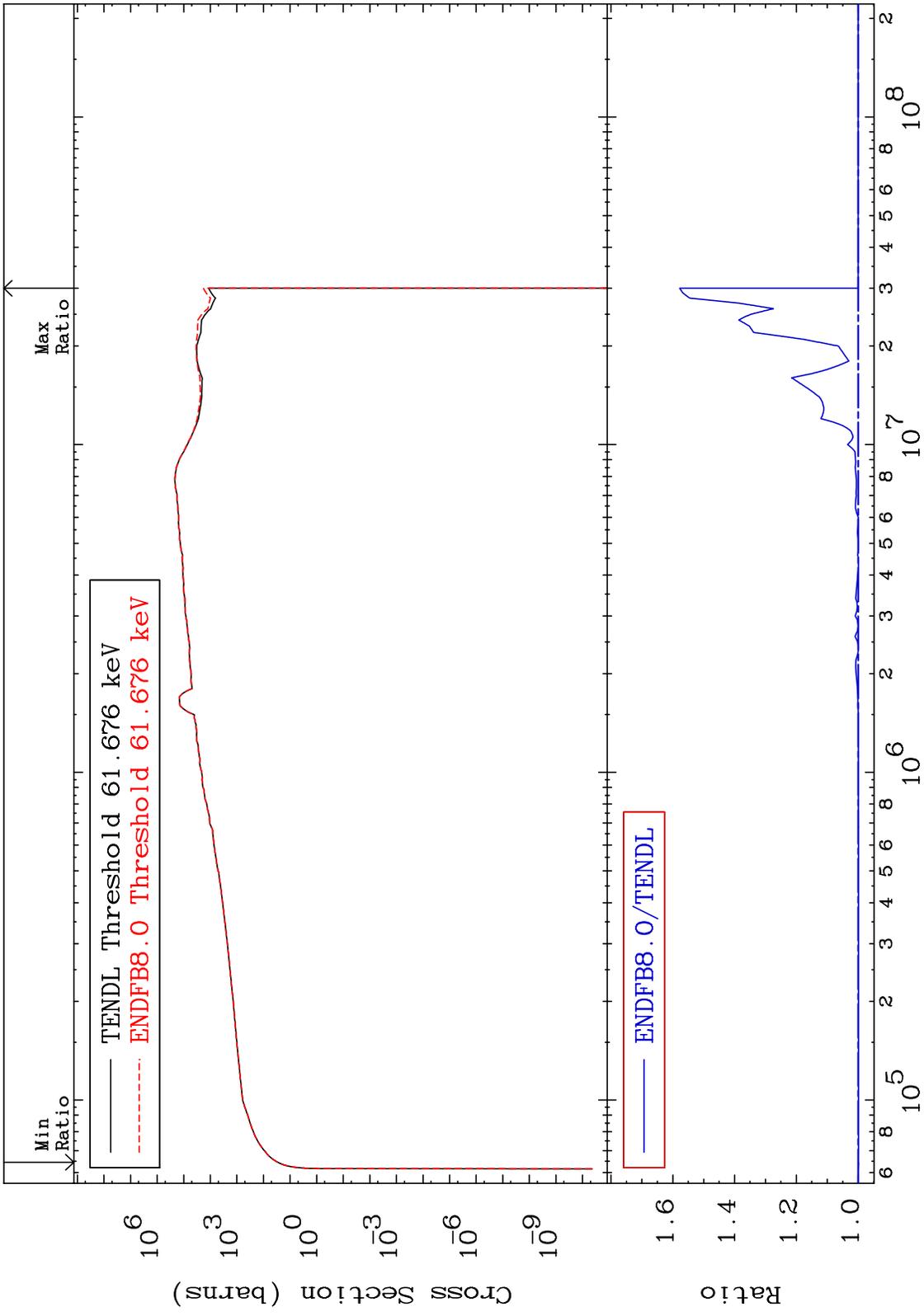
61-Pm-145
-96.86 To 953.1 %



MAT 6143 Kerma non-elastic (all but mt2) 61-Pm-145
 Cross Section -3.696 To 9999. %



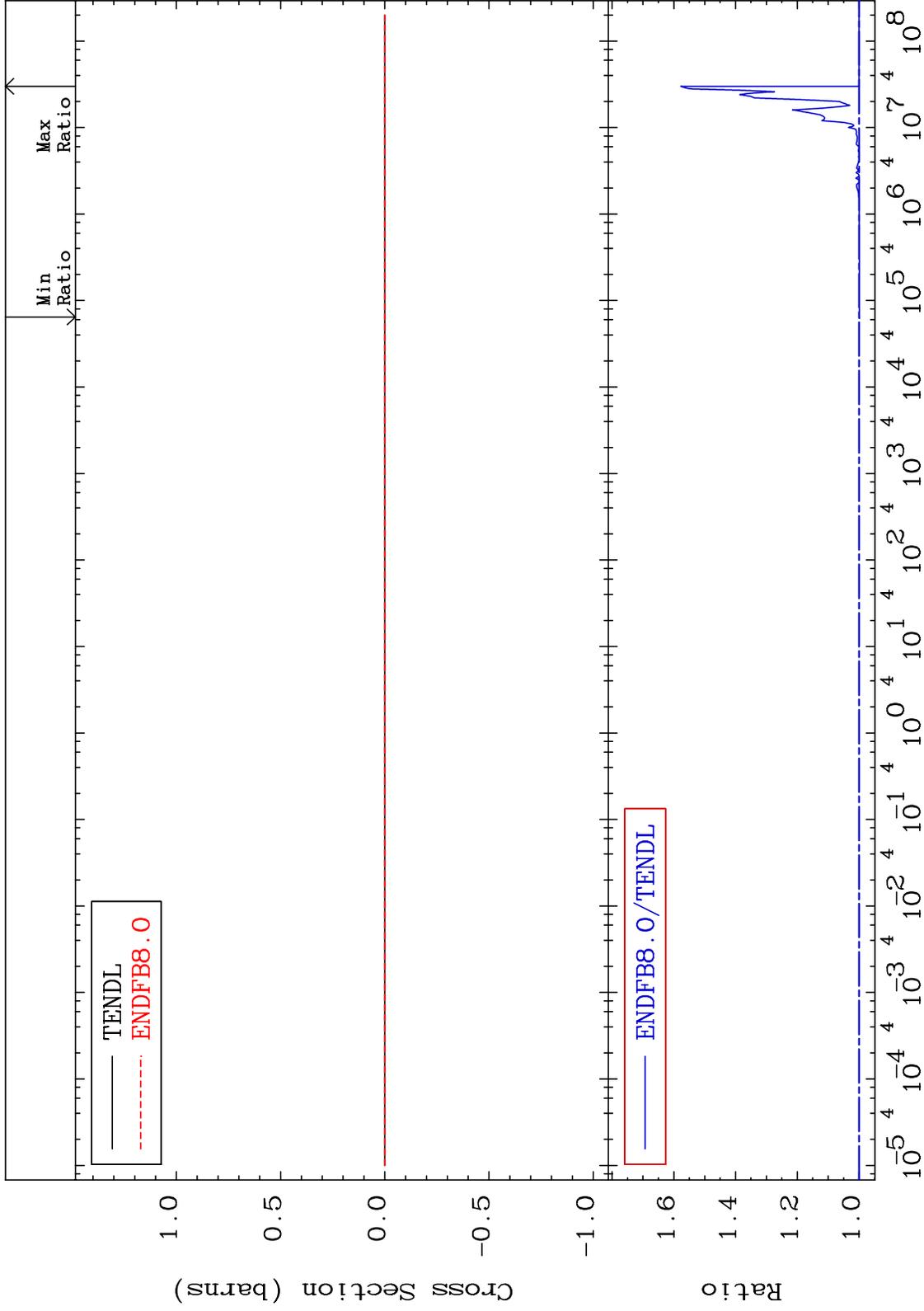
MAT 6143 Kerma inelastic (mt51-91) 61-Pm-145
 Cross Section -0.221 To 57.75 %



