

Program Complot
(Version 2018-1)

by

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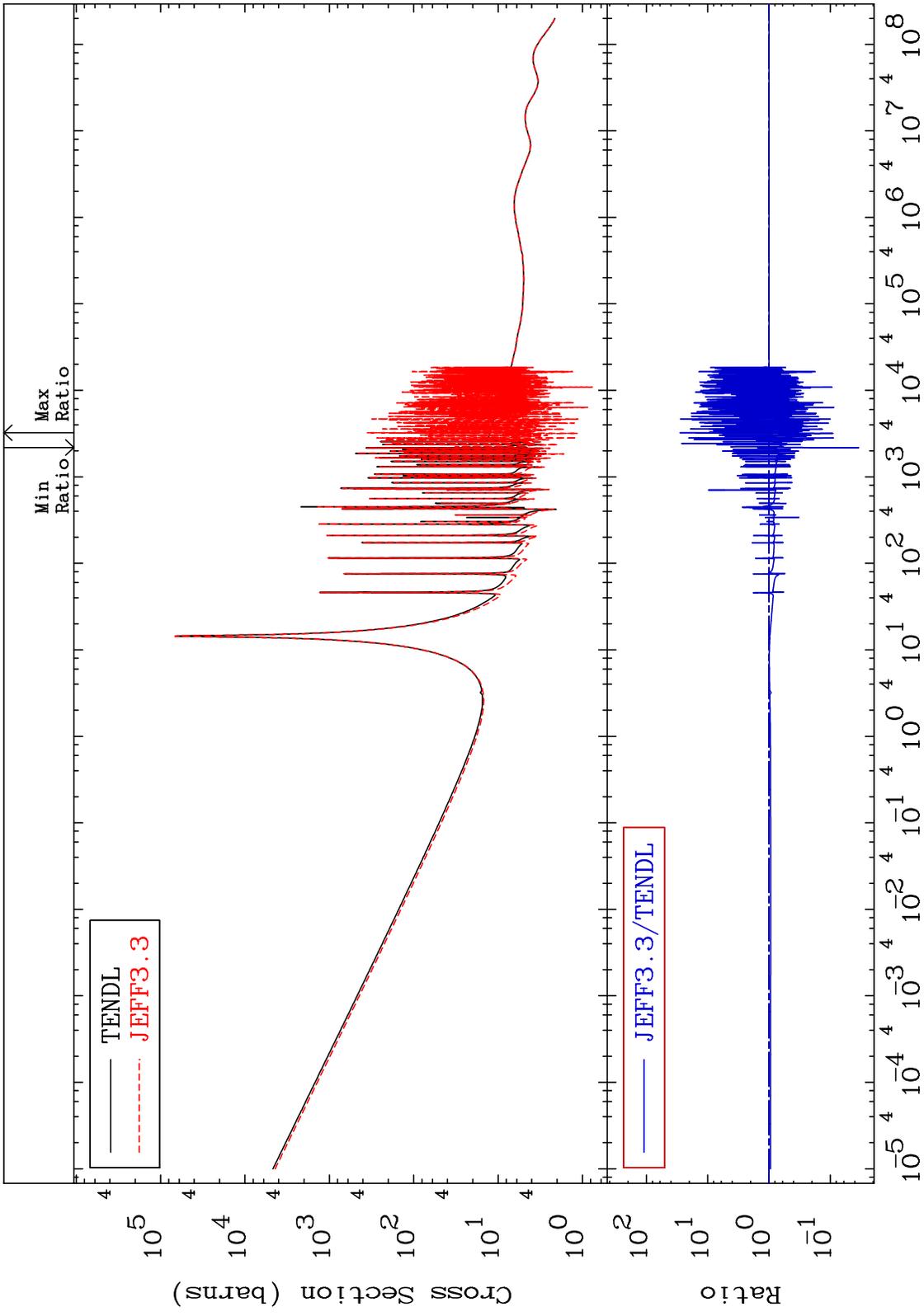
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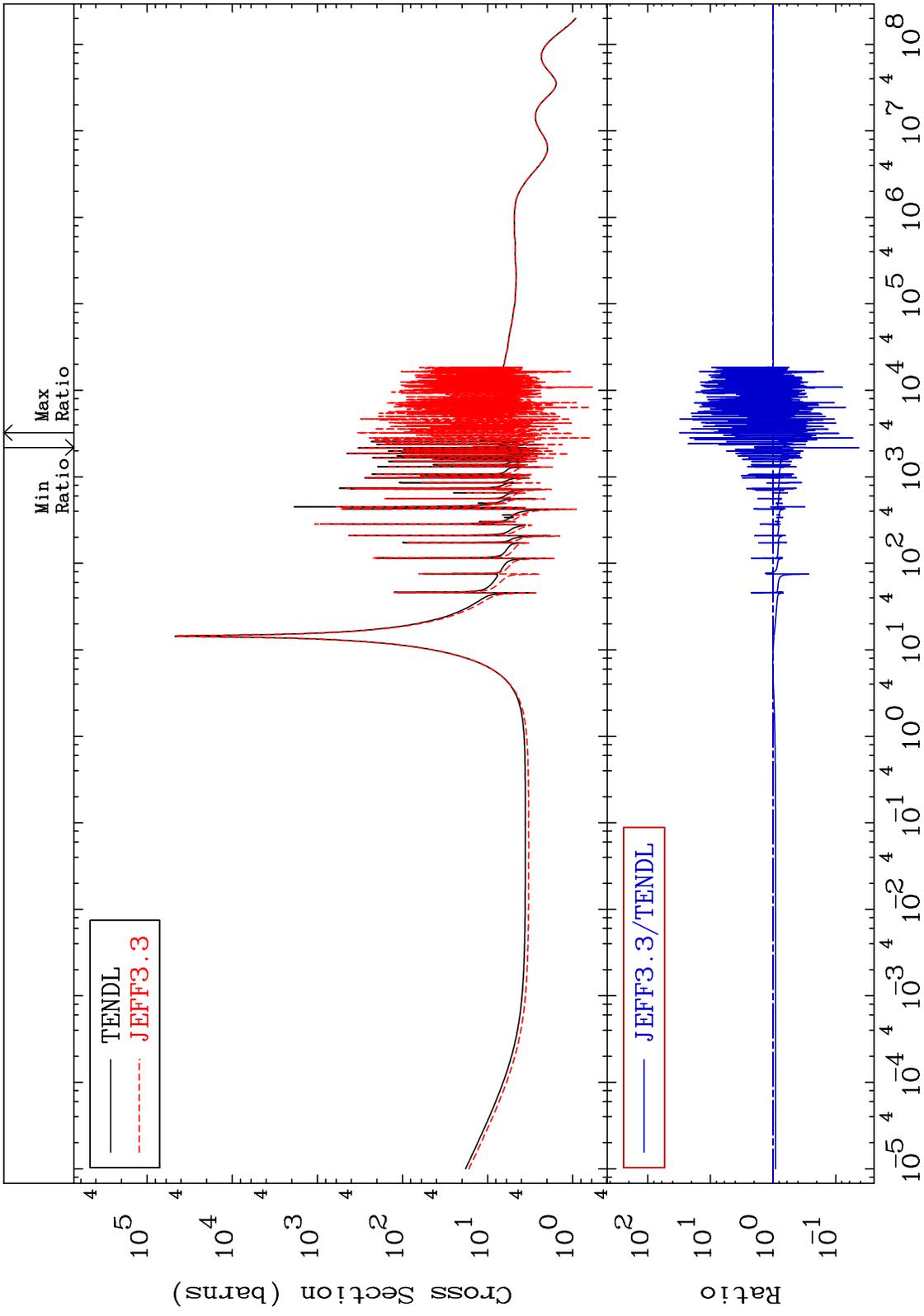
Press Mouse Button to Start

MAT 5446 54-Xe-131
Total -96.57 To 2766. %
Cross Section



1 54-Xe-131

MAT 5446 Elastic Cross Section 54-Xe-131 -95.73 To 2990. %

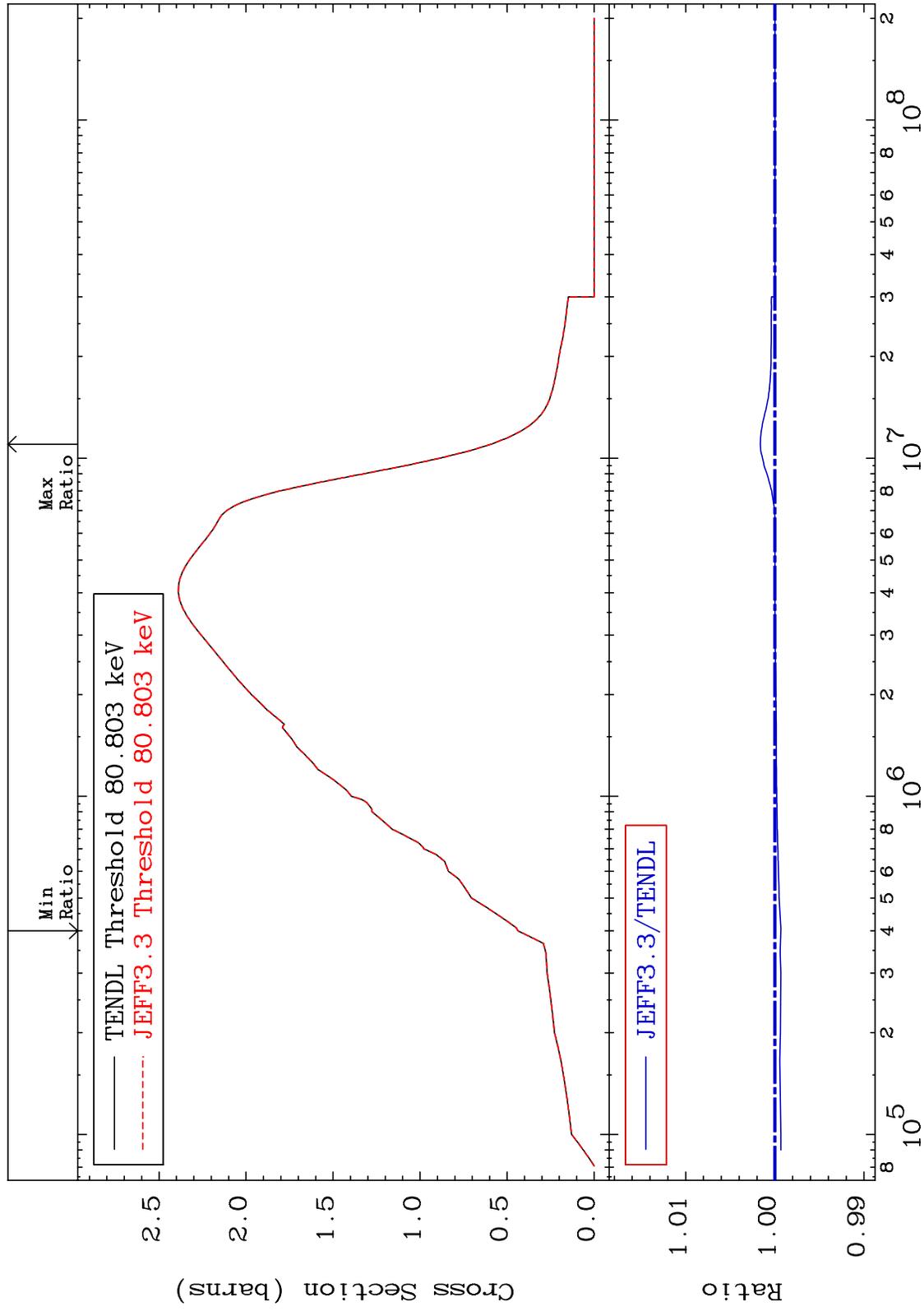


2 54-Xe-131 Incident Energy (eV)

MAT 5446

Inelastic
Cross Section

54-Xe-131
-0.068 To 0.162 %

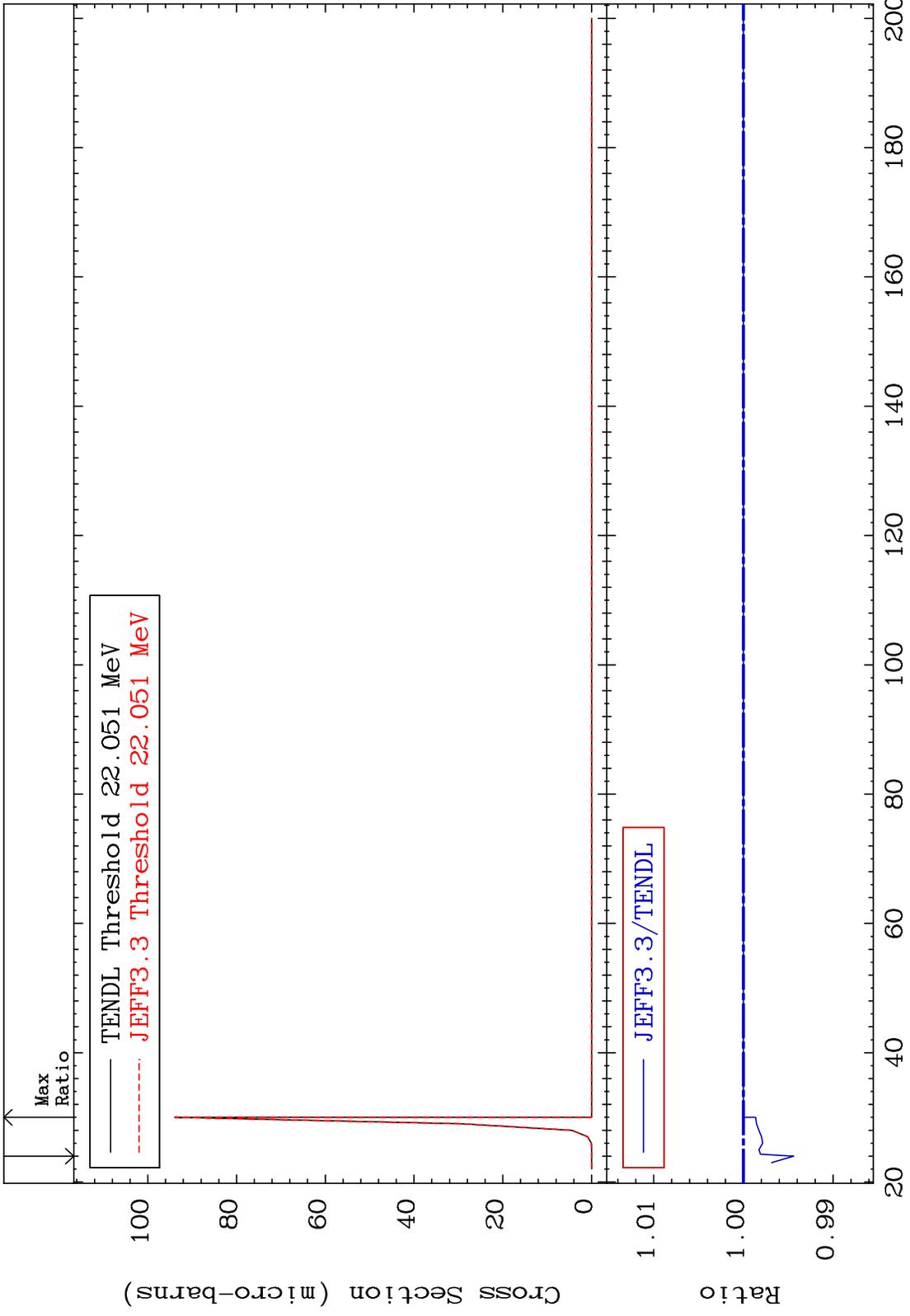


3

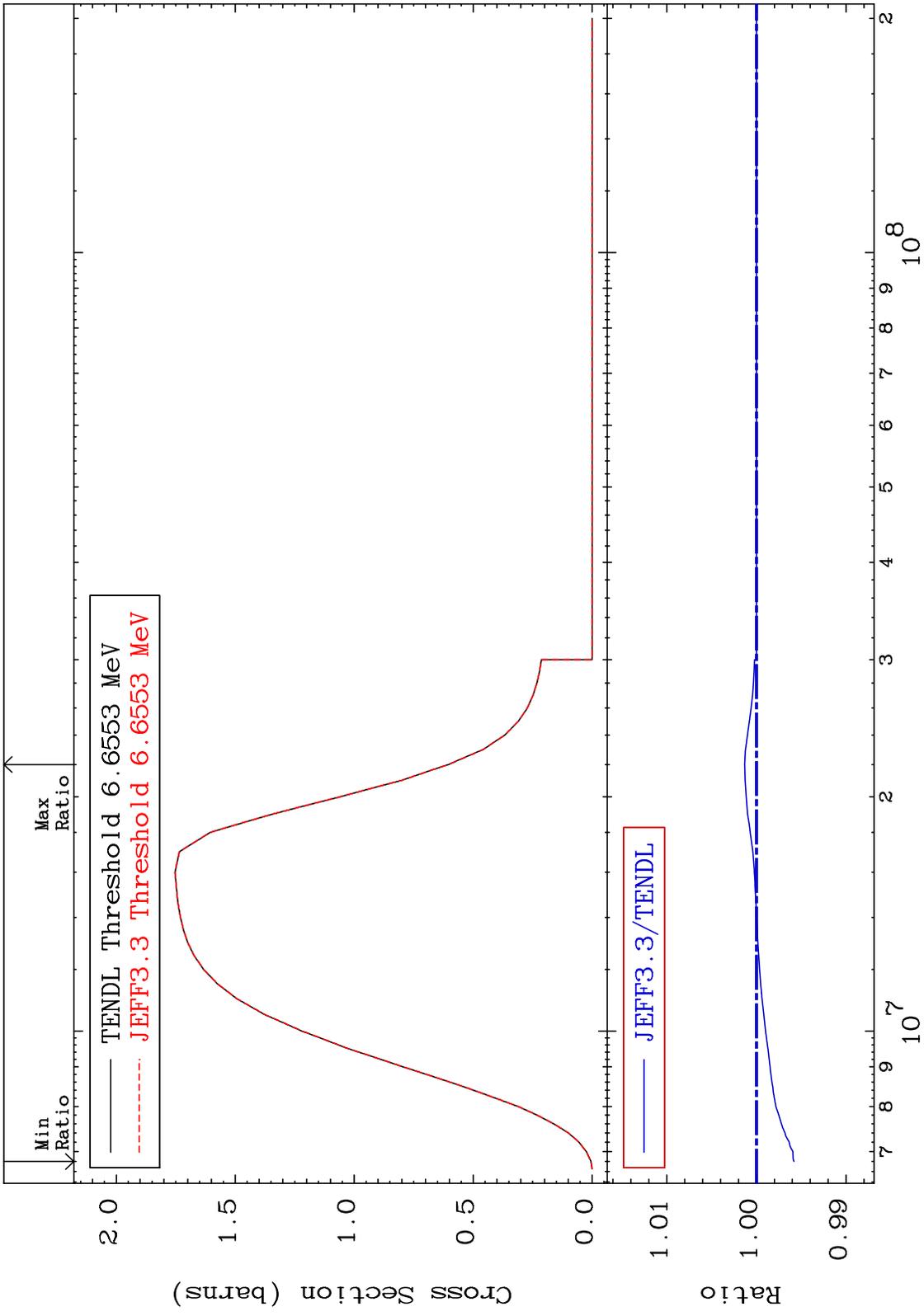
Incident Energy (eV)

54-Xe-131

MAT 5446 (n,2n) d 54-Xe-131
Cross Section -0.562 To 0.000 %



MAT 5446 (n,2n) Cross Section 54-Xe-131 -0.418 To 0.131 %



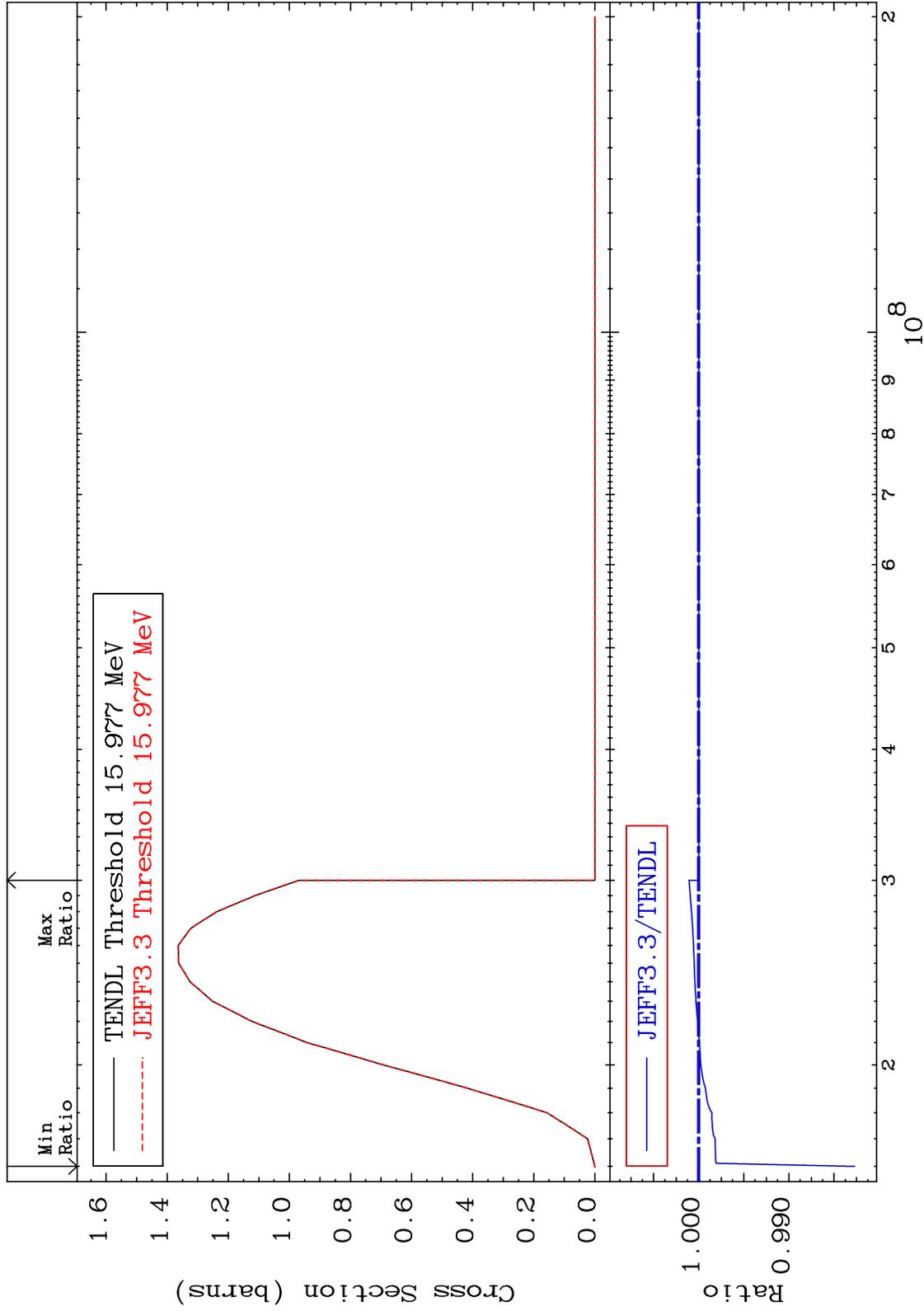
MAT 5446

(n,3n)

54-Xe-131

-1.731 To 0.107 %

Cross Section



6

Incident Energy (eV)

54-Xe-131

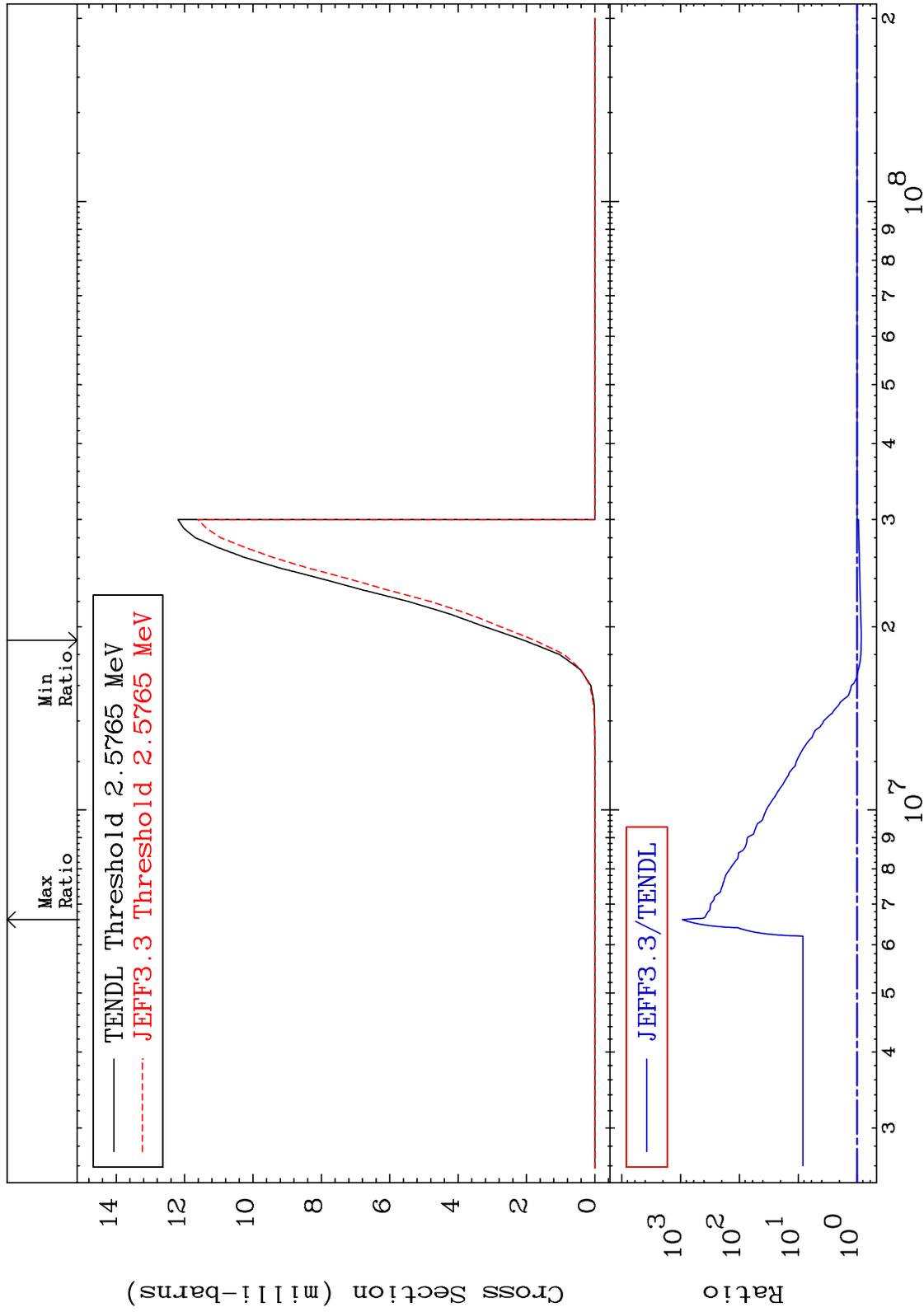
MAT 5446

(n, n') α

54-Xe-131

-15.16 To 9999. %

Cross Section



7

Incident Energy (eV)

54-Xe-131

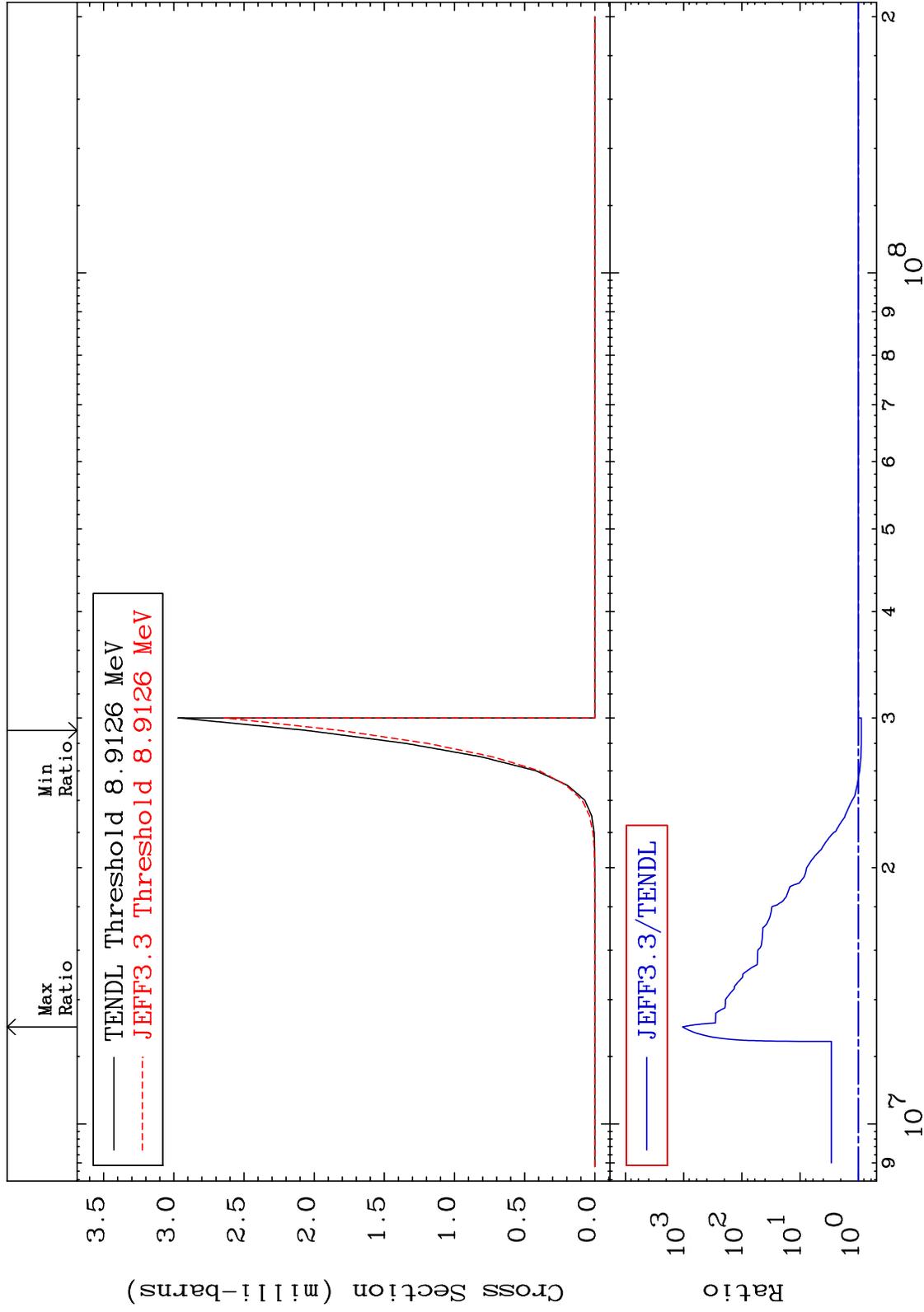
MAT 5446

(n,2n) α

54-Xe-131

Cross Section

-11.59 To 9999. %

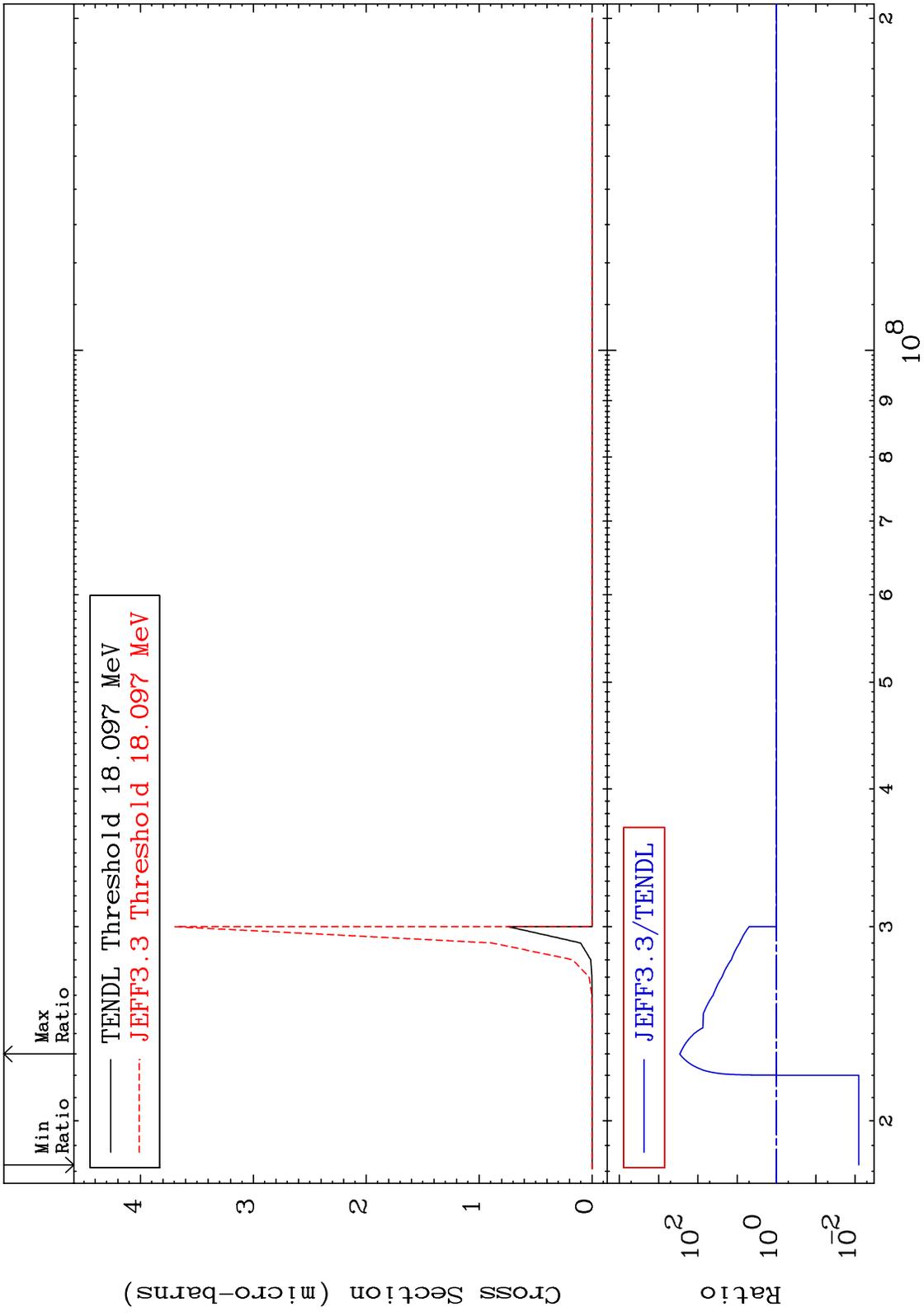


8

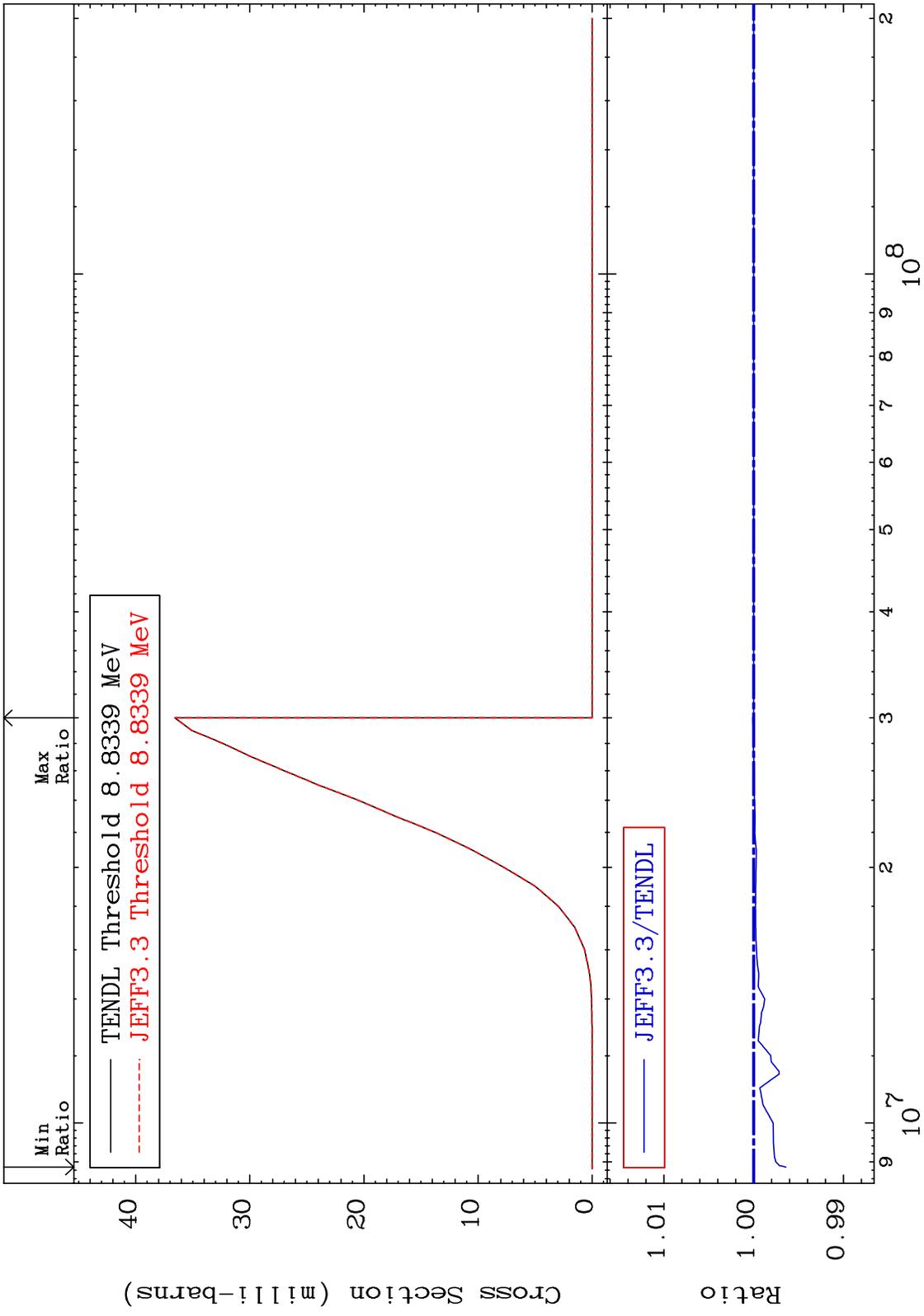
Incident Energy (eV)