MAT 6143

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

61-Pm-145
-0.221 To 57.75 %



72

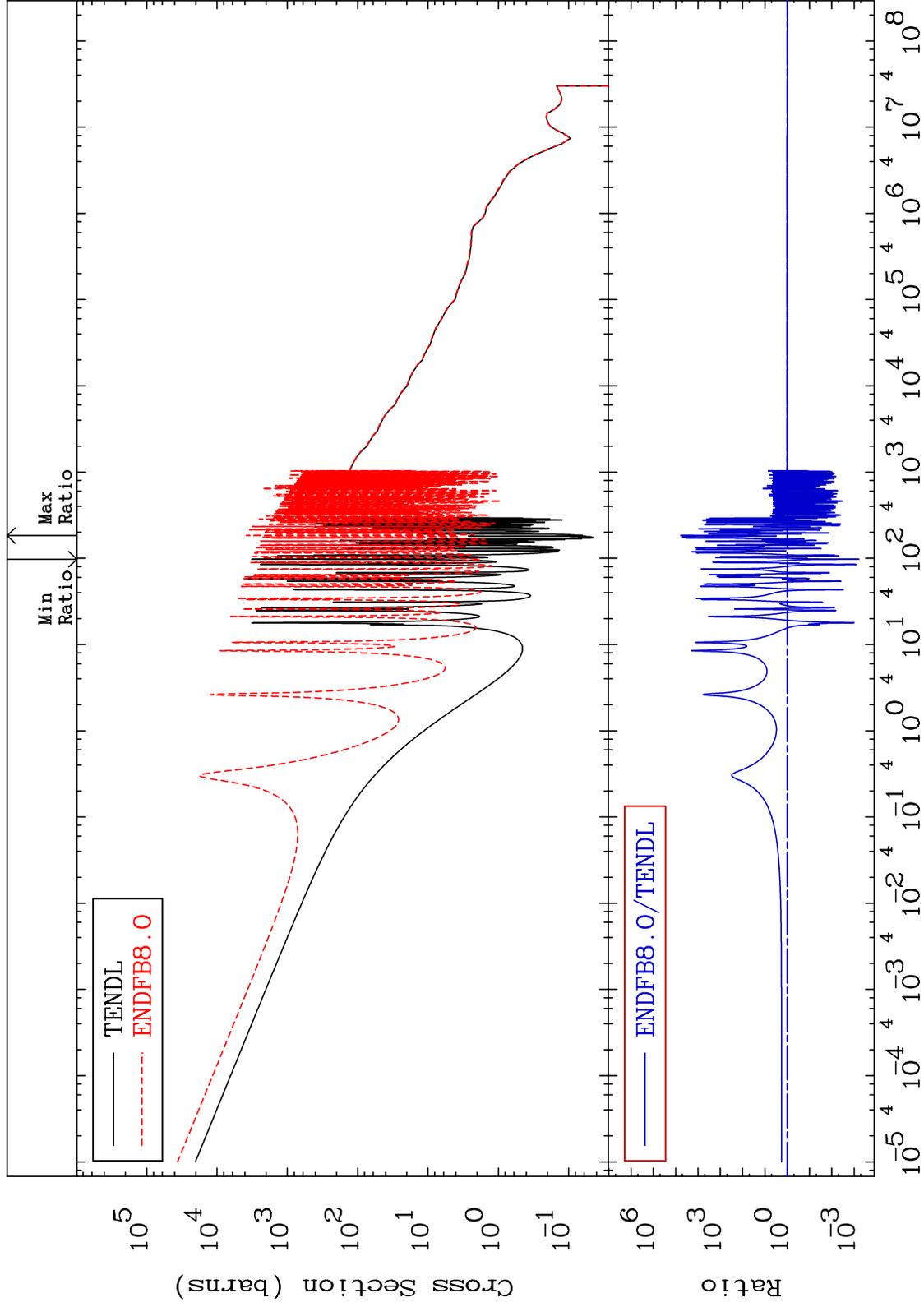
Incident Energy (eV)