54-Xe-131

MAT 5446 (n,3n) α 54-Xe-131
Cross Section -99.20 To 9999. %

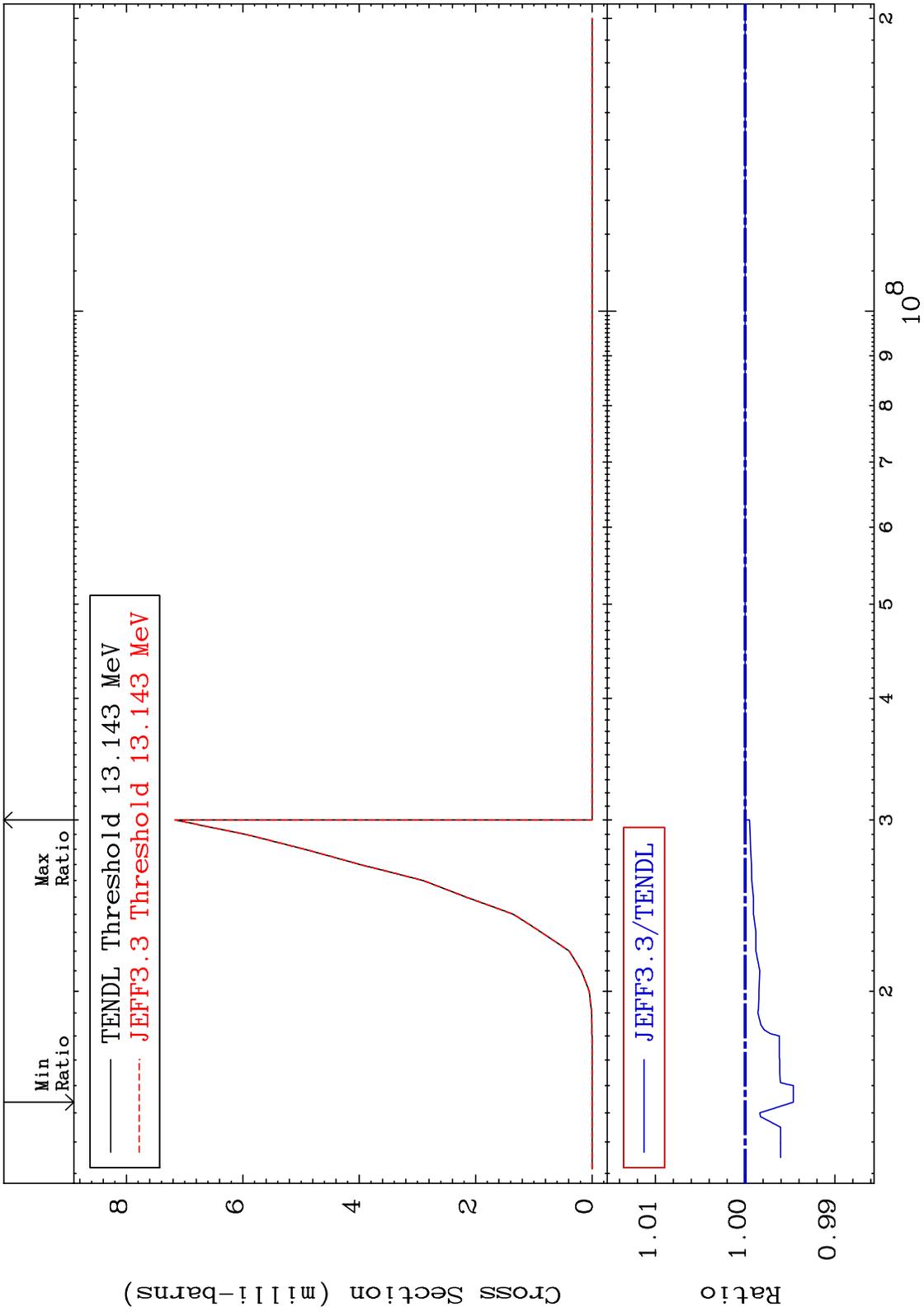


MAT 5446 (n,n') p 54-Xe-131
Cross Section -0.358 To 0.010 %

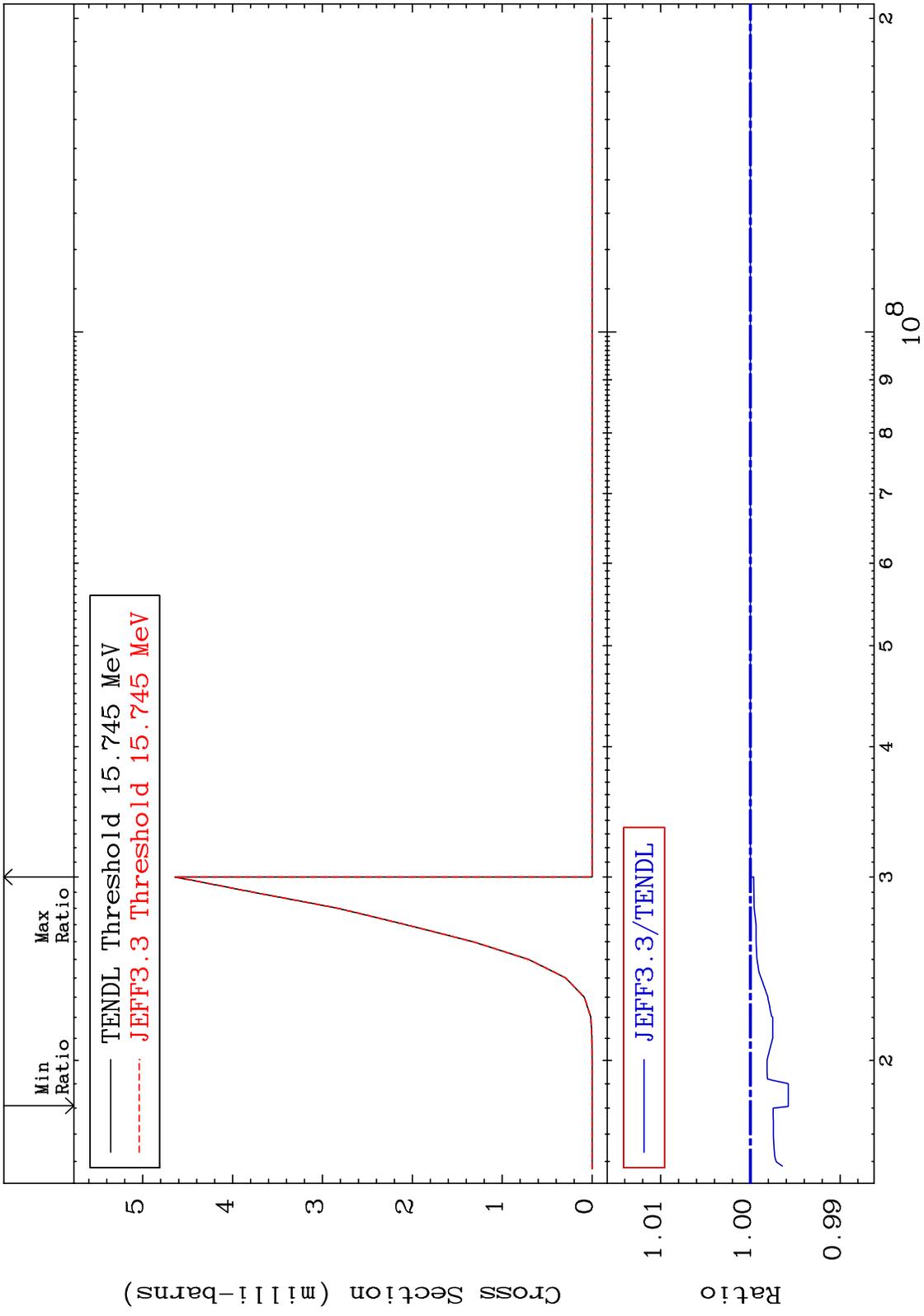


54-Xe-131 Incident Energy (eV)

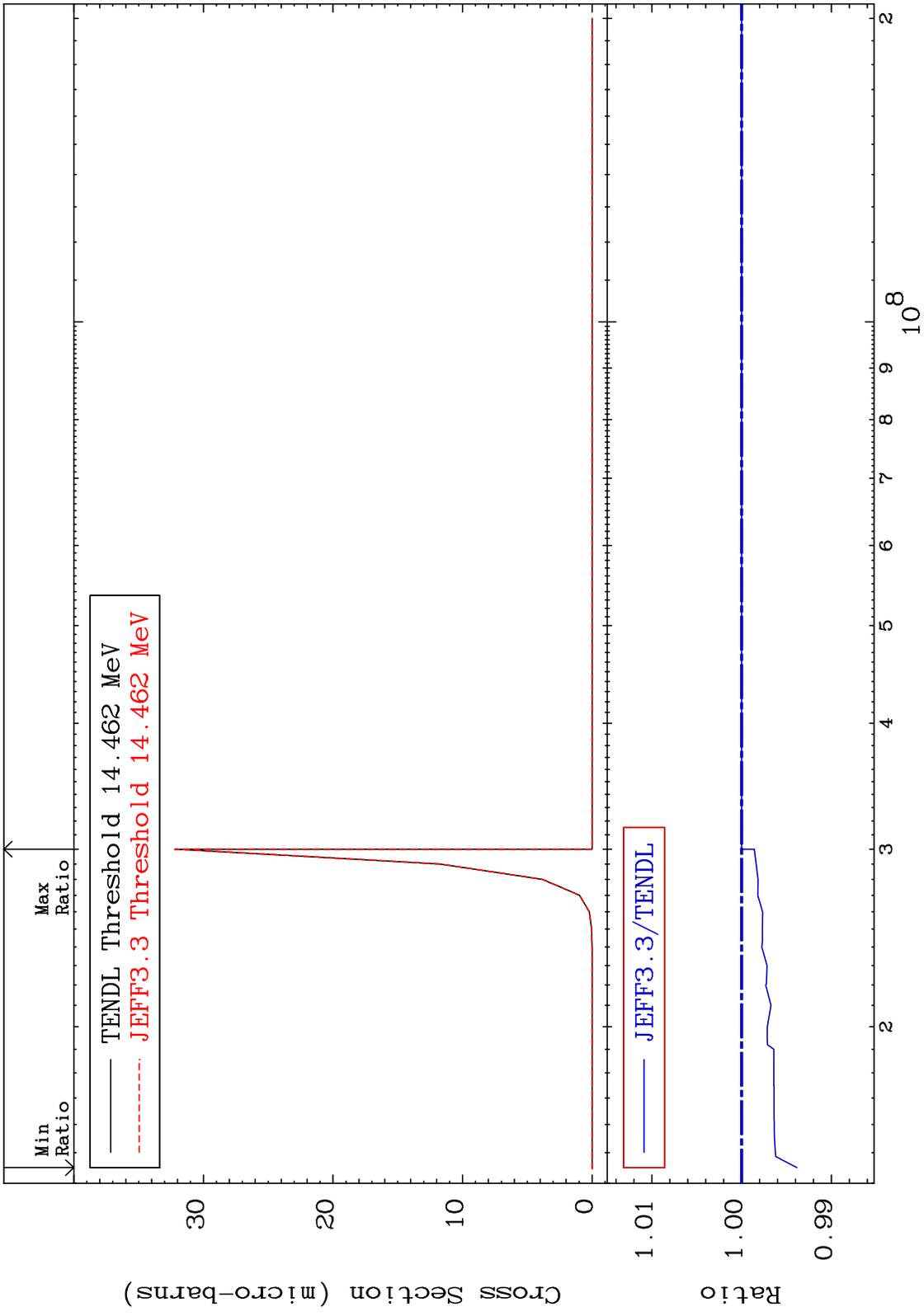
MAT 5446 (n, n') d $^{54}\text{Xe-131}$
 Cross Section -0.537 To 0.000 %



MAT 5446 (n,n') t 54-Xe-131
 Cross Section -0.422 To 0.000 %

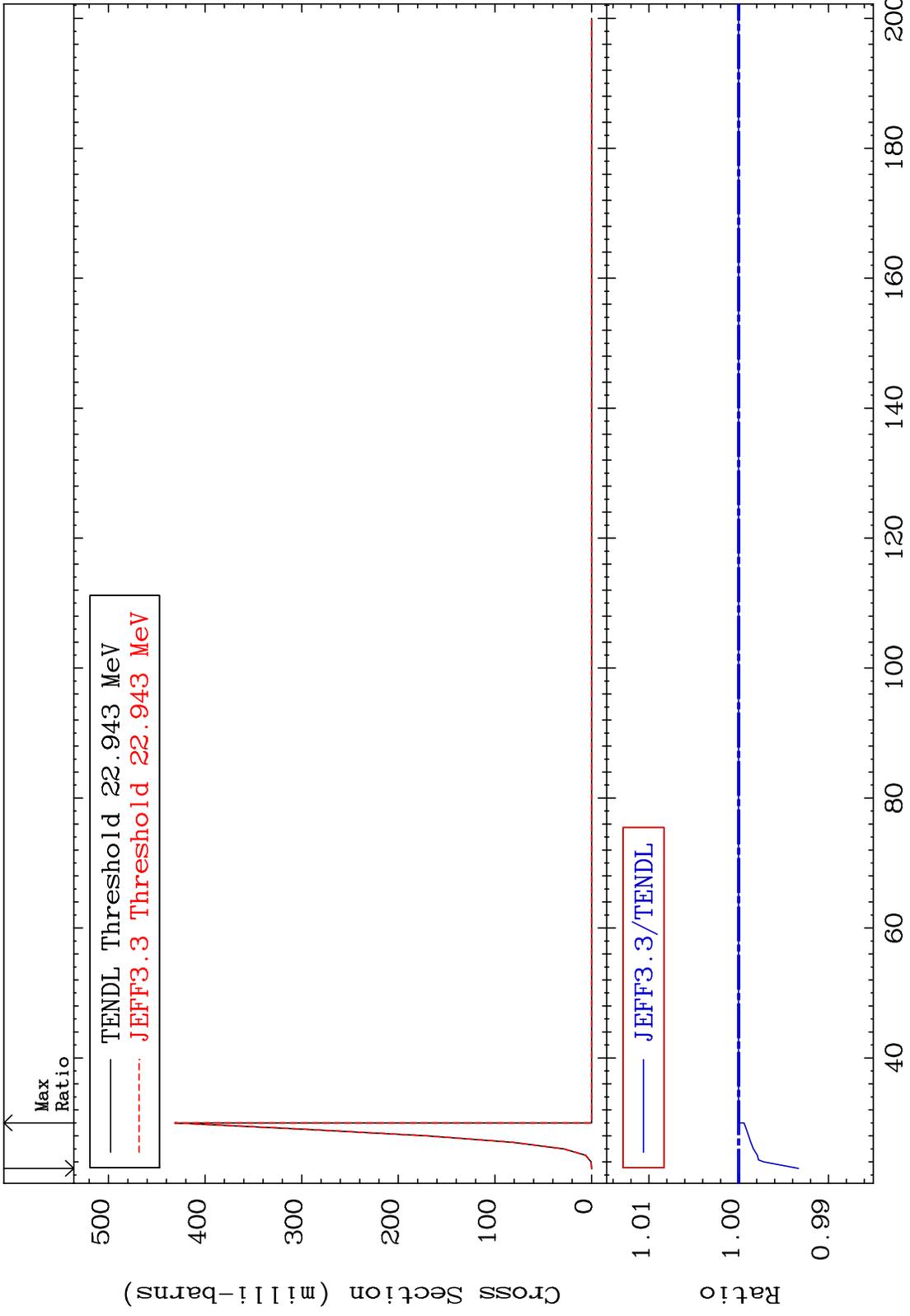


MAT 5446 (n, n') He-3 54-Xe-131
Cross Section -0.615 To 0.000 %

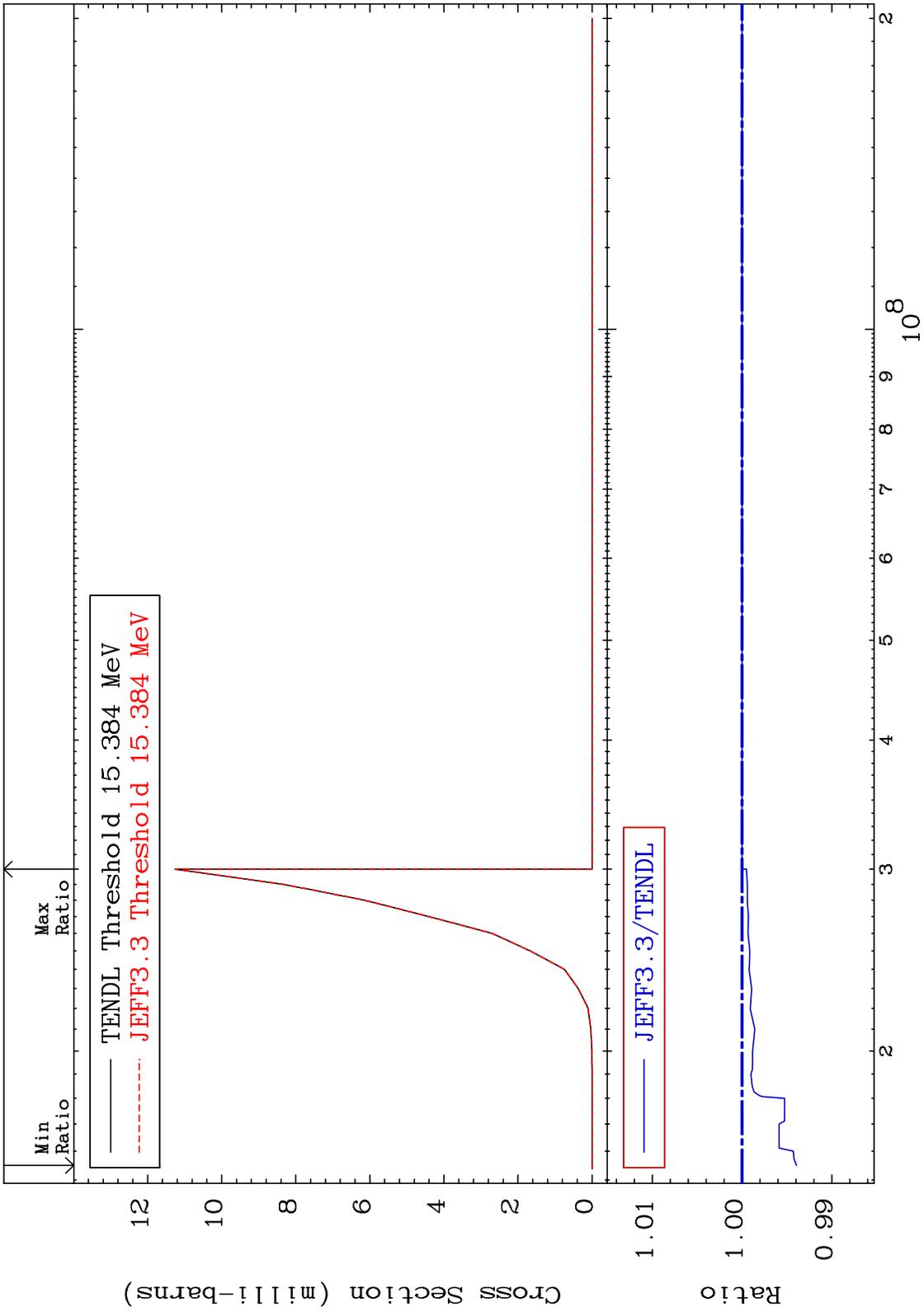


54-Xe-131

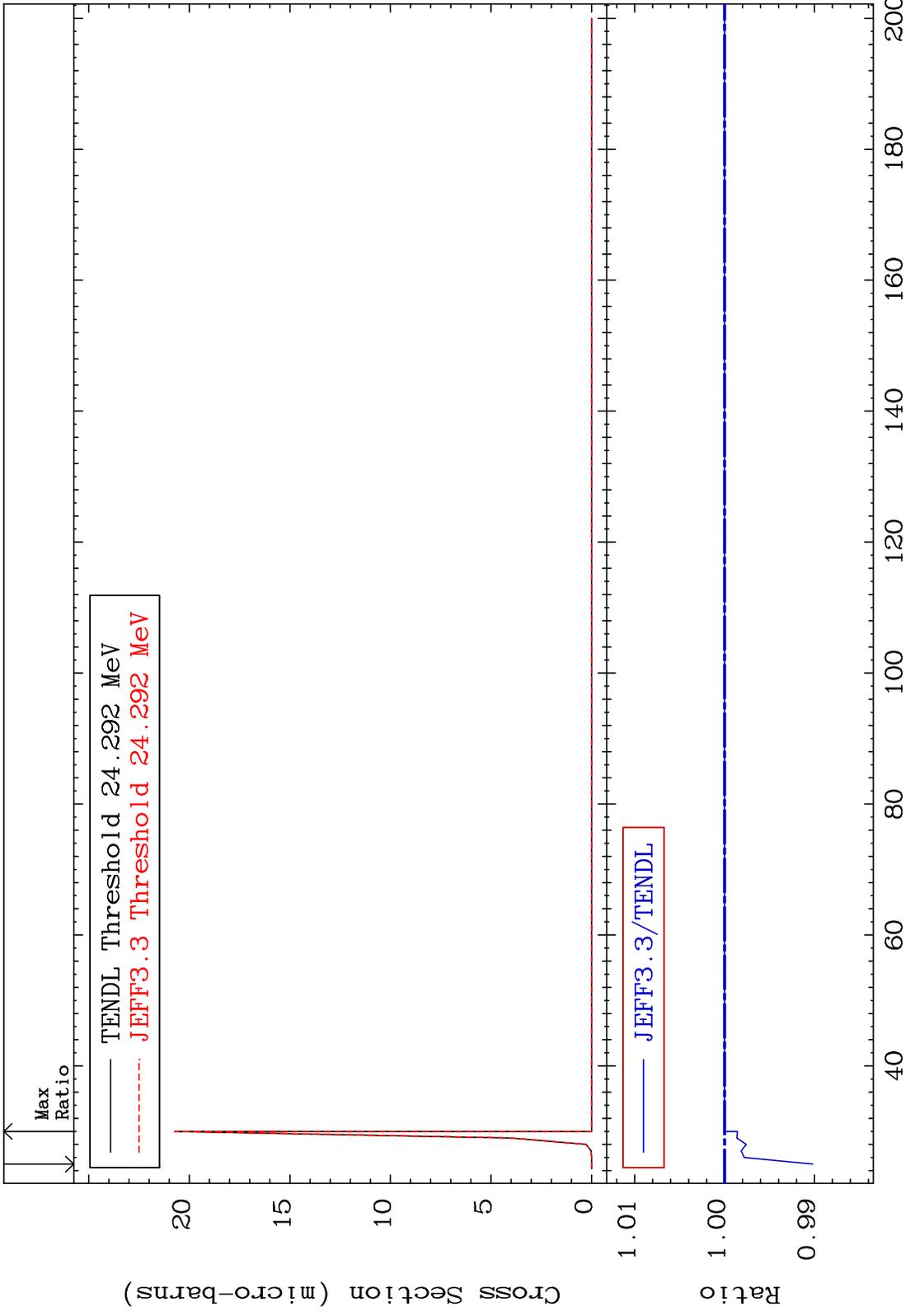
MAT 5446 (n,4n) 54-Xe-131
Cross Section -0.667 To 0.000 %