61-Pm-145

MAT 6143

Kerma capture (mt102)
Cross Section

61-Pm-145
-99.94 To 9999. %

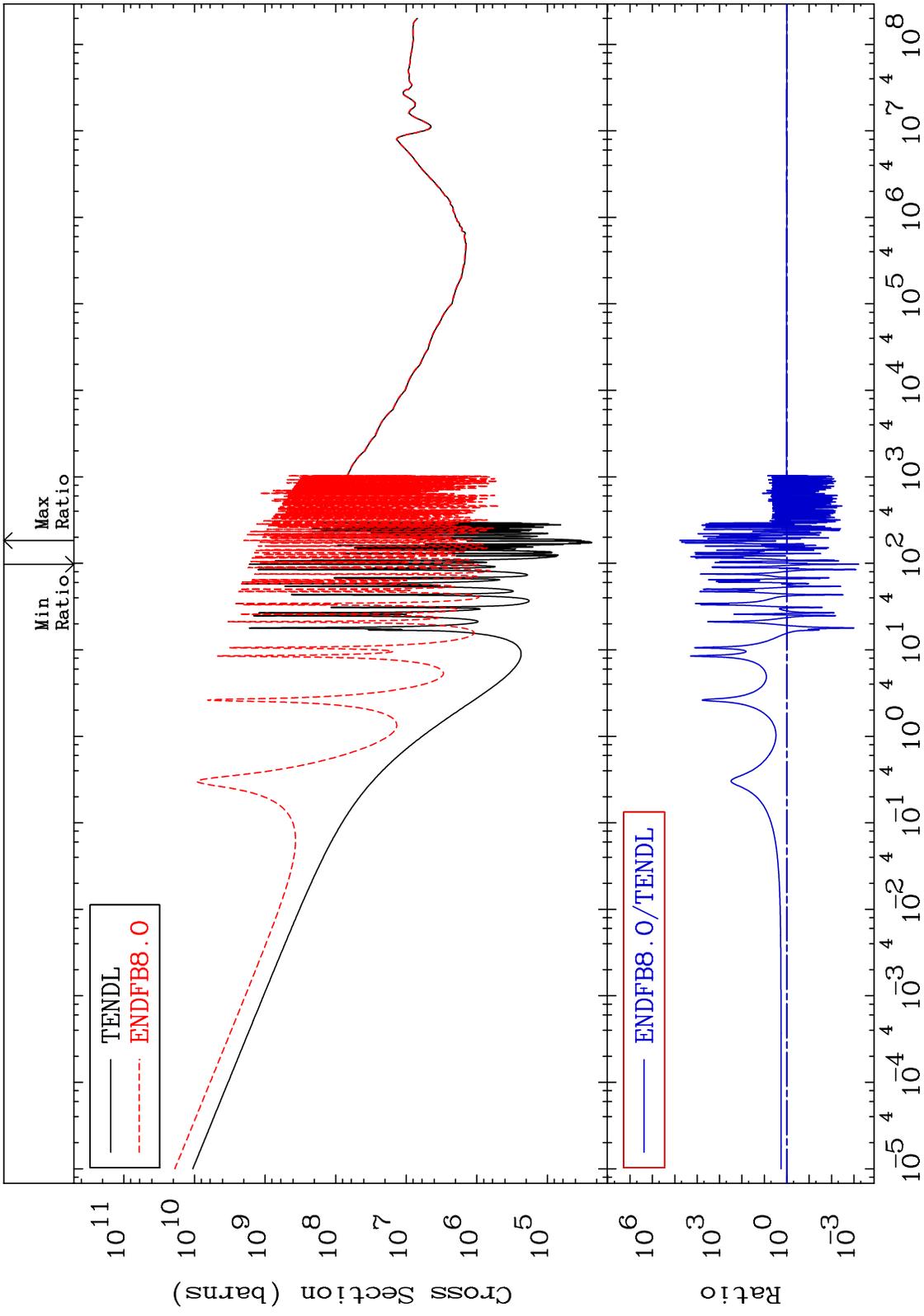


73

Incident Energy (eV)

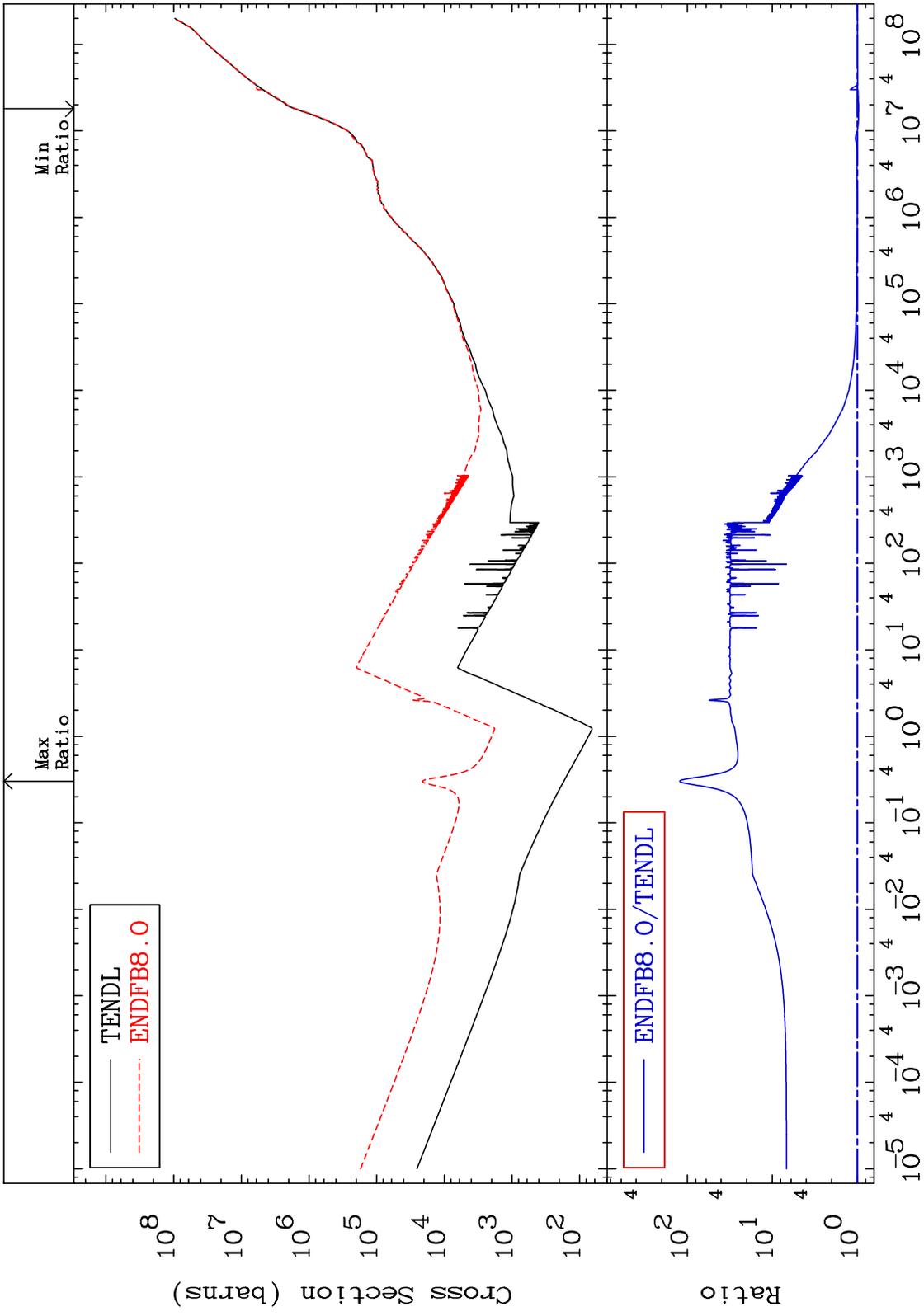
61-Pm-145

MAT 6143 61-Pm-145
-99.94 To 9999. %
 Total photon (eV-barns)
 Cross Section



74 Incident Energy (eV) 61-Pm-145

MAT 6143 Total kinematic kerma (high limit) 61-Pm-145
 Cross Section -4.039 To 9999. %



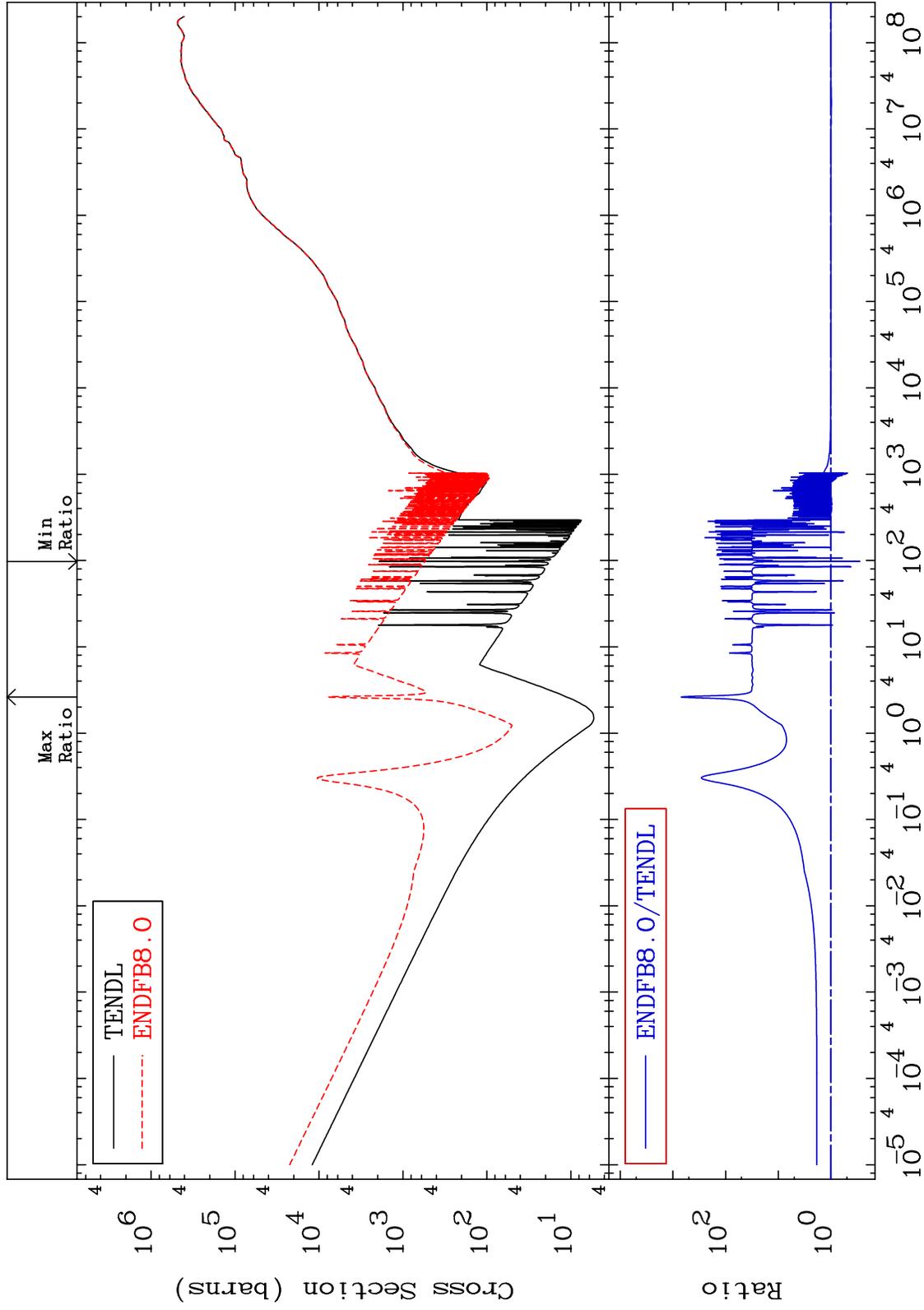
MAT 6143

Dpa total (eV-barns)