MAT 5446 (n,2n) p 54-Xe-131
 Cross Section -0.606 To 0.000 %



MAT 5446 (n,3n) p 54-Xe-131
 Cross Section -0.980 To 0.000 %



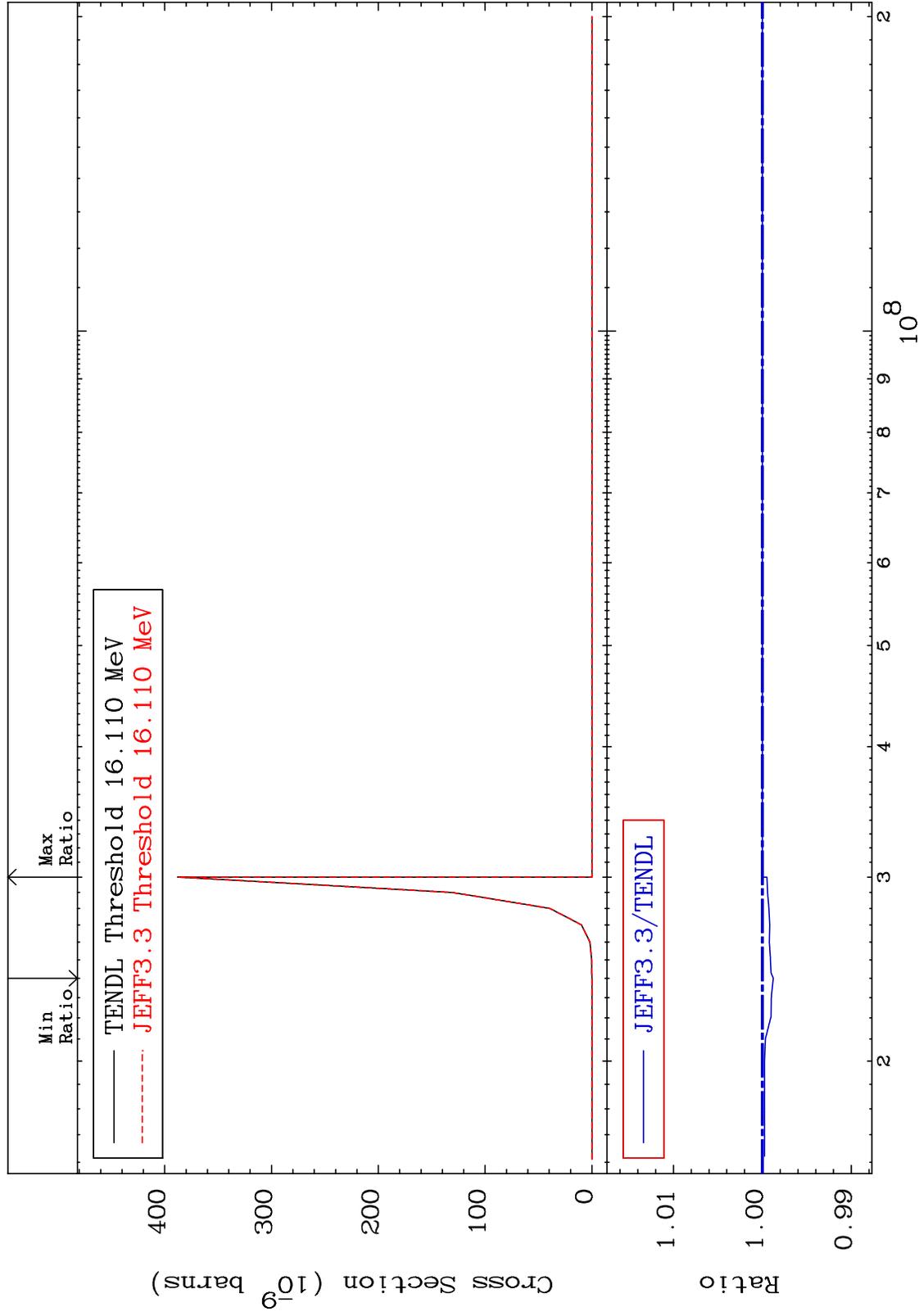
MAT 5446

(n,2n) p

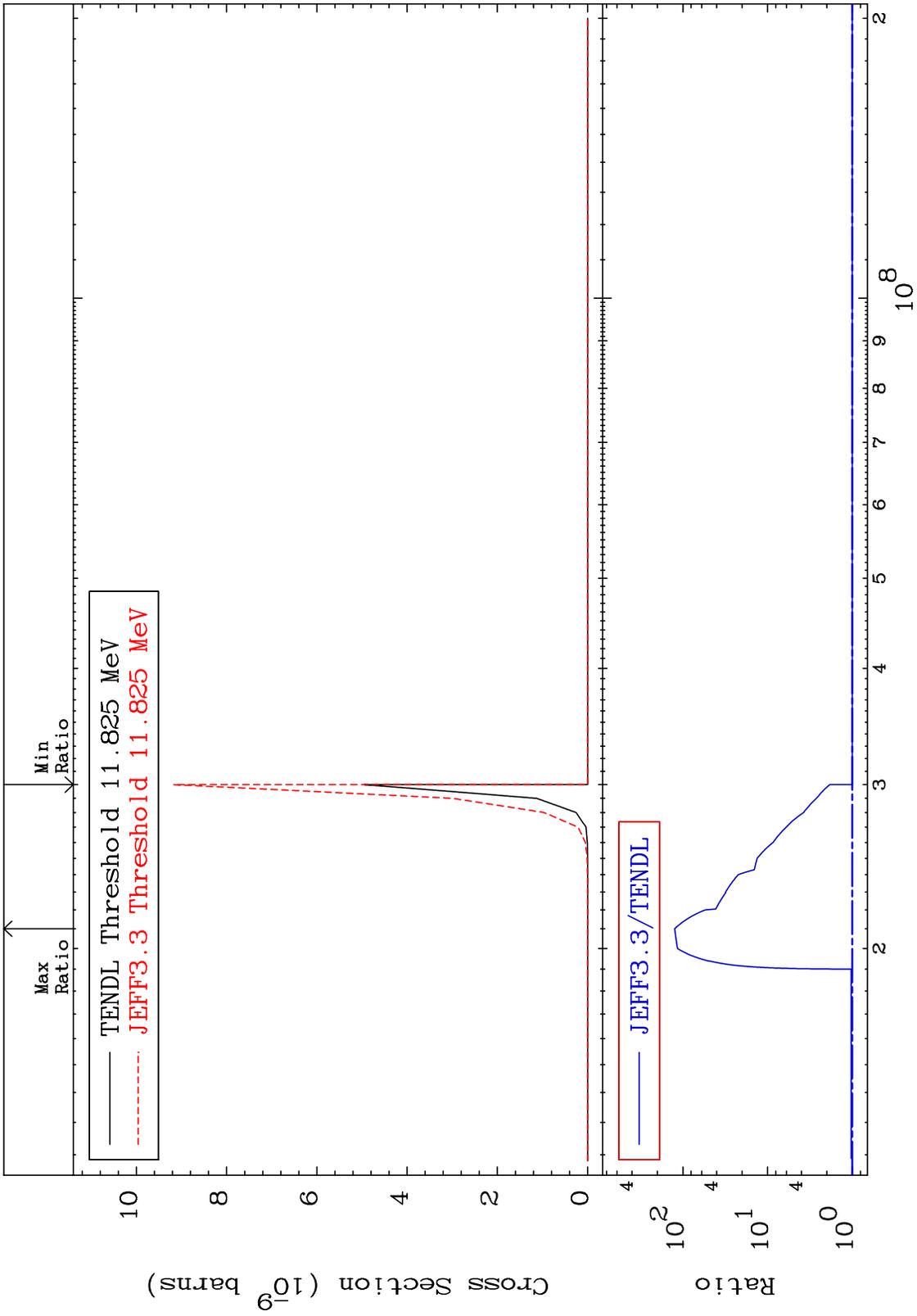
54-Xe-131

Cross Section

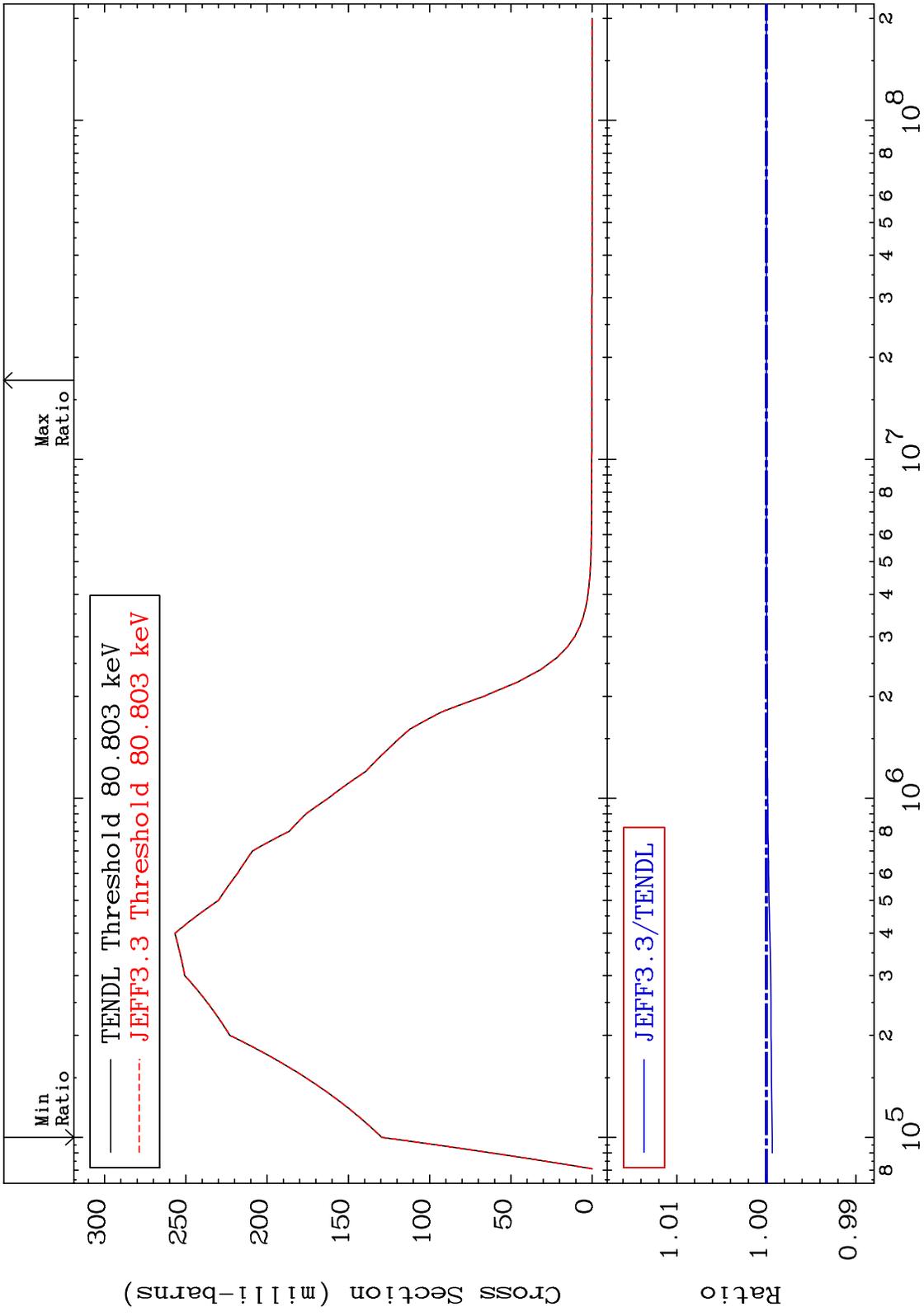
-0.123 To 0.000 %



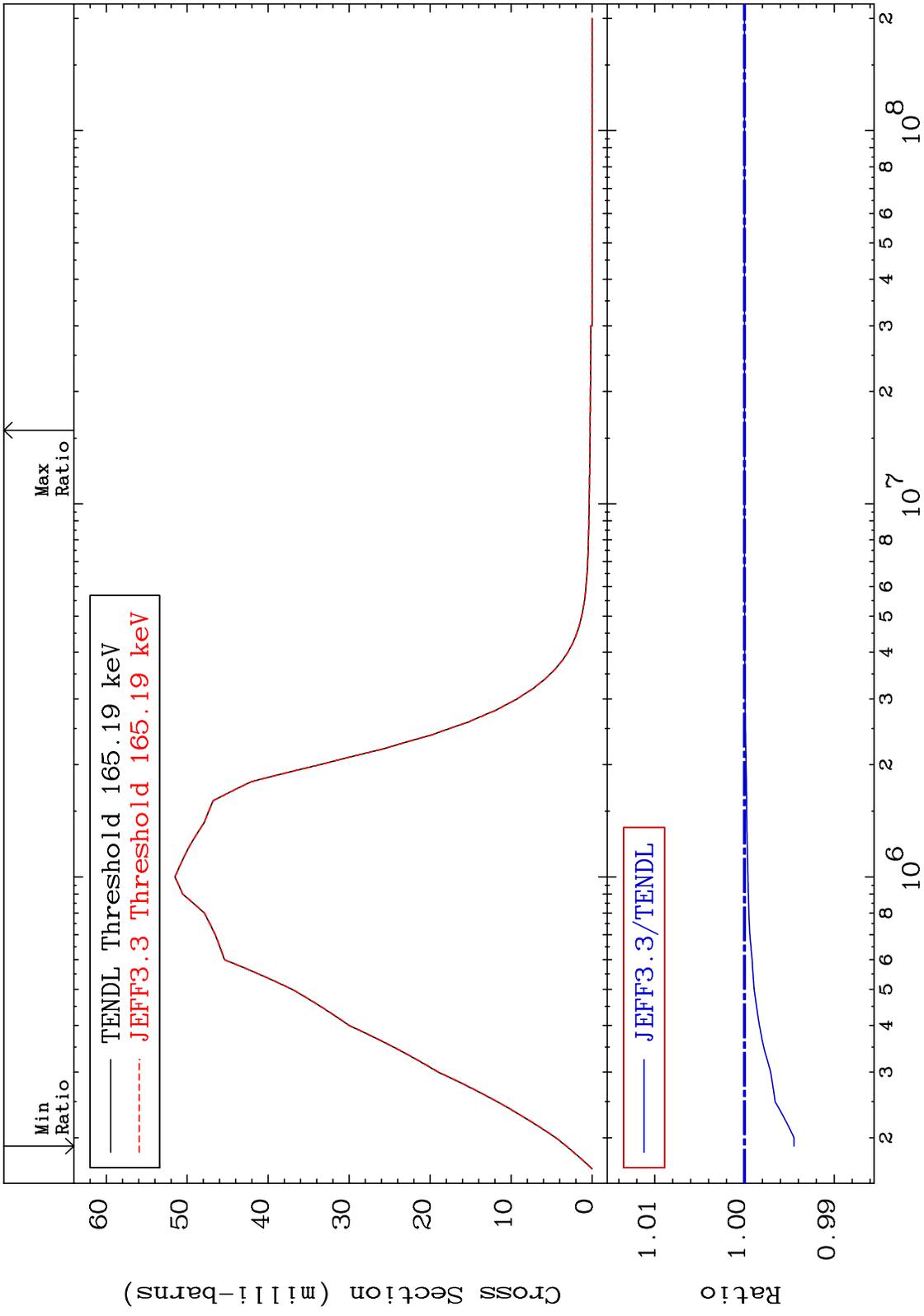
MAT 5446 (n,n') p α 54-Xe-131
 Cross Section 0.000 To 9999. %



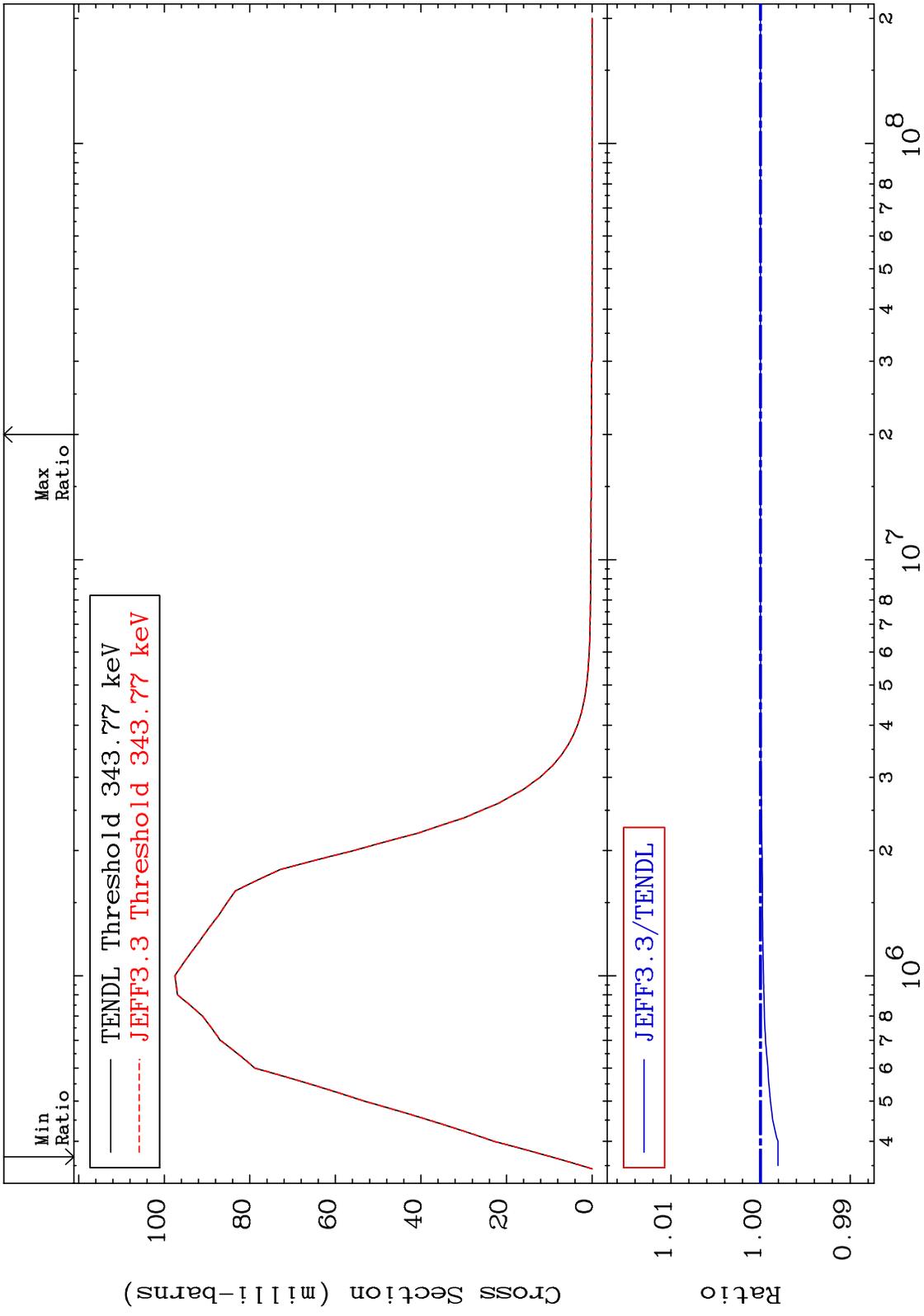
MAT 5446 MT= 51 (n,n') Level Cross Section 54-Xe-131 -0.066 To 0.000 %