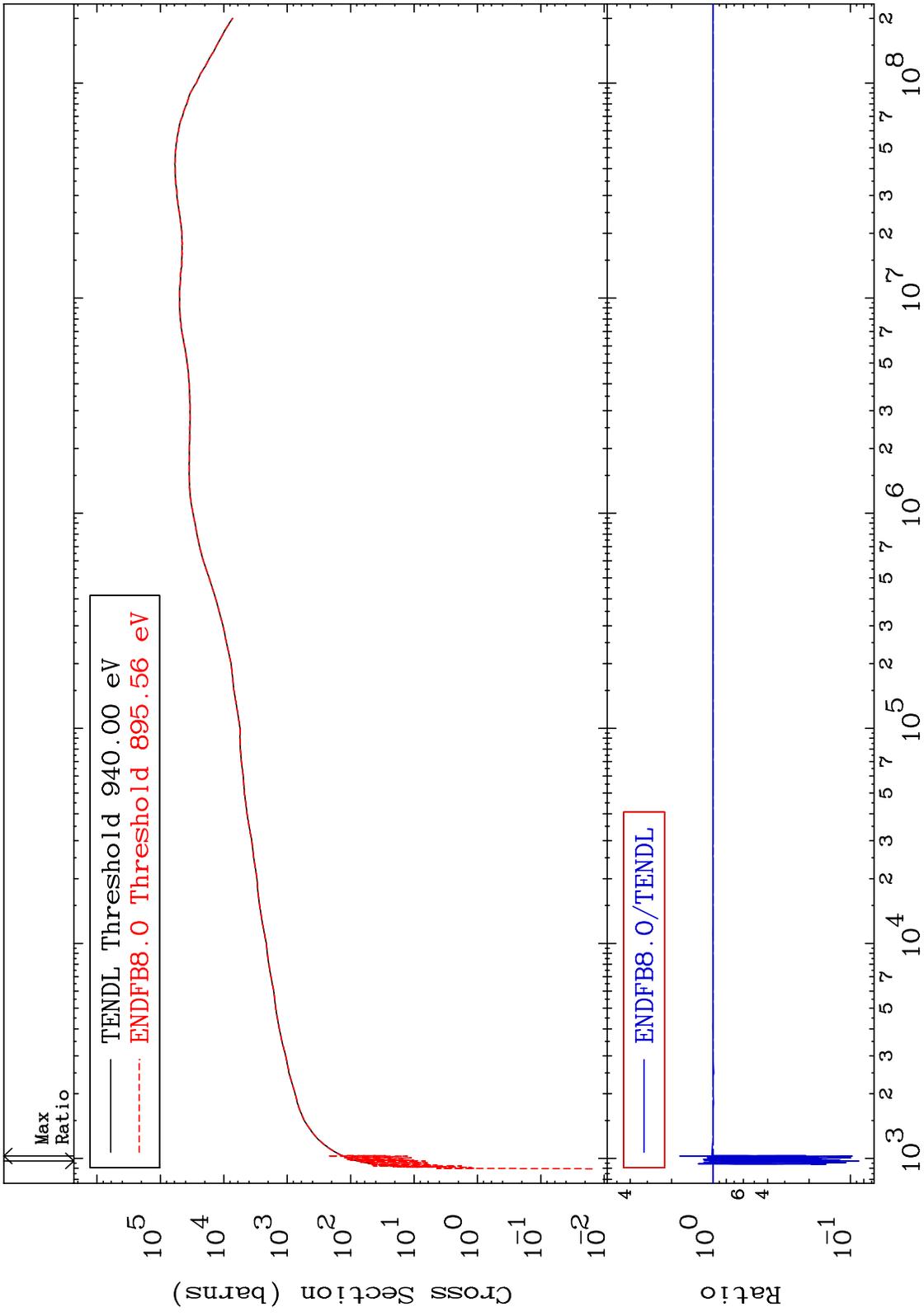
61-Pm-145

Cross Section

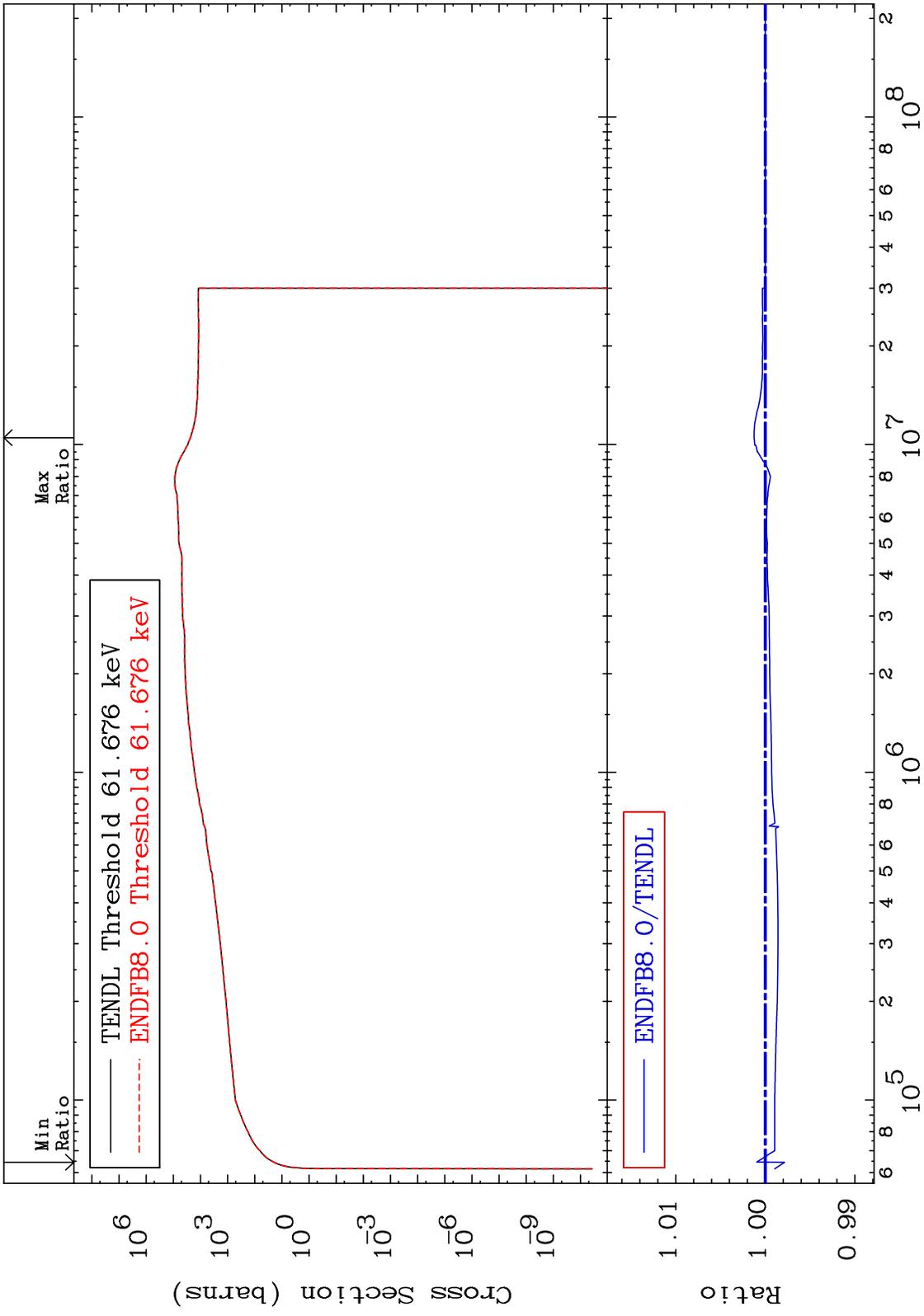
-71.64 To 9999. %



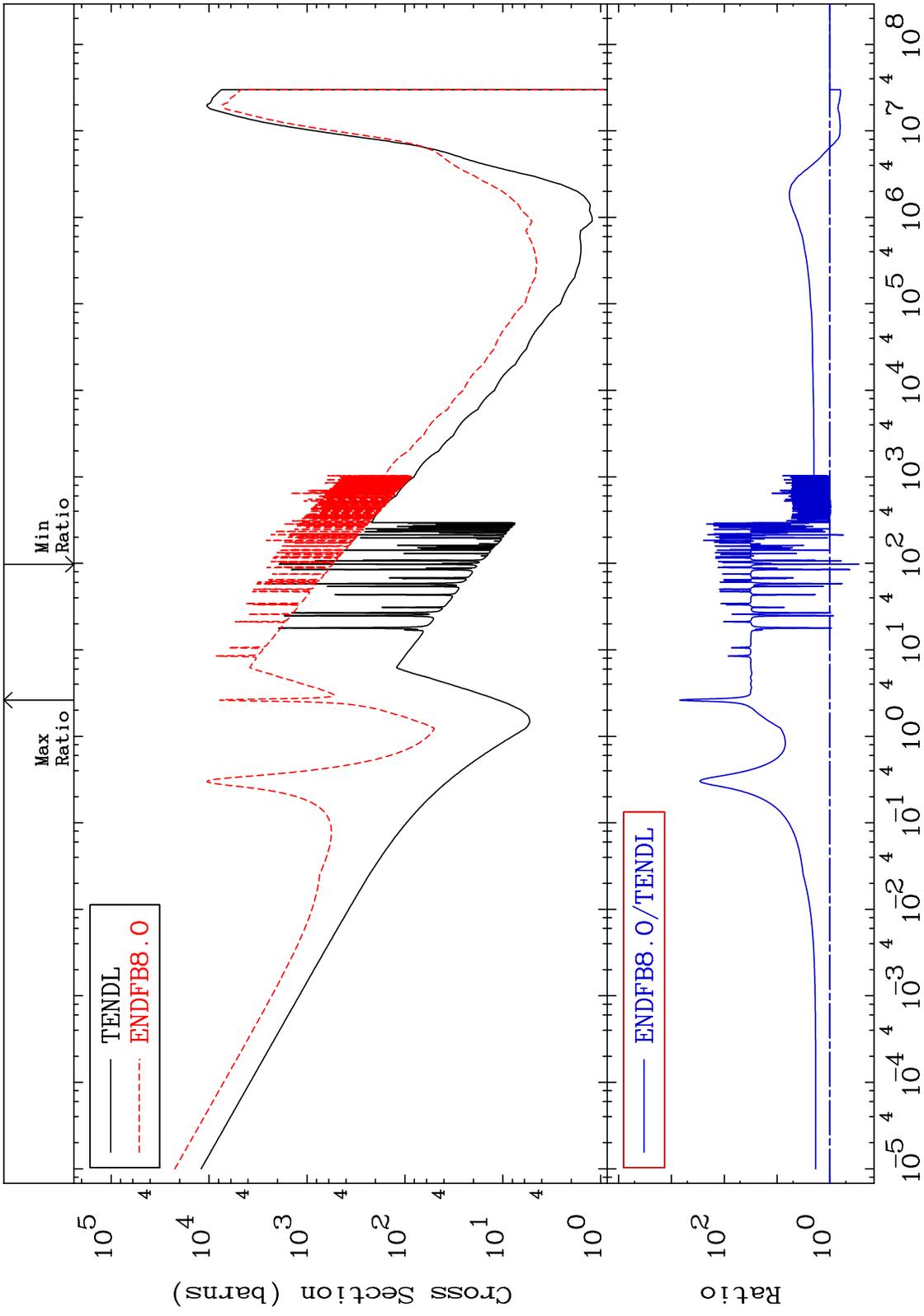
MAT 6143 Dpa elastic (mt2) 61-Pm-145
Cross Section -91.32 To 74.40 %