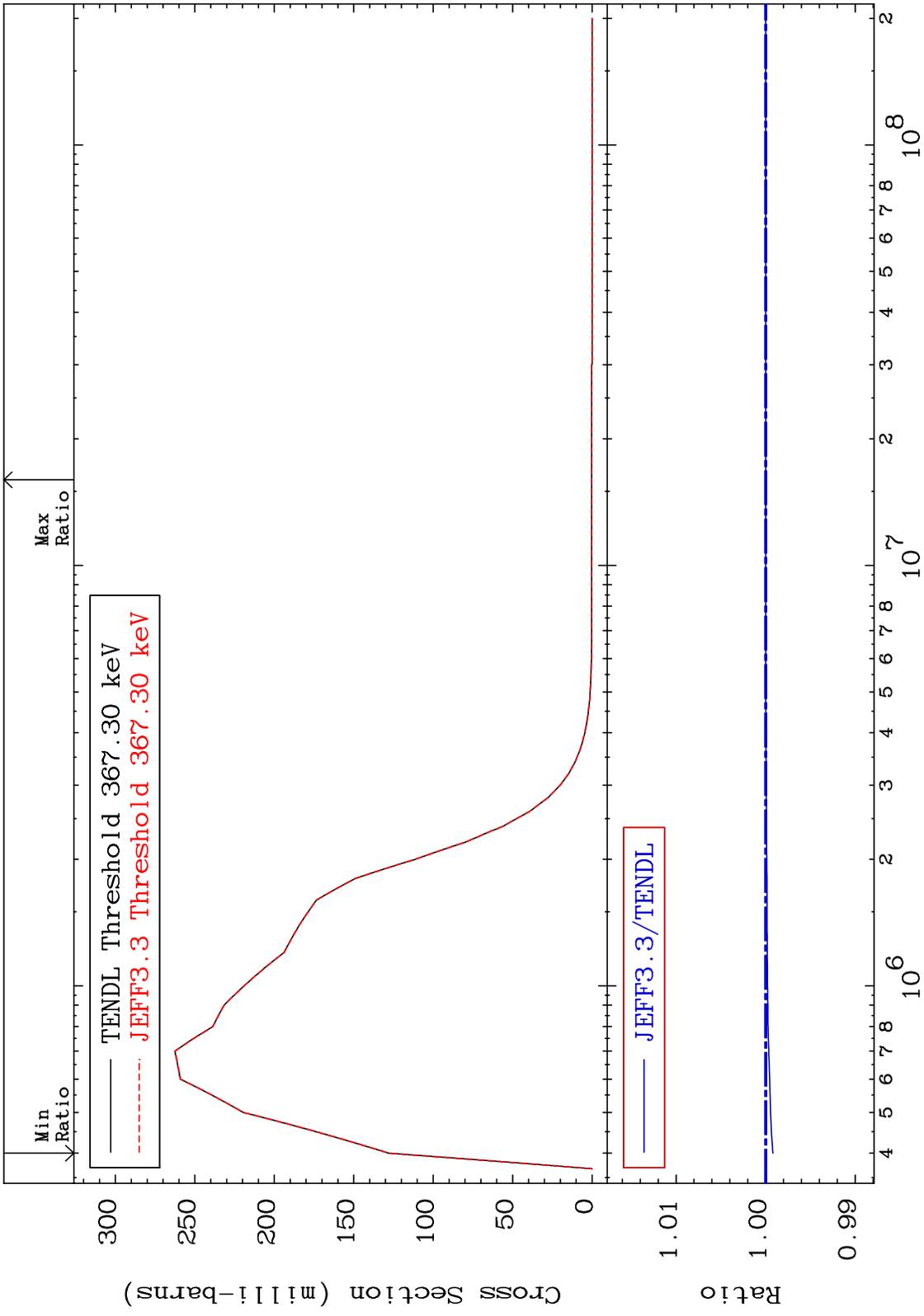
MAT 5446 MT= 52 (n,n') Level Cross Section -0.551 To 0.000 % 54-Xe-131



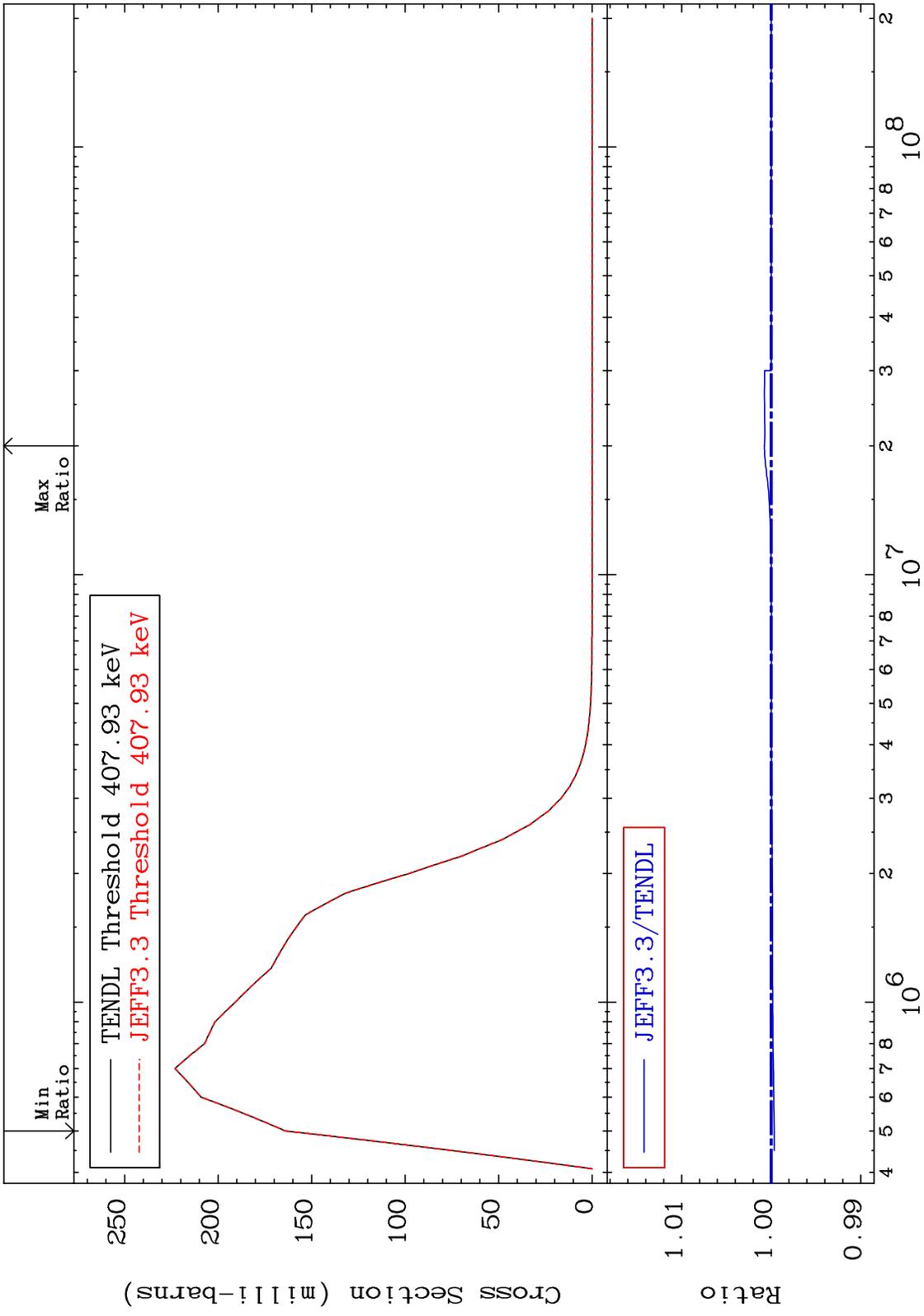
MAT 5446 MT= 53 (n,n') Level Cross Section 54-Xe-131
 -0.195 To 0.000 %



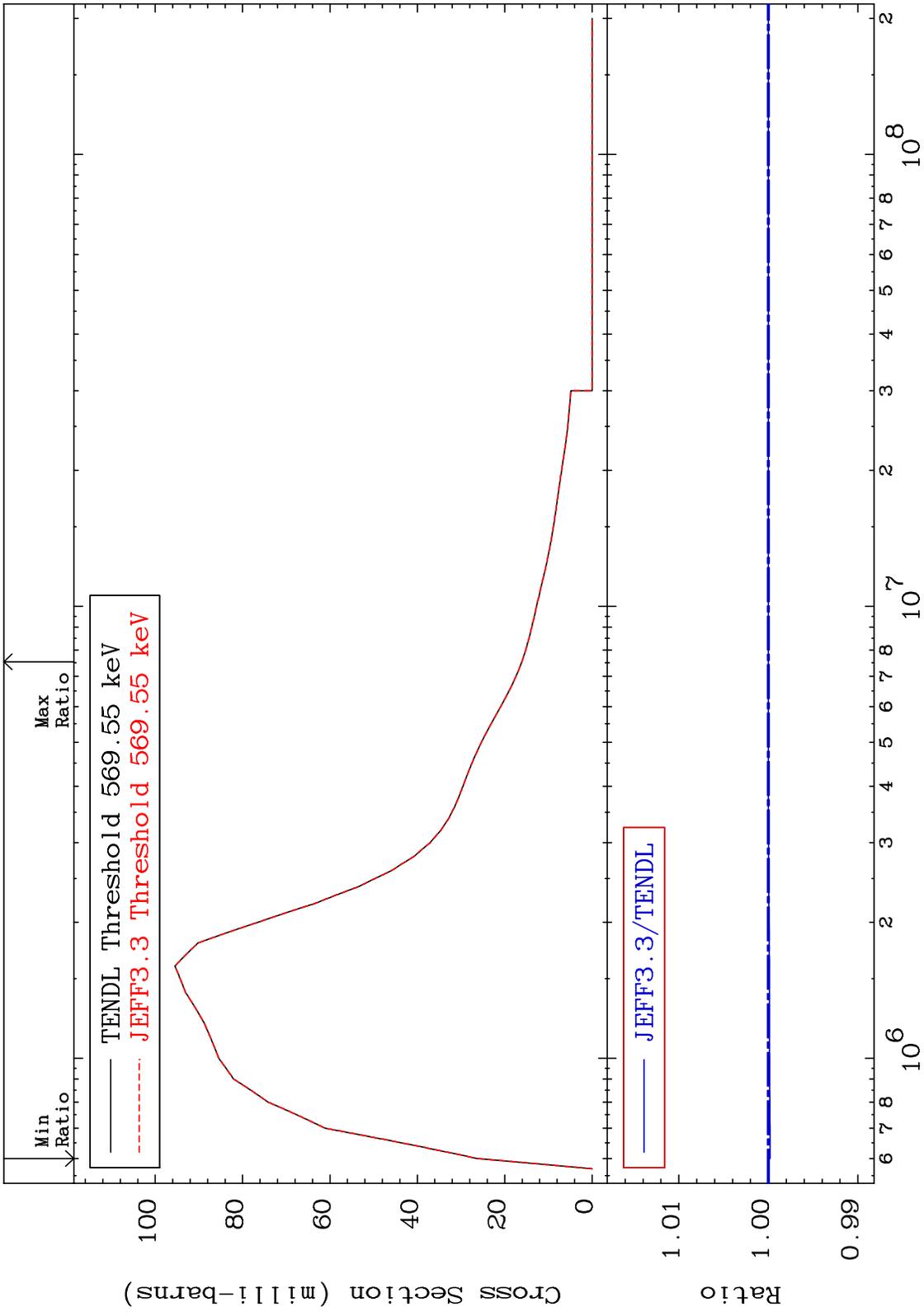
MAT 5446 MT= 54 (n,n') Level Cross Section -0.081 To 0.000 % 54-Xe-131



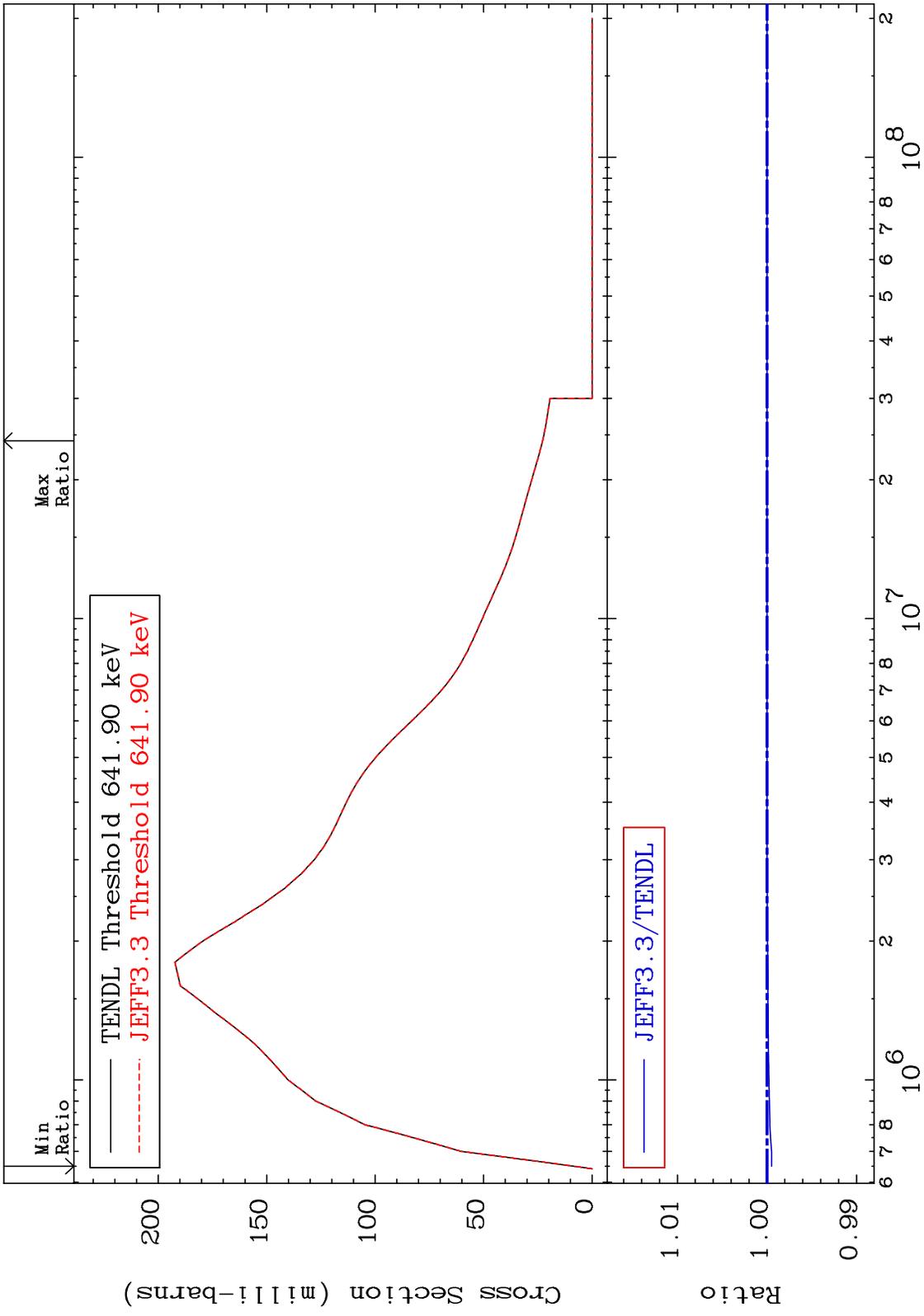
MAT 5446 MT= 55 (n,n') Level Cross Section 54-Xe-131 -0.035 To 0.076 %



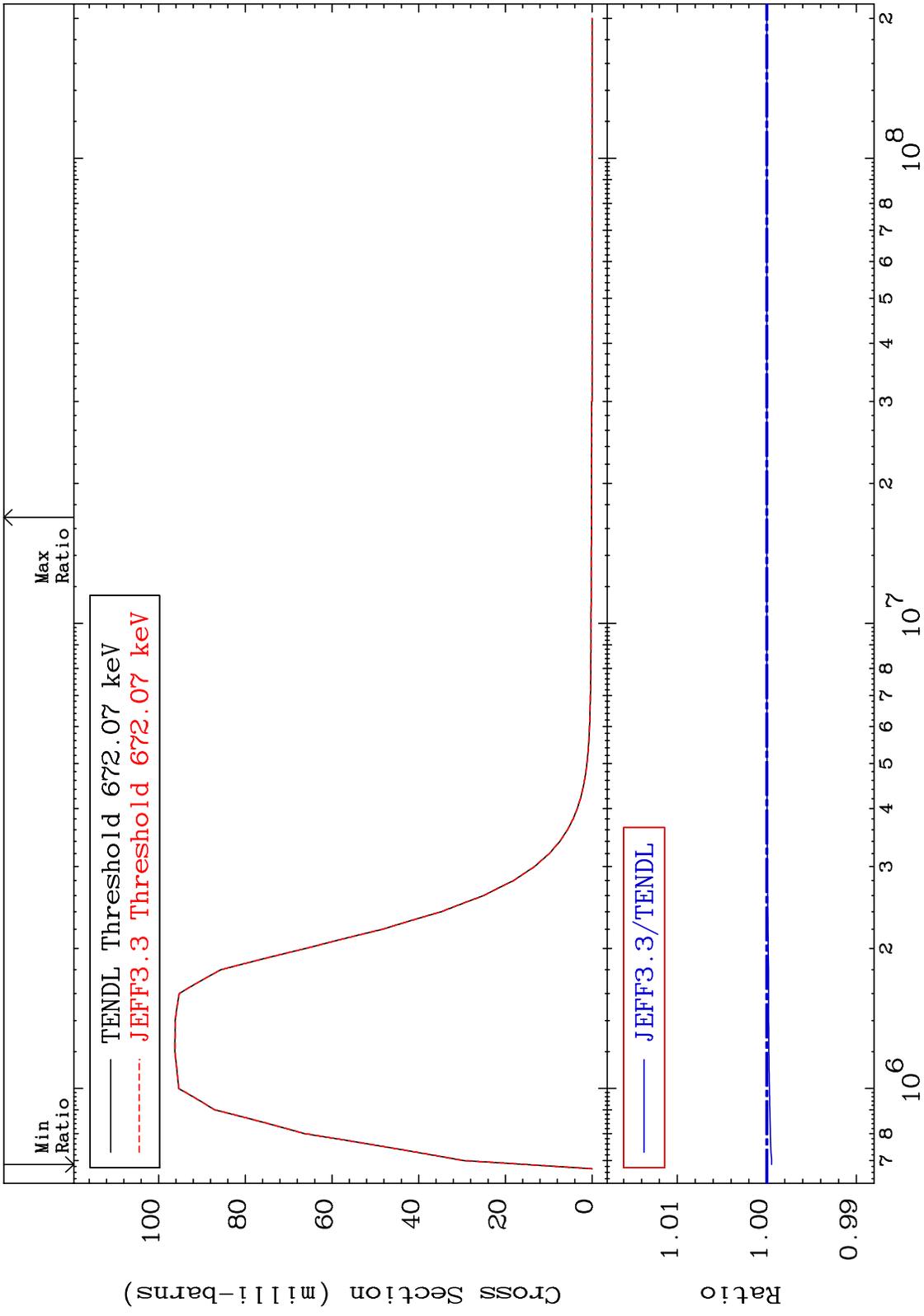
MAT 5446 MT= 56 (n,n') Level Cross Section -0.020 To 0.000 % 54-Xe-131



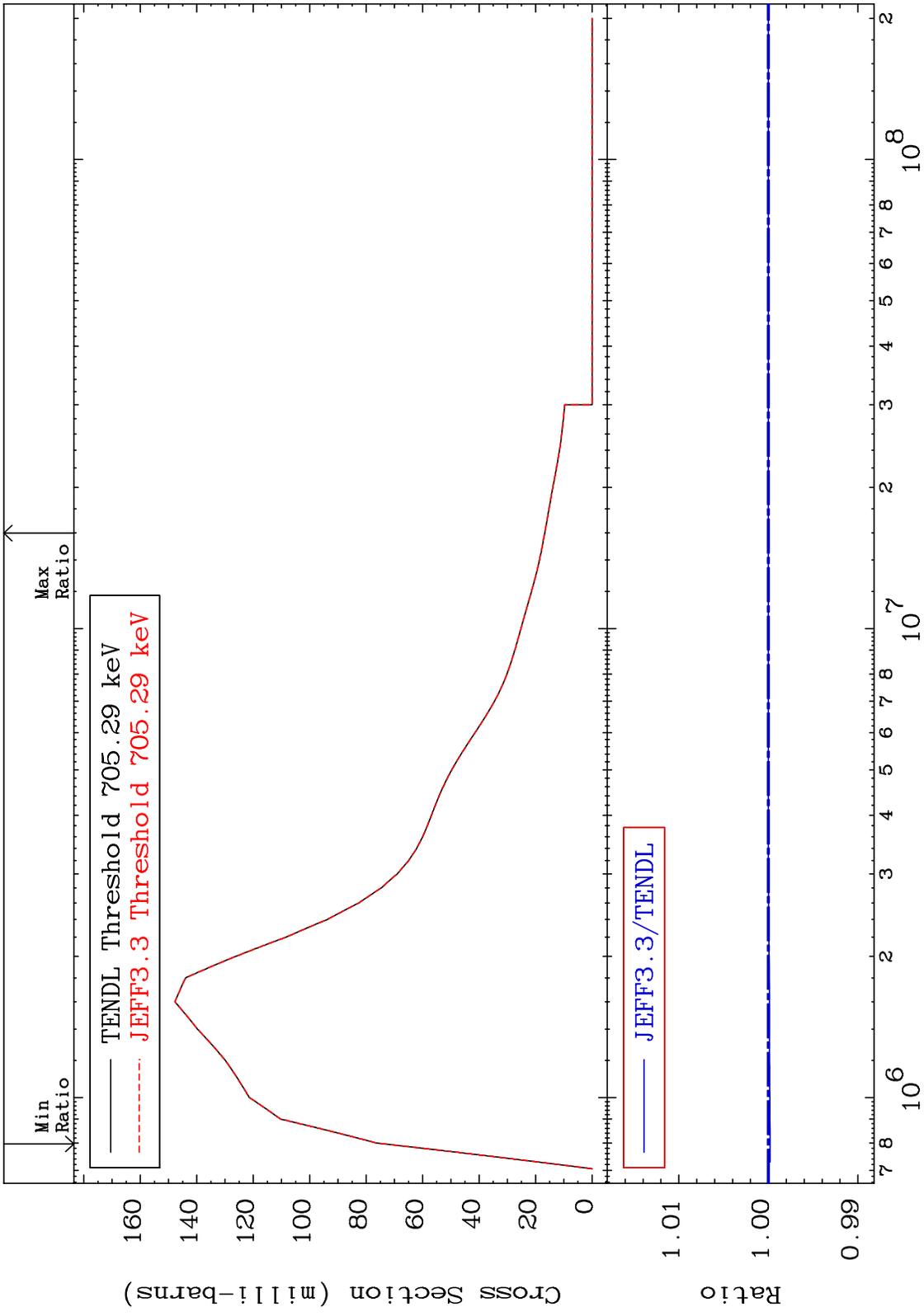
MAT 5446 MT= 57 (n,n') Level Cross Section 54-Xe-131 -0.052 To 0.000 %



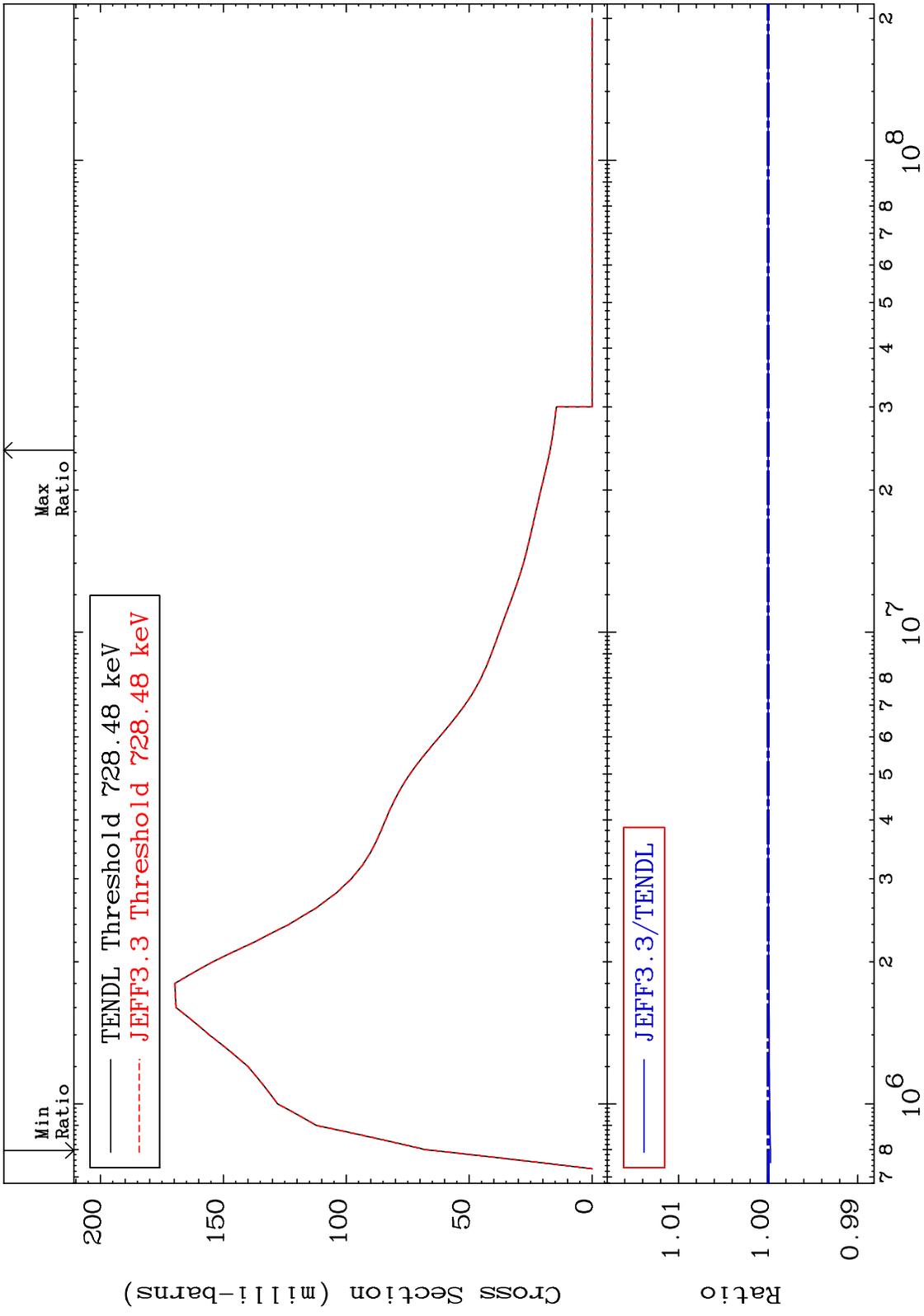
MAT 5446 MT= 58 (n, n') Level Cross Section 54-Xe-131
 -0.054 To 0.000 %



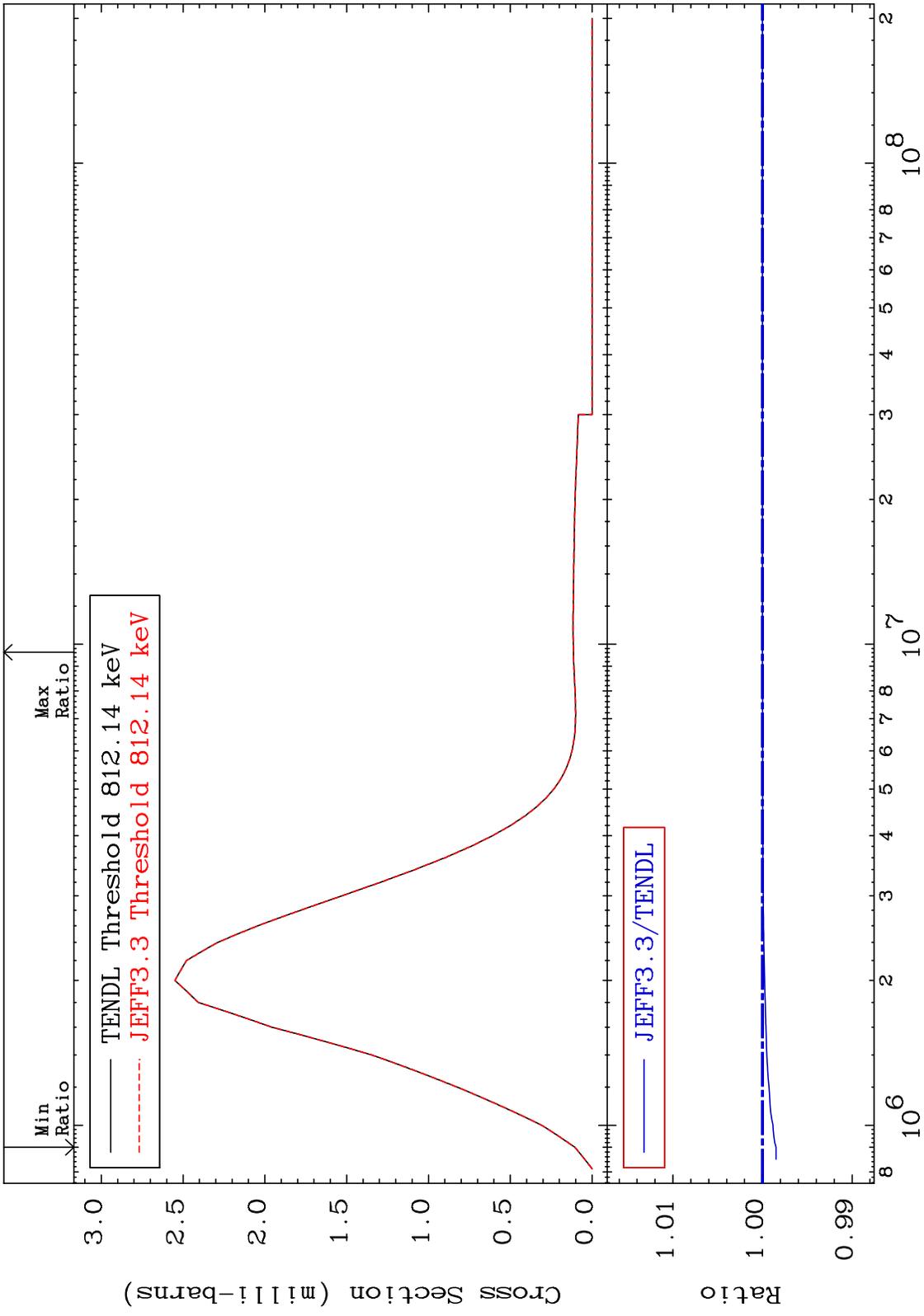
MAT 5446 MT= 59 (n,n') Level Cross Section 54-Xe-131 -0.020 To 0.000 %