MAT 6143 Dpa inelastic (mt51-91) 61-Pm-145
Cross Section -0.215 To 0.126 %



MAT 6143 Dpa disappearance (mt102 -120) 61-Pm-145
 Cross Section -71.64 To 9999. %

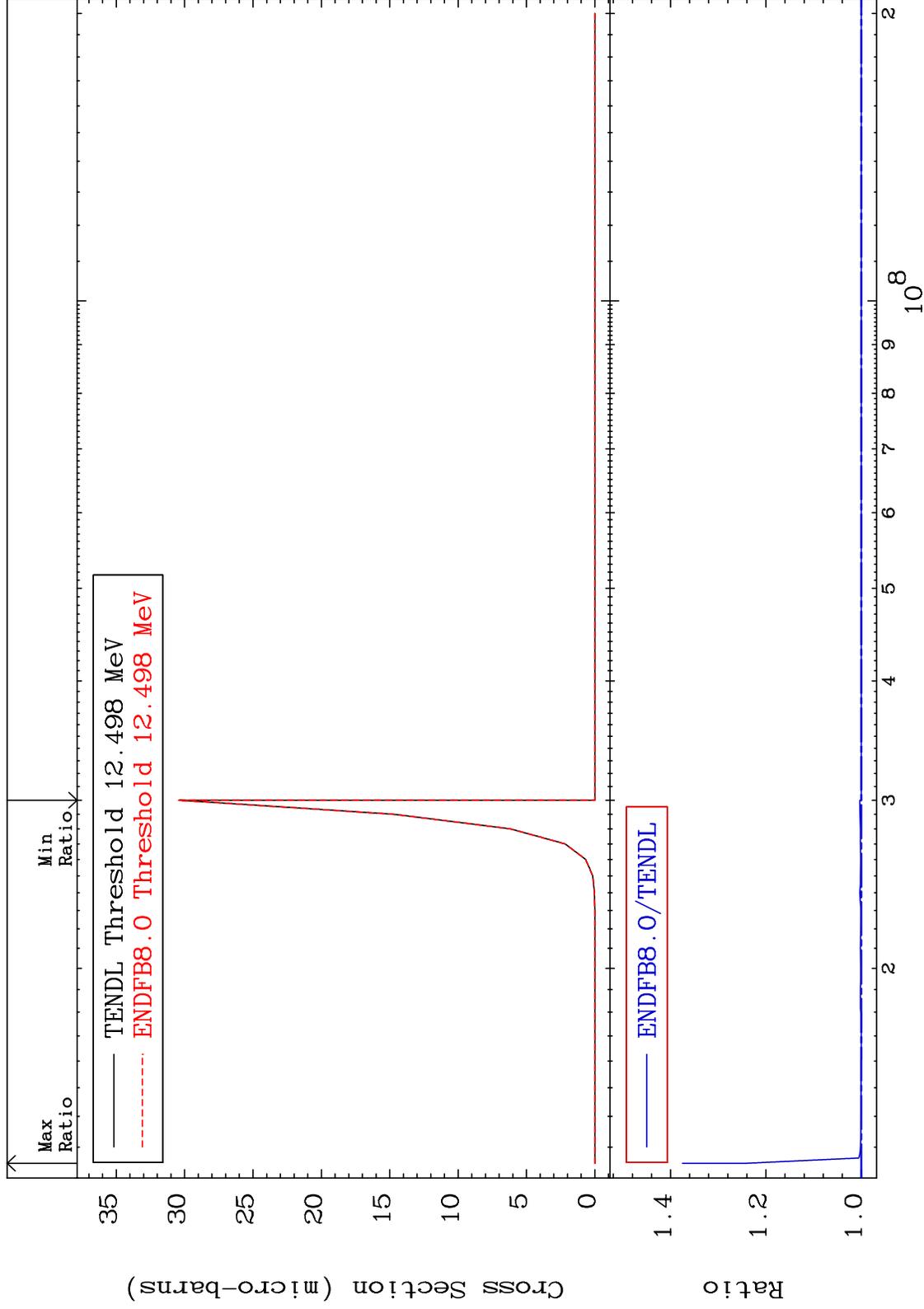


MAT 6143

(n,n') He-3:59-Pr-142g

61-Pm-145

Radionuclide Production Cross Section 0.000 To 37.51 %

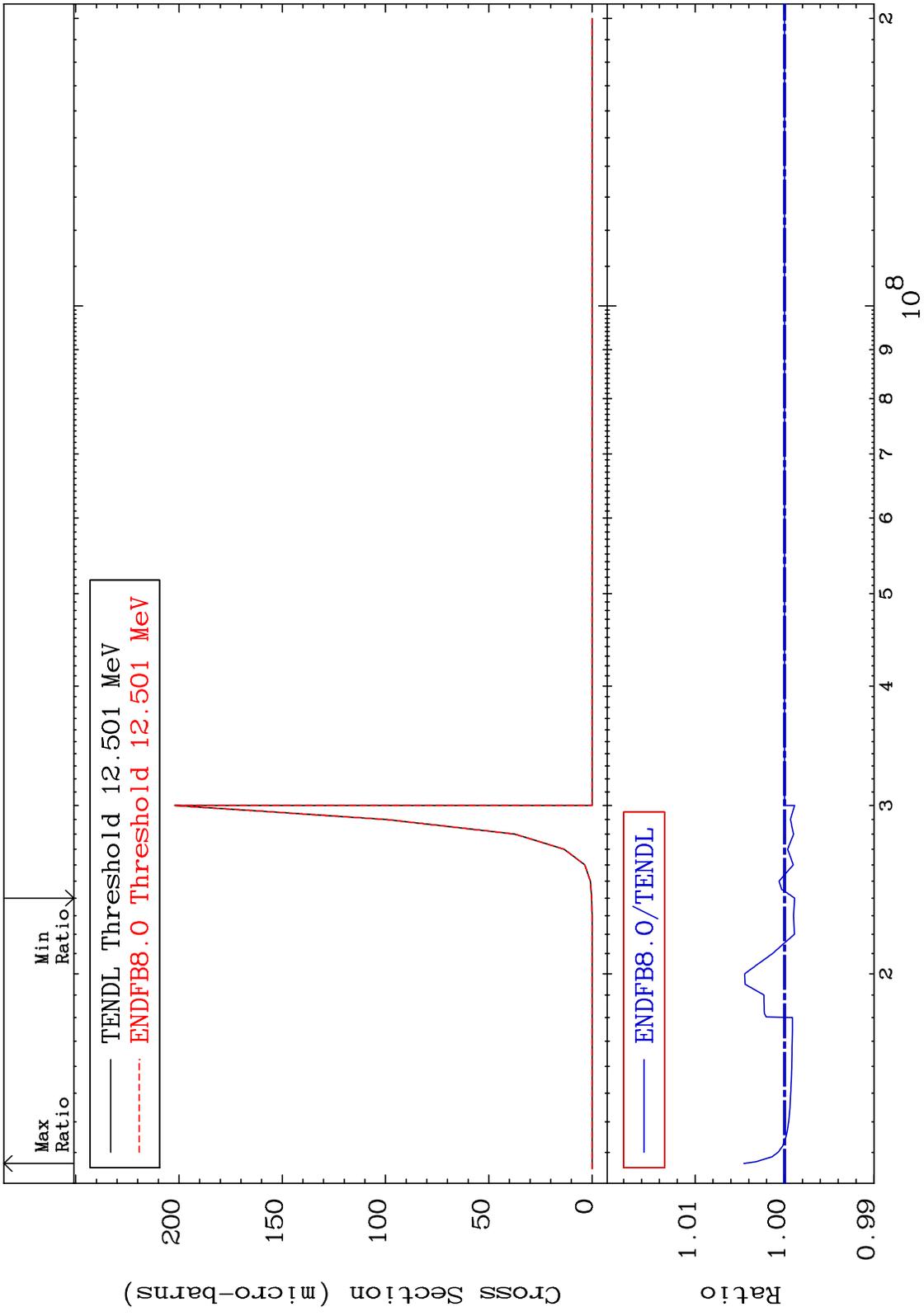


80

Incident Energy (eV)

61-Pm-145

MAT 6143 (n, n') He-3:59-Pr-142m1 61-Pm-145
 Radionuclide Production Cross Section -0.113 To 0.455 %