MAT 5446 MT= 60 (n,n') Level Cross Section 54-Xe-131 -0.028 To 0.000 %

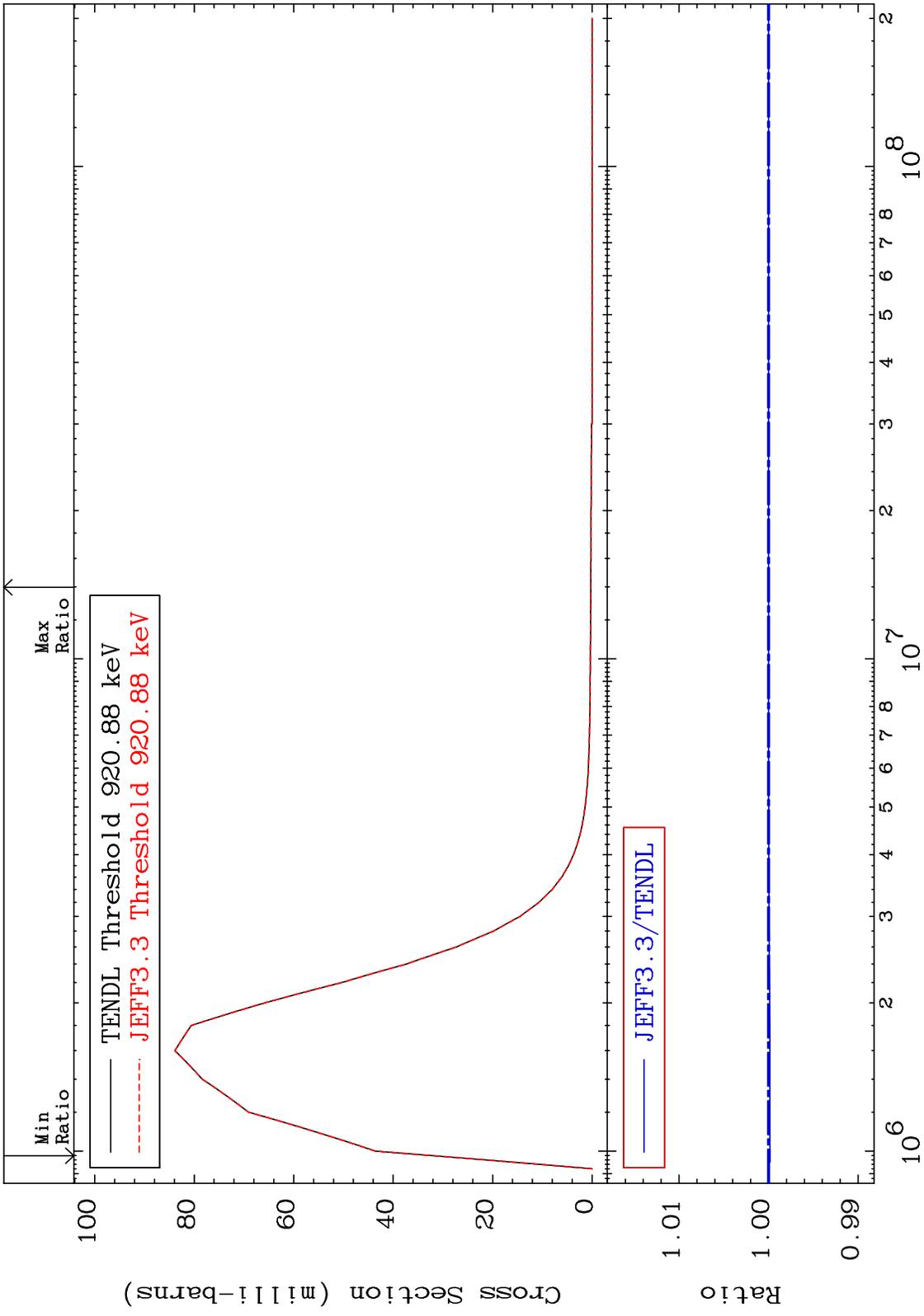


MAT 5446 MT= 61 (n,n') Level Cross Section -0.151 To 0.000 % 54-Xe-131



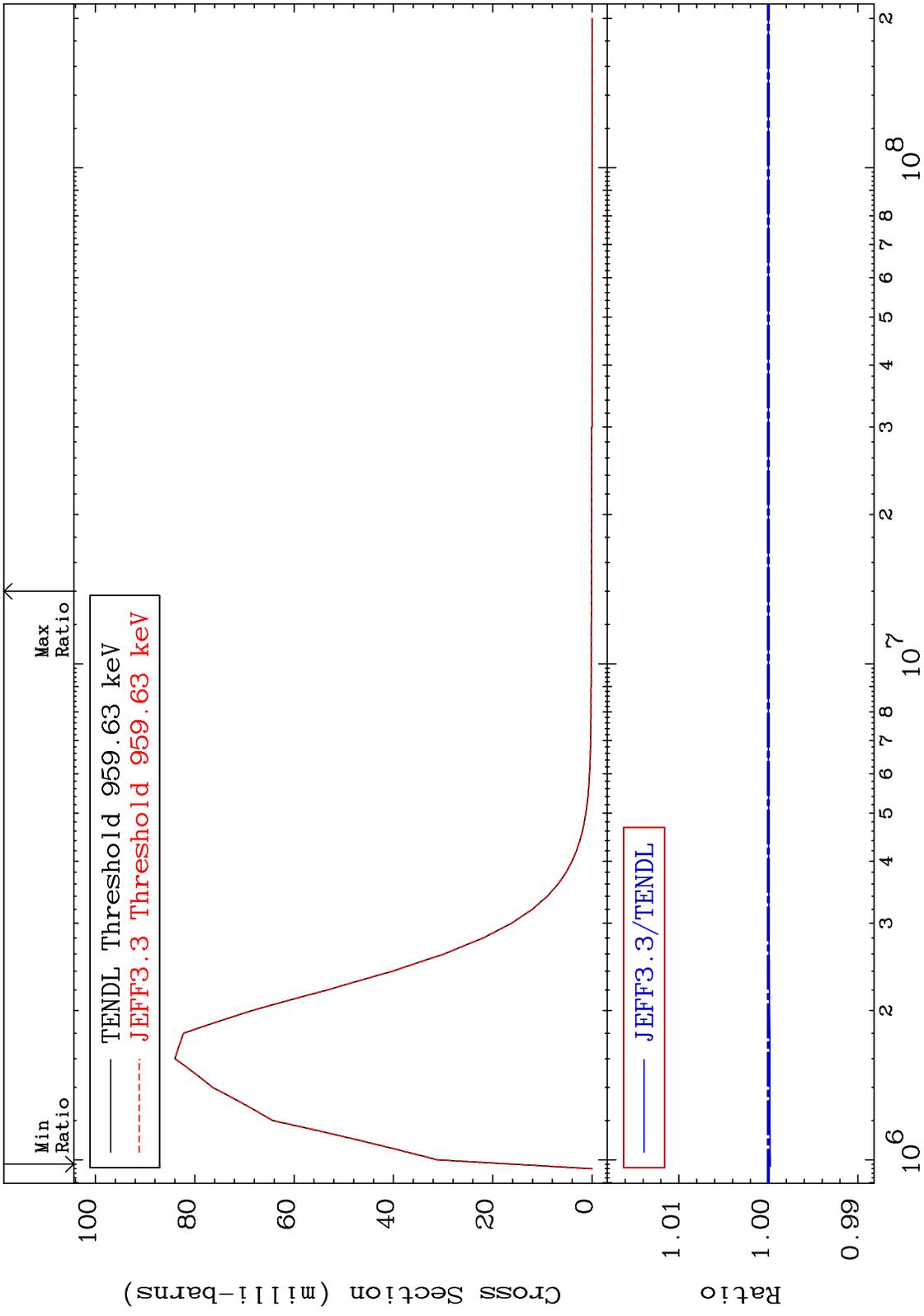
29 Incident Energy (eV) 54-Xe-131

MAT 5446 MT= 62 (n,n') Level Cross Section 54-Xe-131 -0.016 To 0.000 %



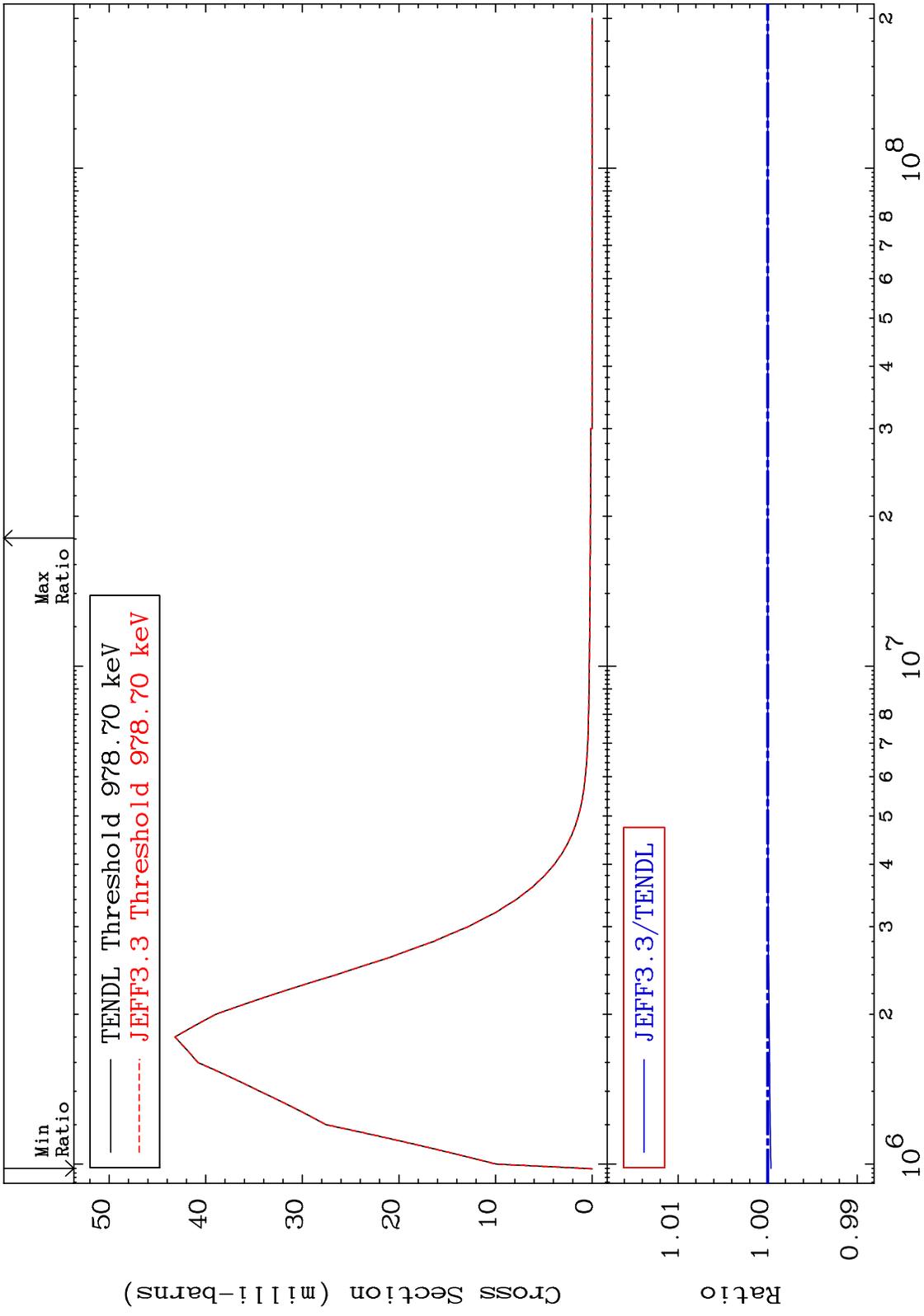
30 Incident Energy (eV) 54-Xe-131

MAT 5446 MT= 63 (n,n') Level Cross Section 54-Xe-131 -0.021 To 0.000 %

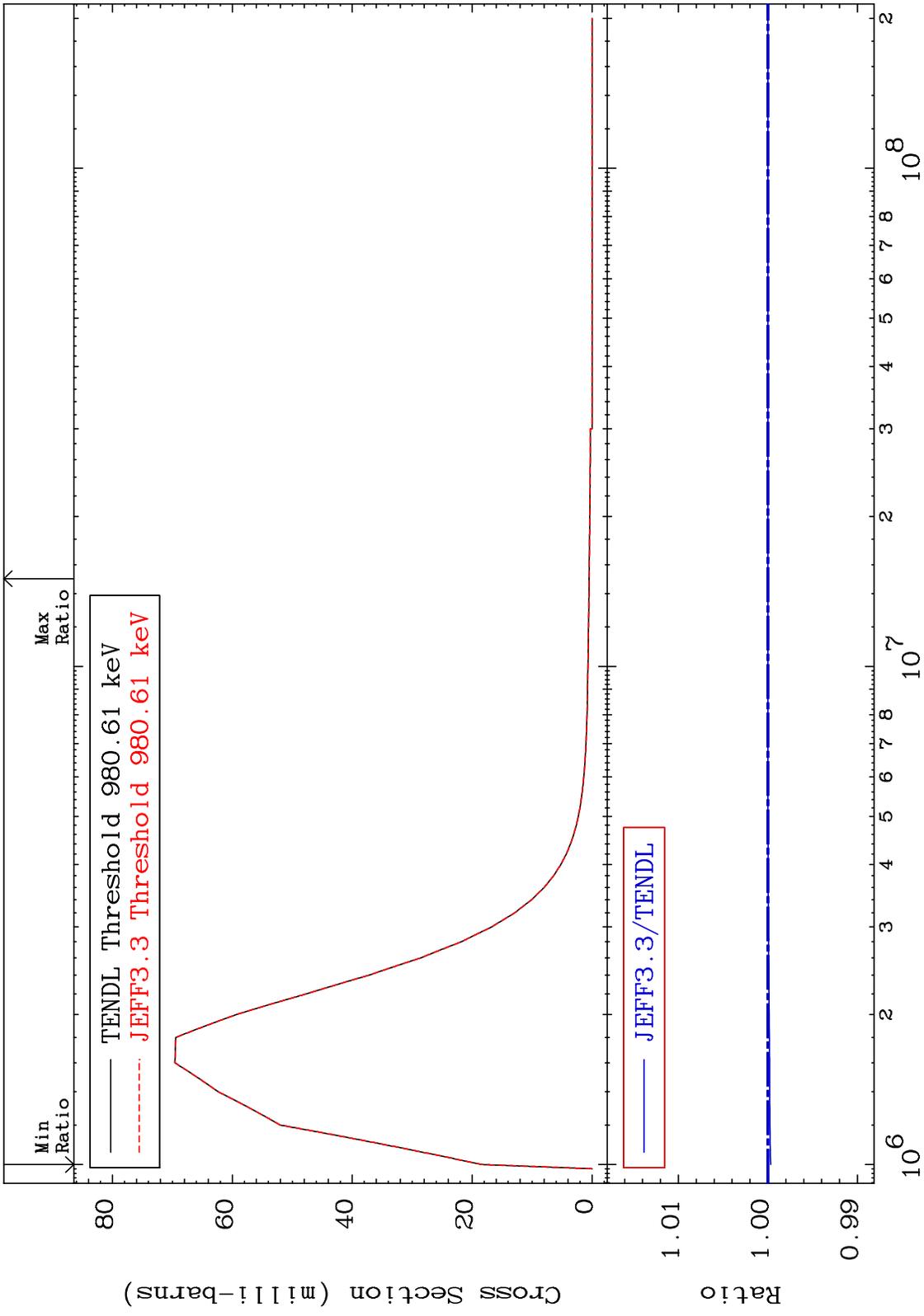


31 Incident Energy (eV) 54-Xe-131

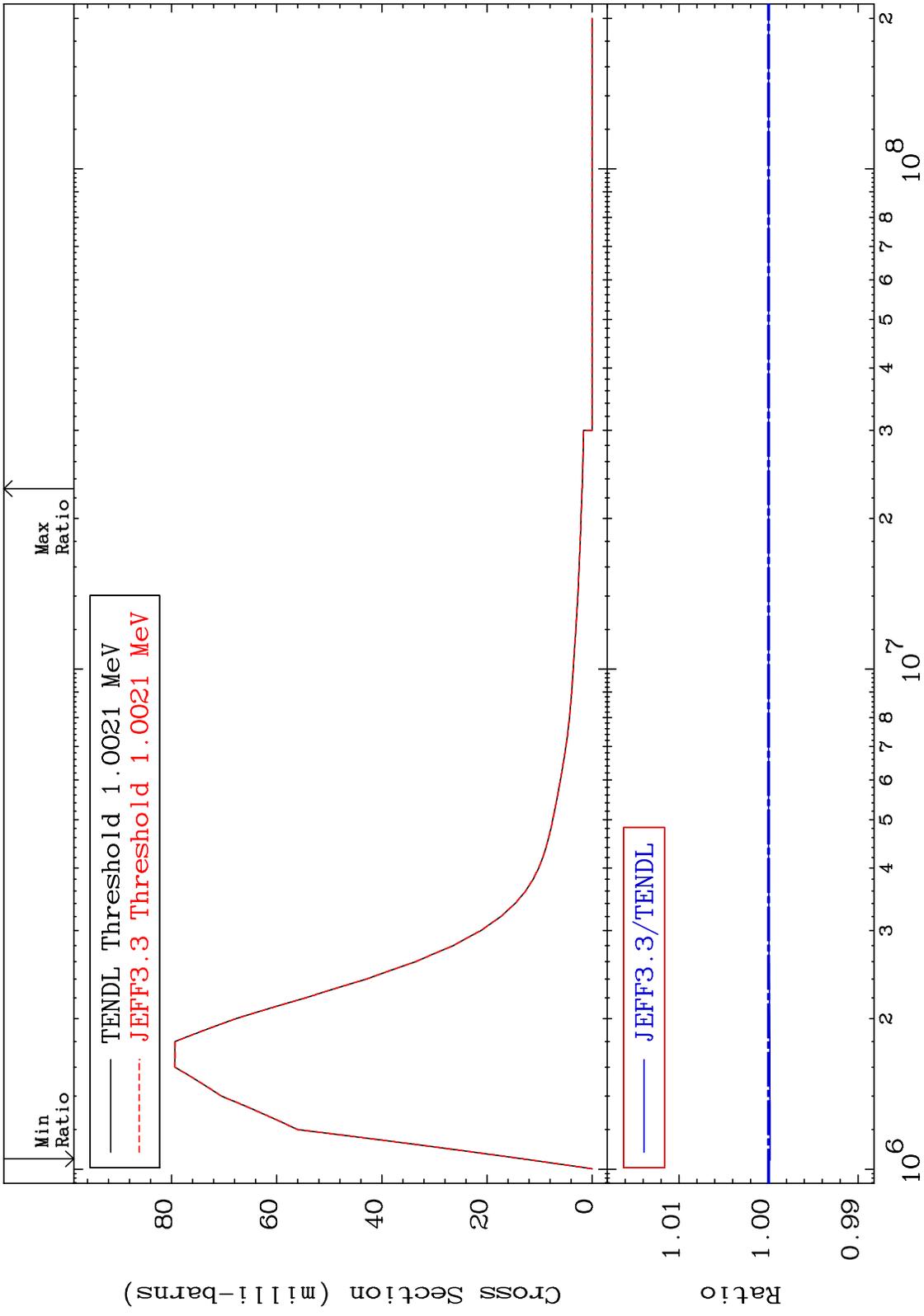
MAT 5446 MT= 64 (n,n') Level Cross Section 54-Xe-131 -0.037 To 0.000 %



MAT 5446 MT= 65 (n,n') Level Cross Section 54-Xe-131 -0.031 To 0.000 %



MAT 5446 MT= 66 (n,n') Level Cross Section 54-Xe-131
 -0.017 To 0.000 %

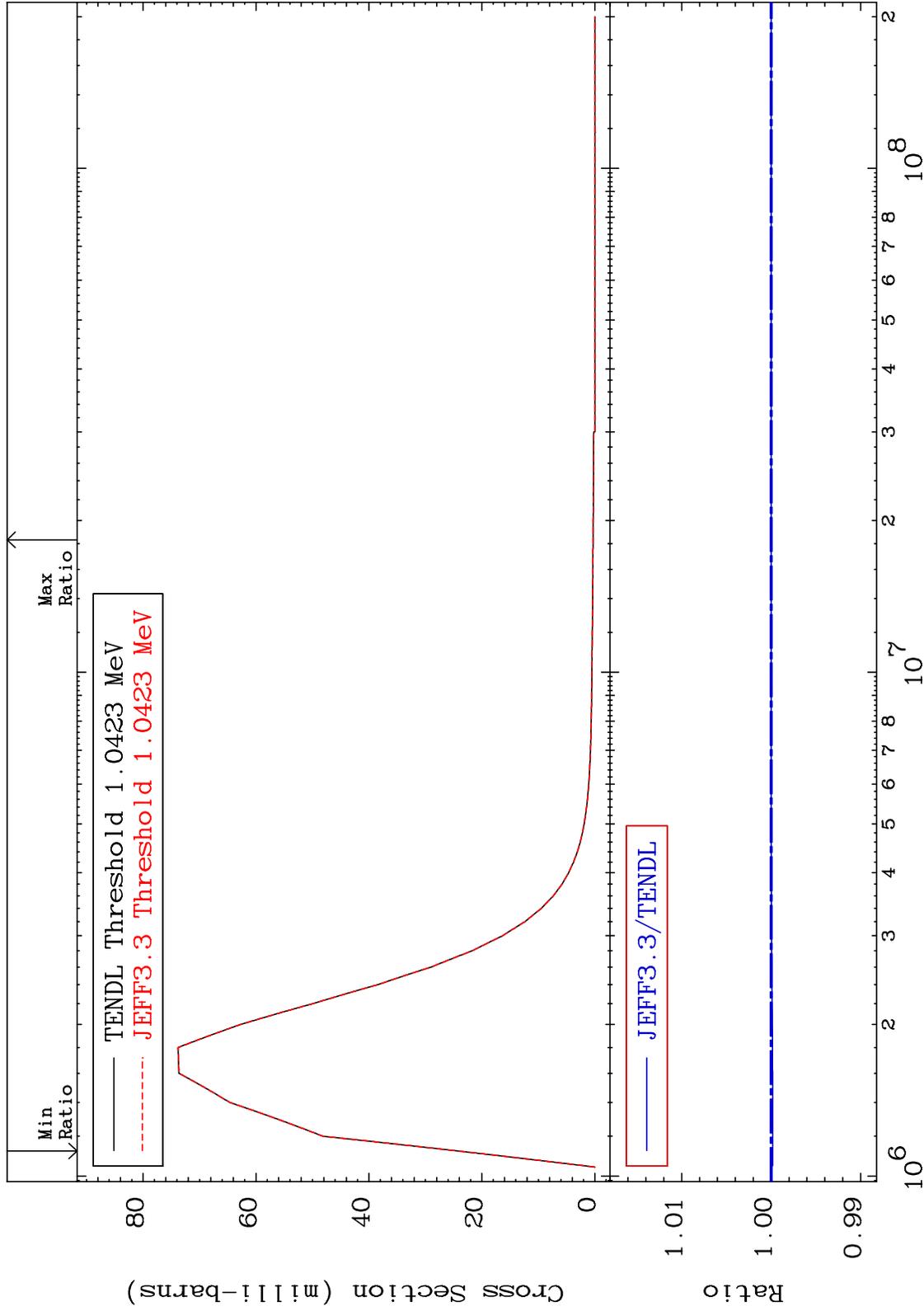


34 Incident Energy (eV) 54-Xe-131

MAT 5446

MT= 67 (n,n') Level
Cross Section

54-Xe-131
-0.017 To 0.000 %

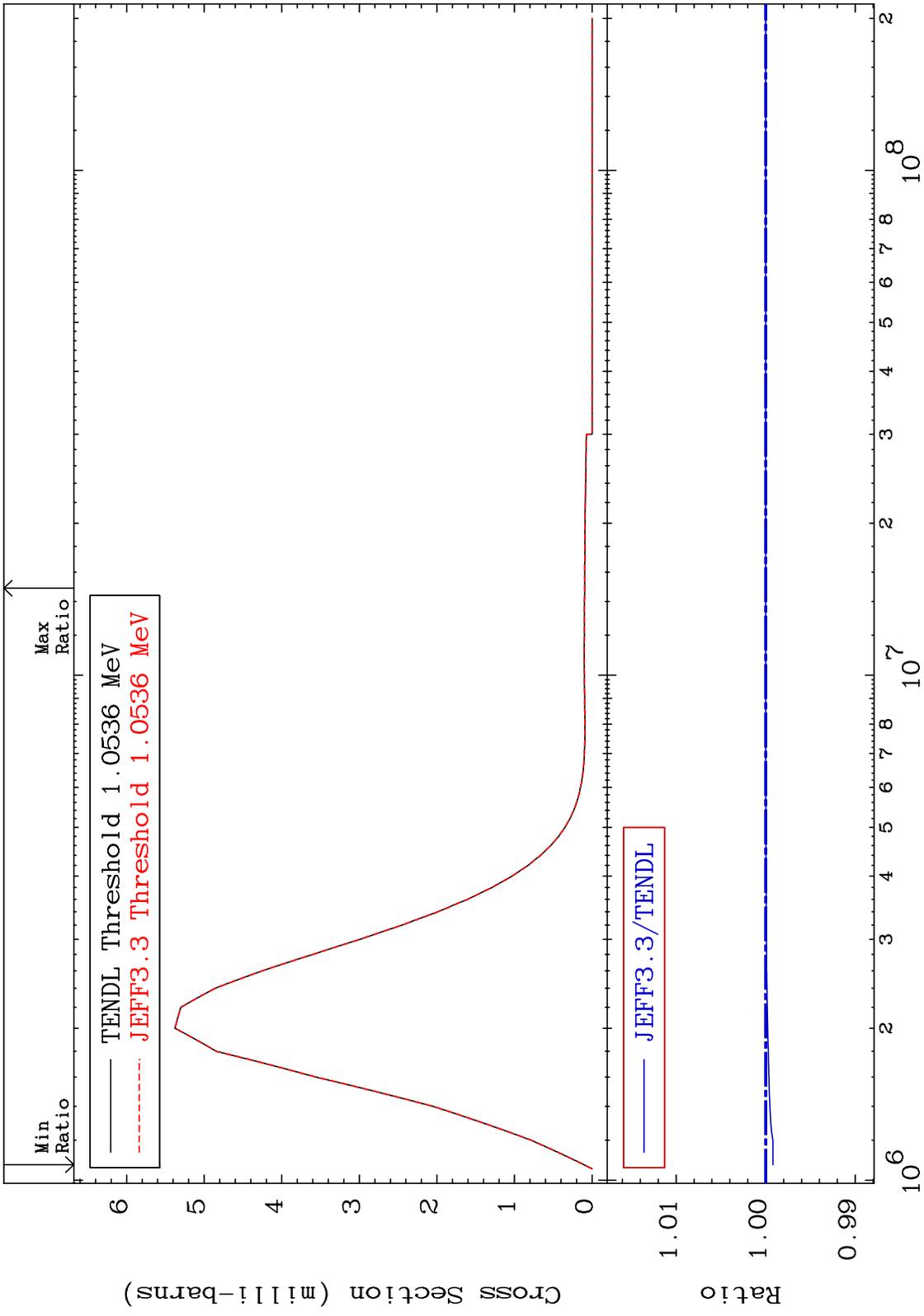


35

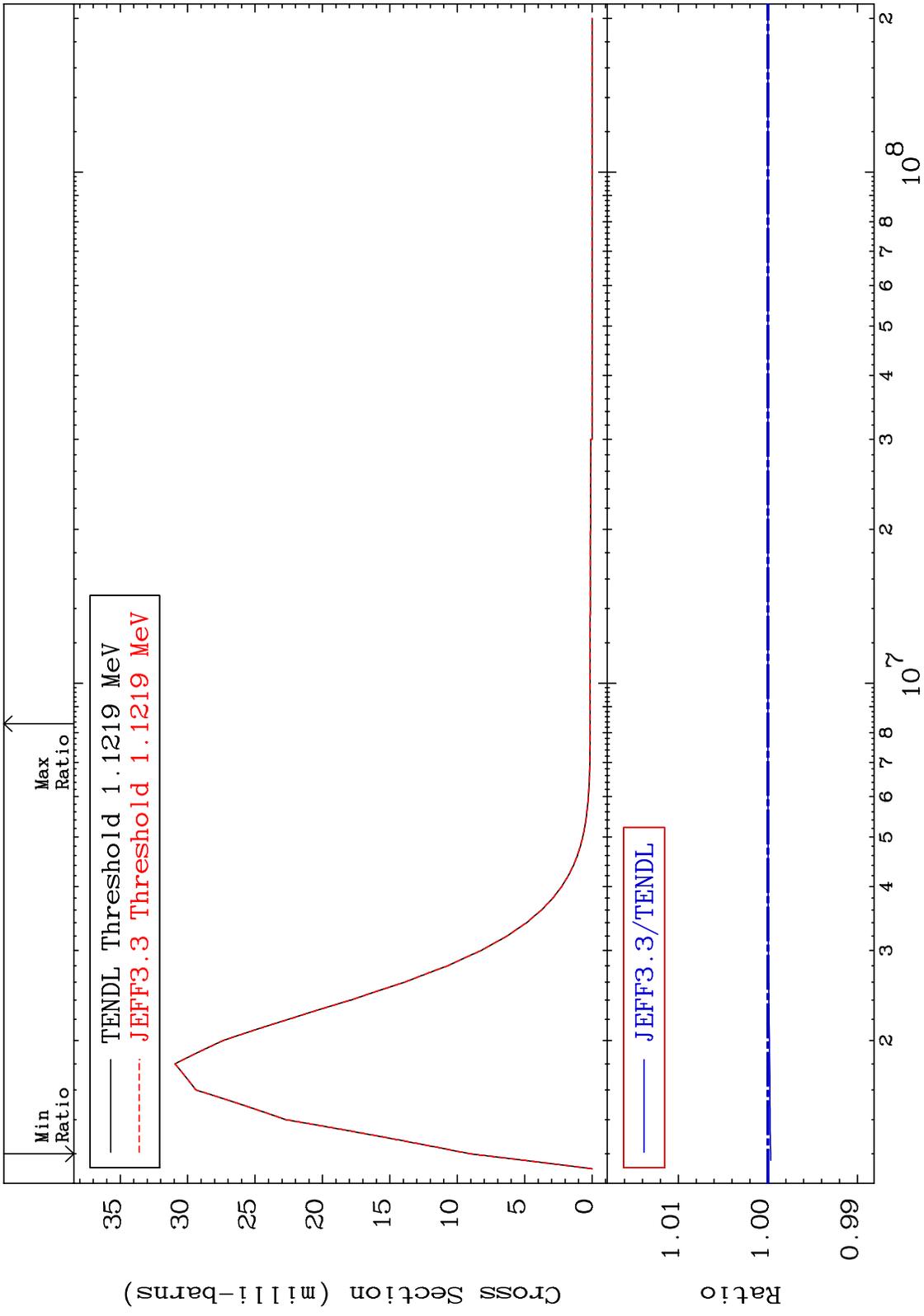
Incident Energy (eV)