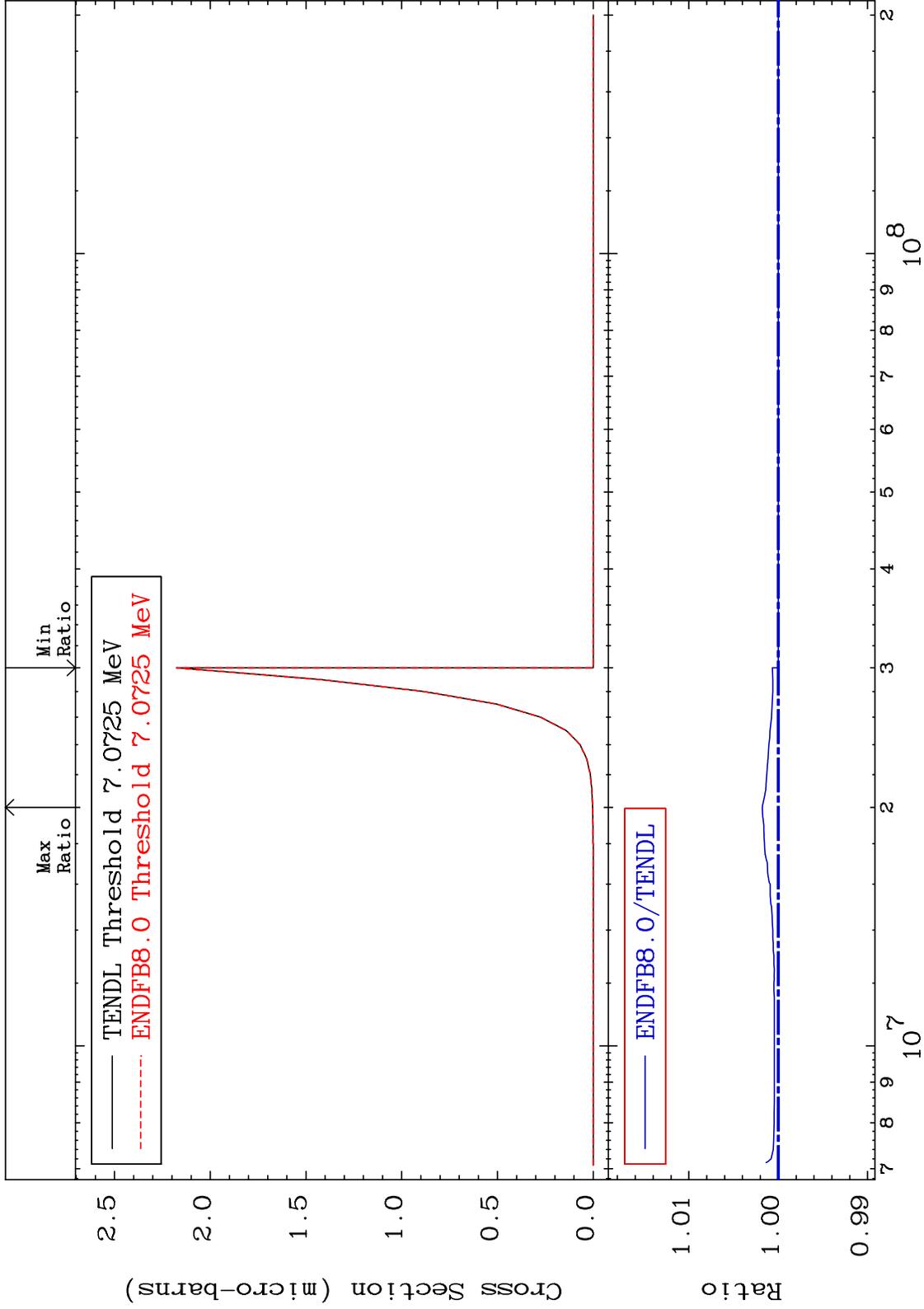


MAT 6143

(n,2p):59-Pr-144g

61-Pm-145

Radionuclide Production Cross Section 0.000 To 0.179 %

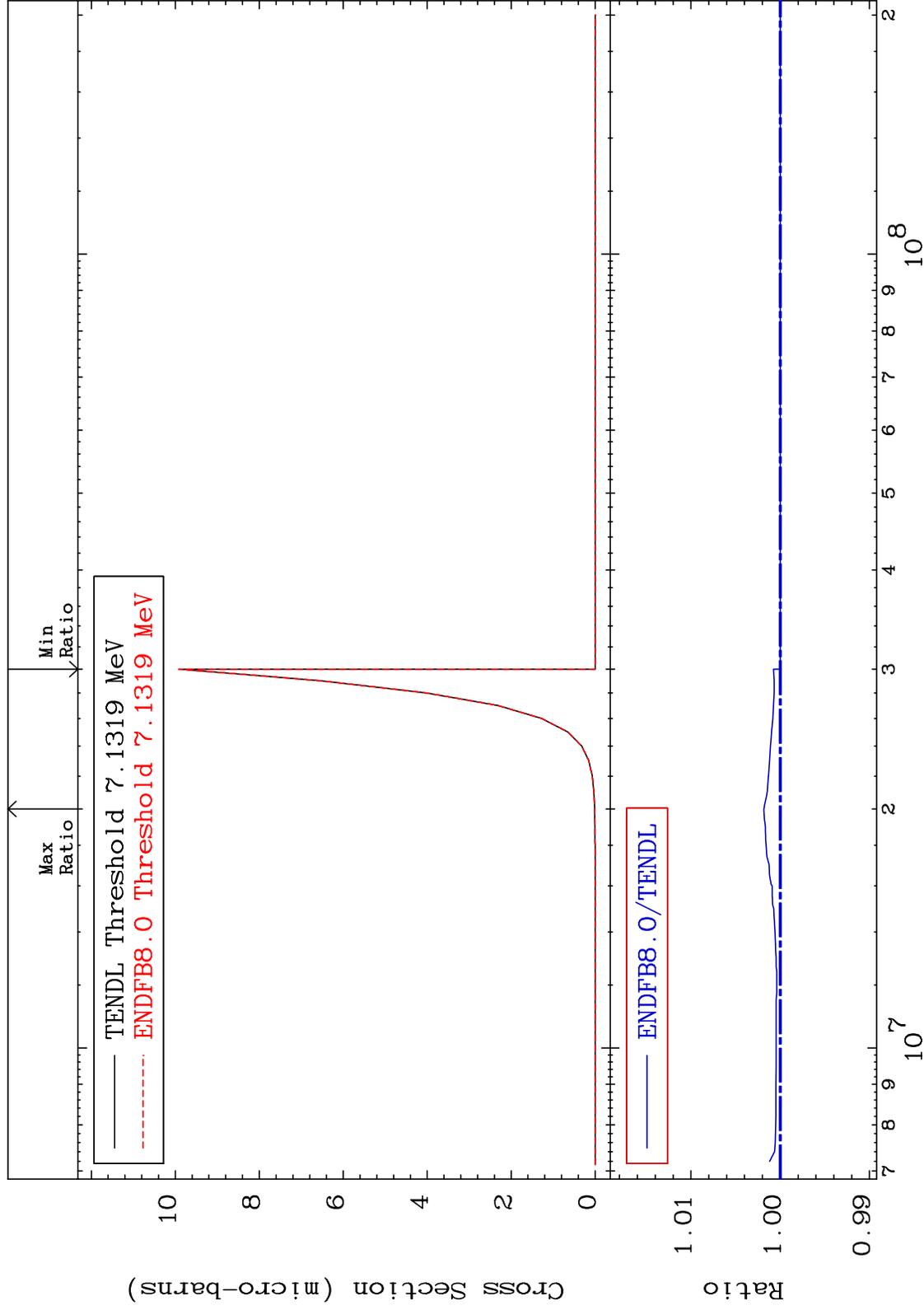


MAT 6143

(n,2p):59-Pr-144m1

61-Pm-145

Radionuclide Production Cross Section 0.000 To 0.184 %

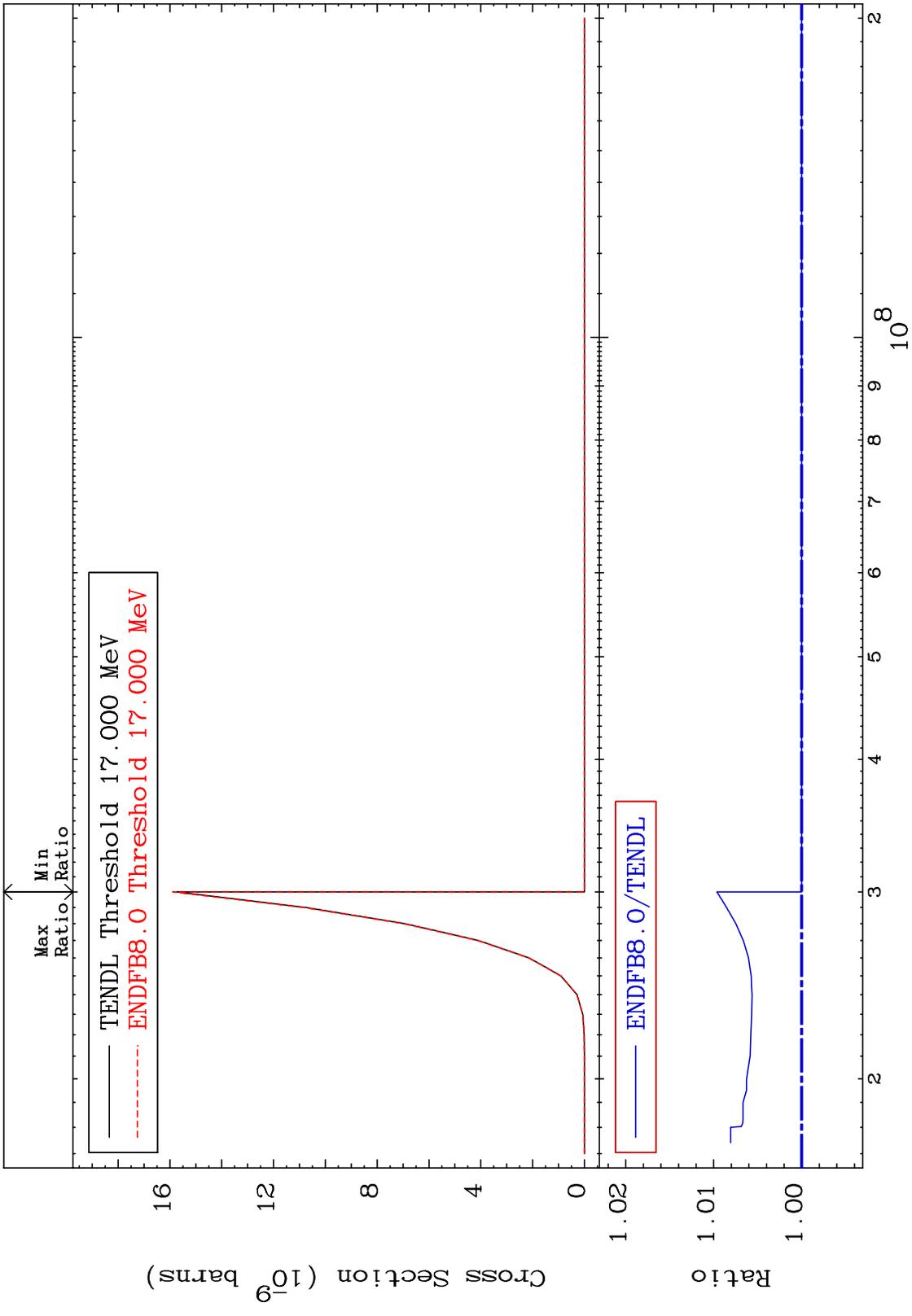


83

Incident Energy (eV)

61-Pm-145

MAT 6143 (n,p) t:59-Pr-142g 61-Pm-145
 Radionuclide Production Cross Section 0.000 To 0.964 %



MAT 6143 (n,p) t:59-Pr-142m1 61-Pm-145
 Radionuclide Production Cross Section 0.000 To 1.151 %