54-Xe-131

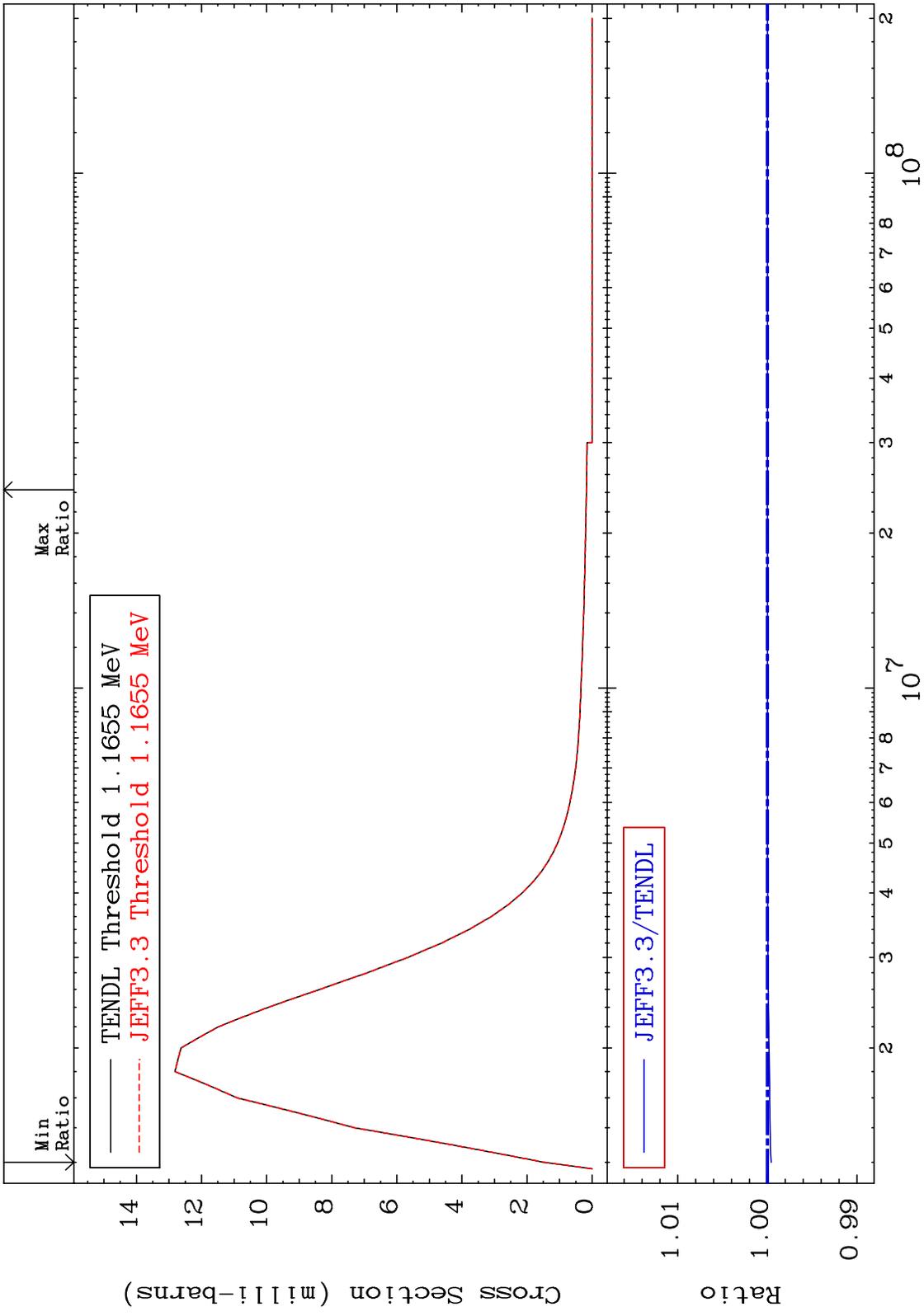
MAT 5446 MT= 68 (n,n') Level Cross Section 54-Xe-131 -0.080 To 0.000 %



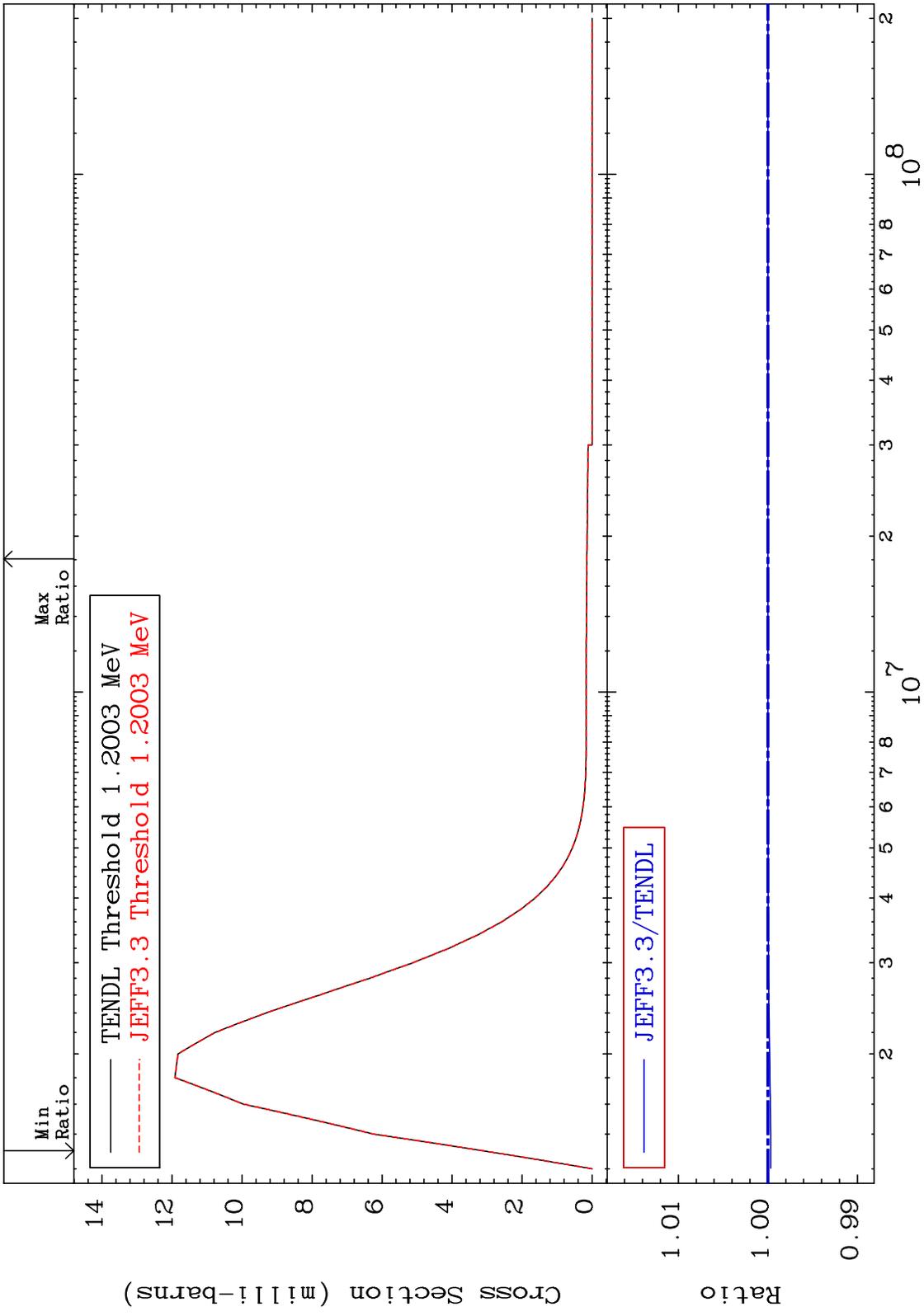
MAT 5446 MT= 69 (n,n') Level Cross Section 54-Xe-131
 -0.031 To 0.000 %



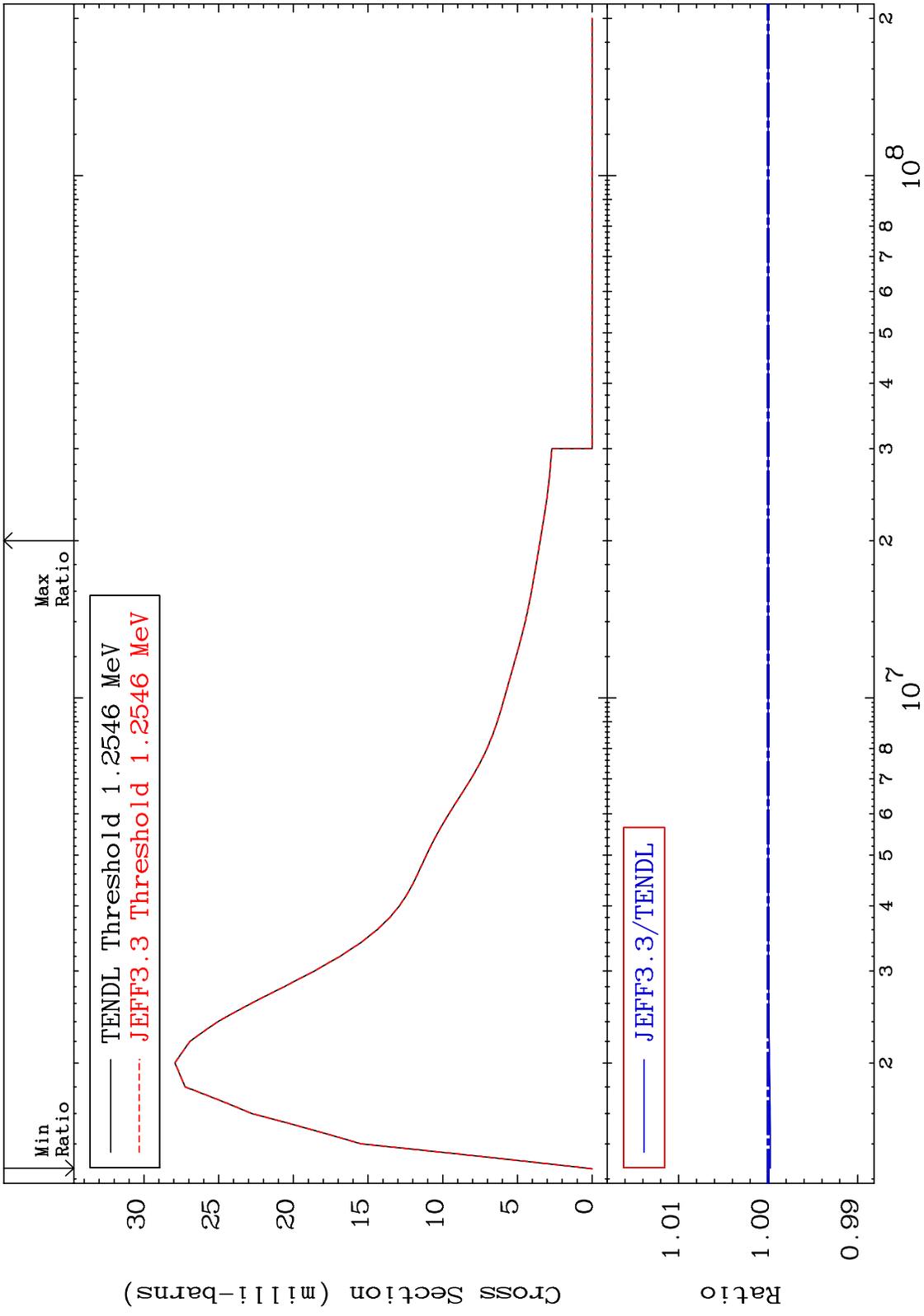
MAT 5446 MT= 70 (n,n') Level Cross Section 54-Xe-131
 -0.043 To 0.000 %



MAT 5446 MT= 71 (n,n') Level Cross Section 54-Xe-131 -0.031 To 0.000 %

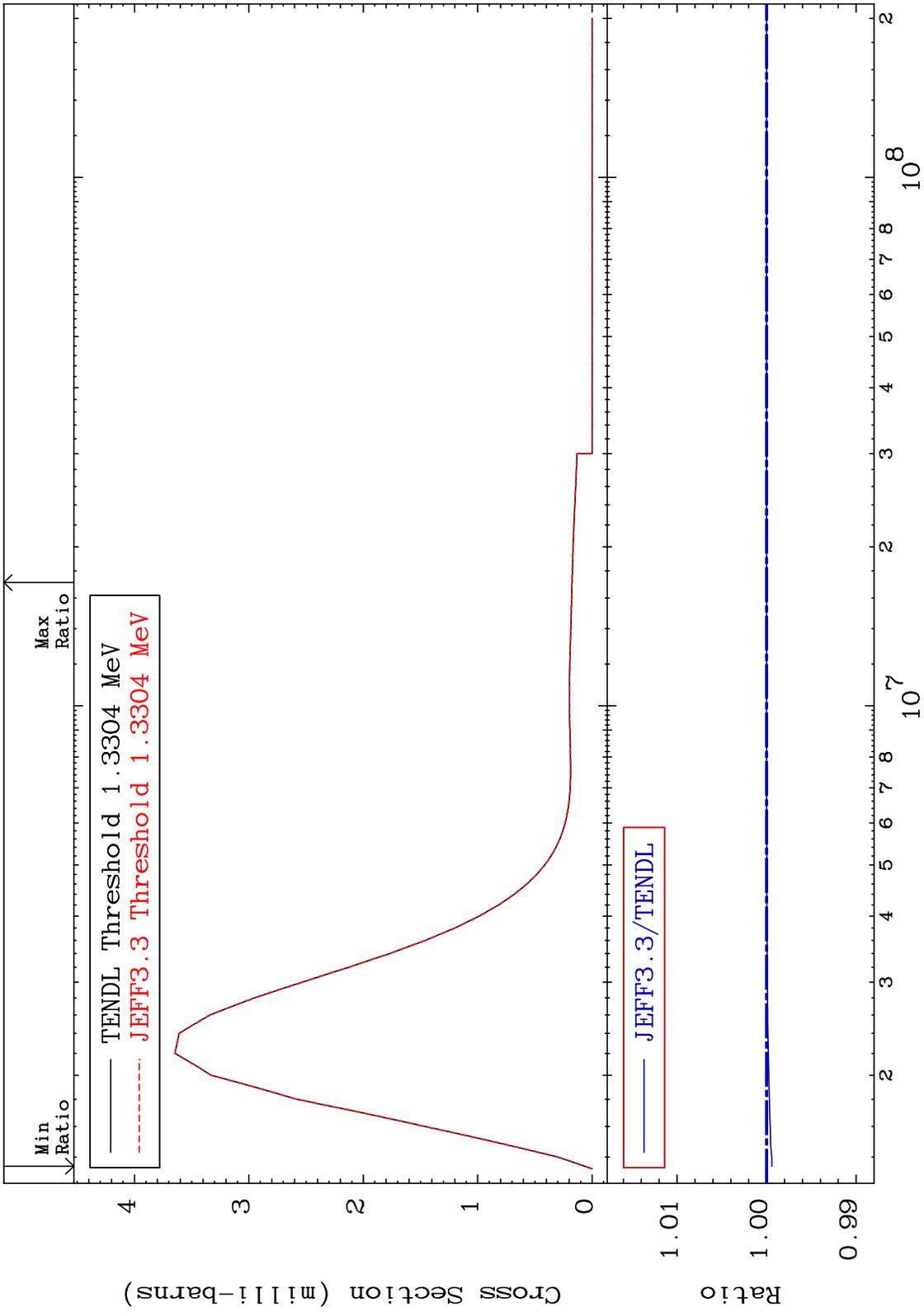


MAT 5446 MT= 72 (n, n') Level Cross Section 54-Xe-131 -0.025 To 0.000 %

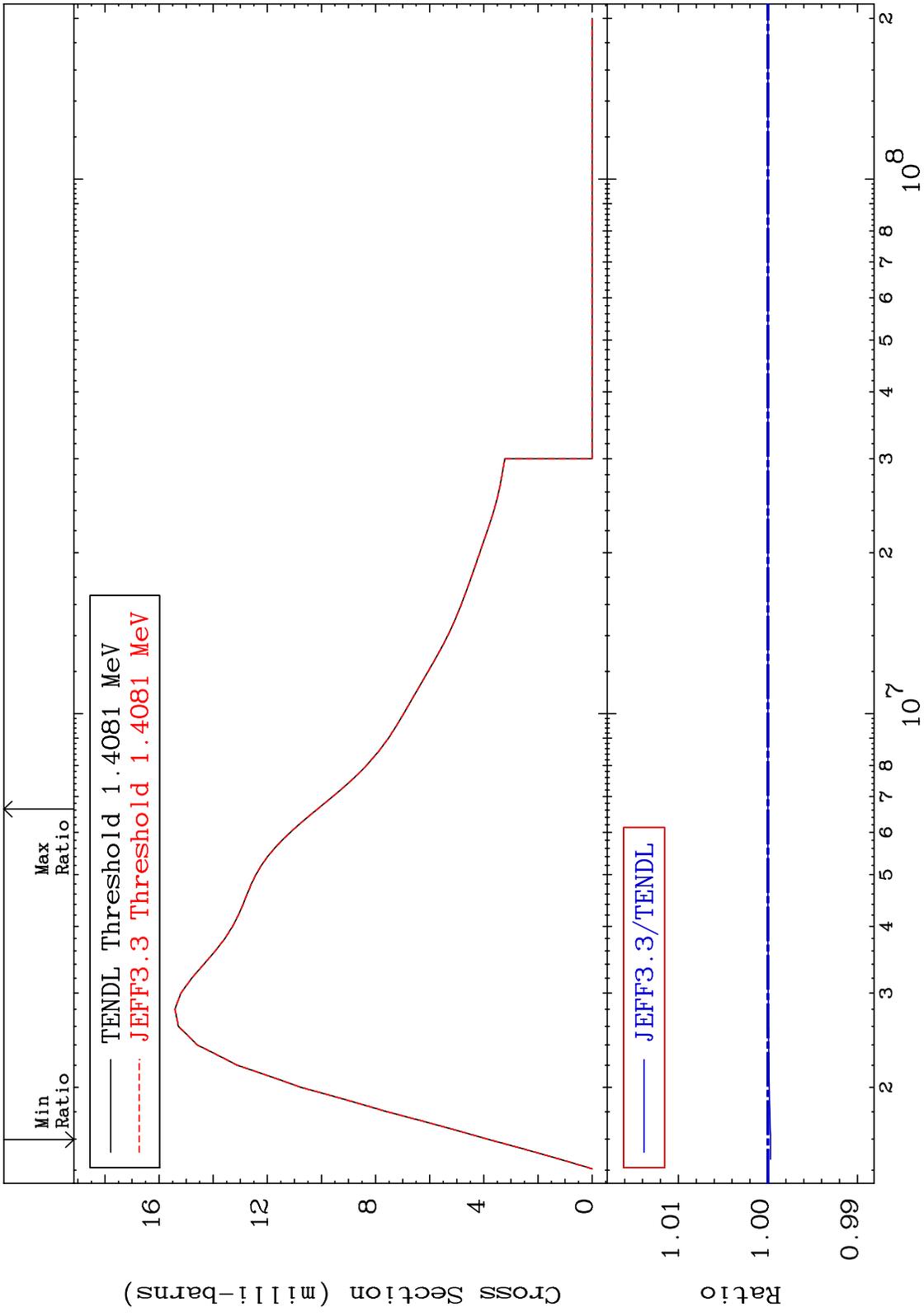


40 Incident Energy (eV) 54-Xe-131

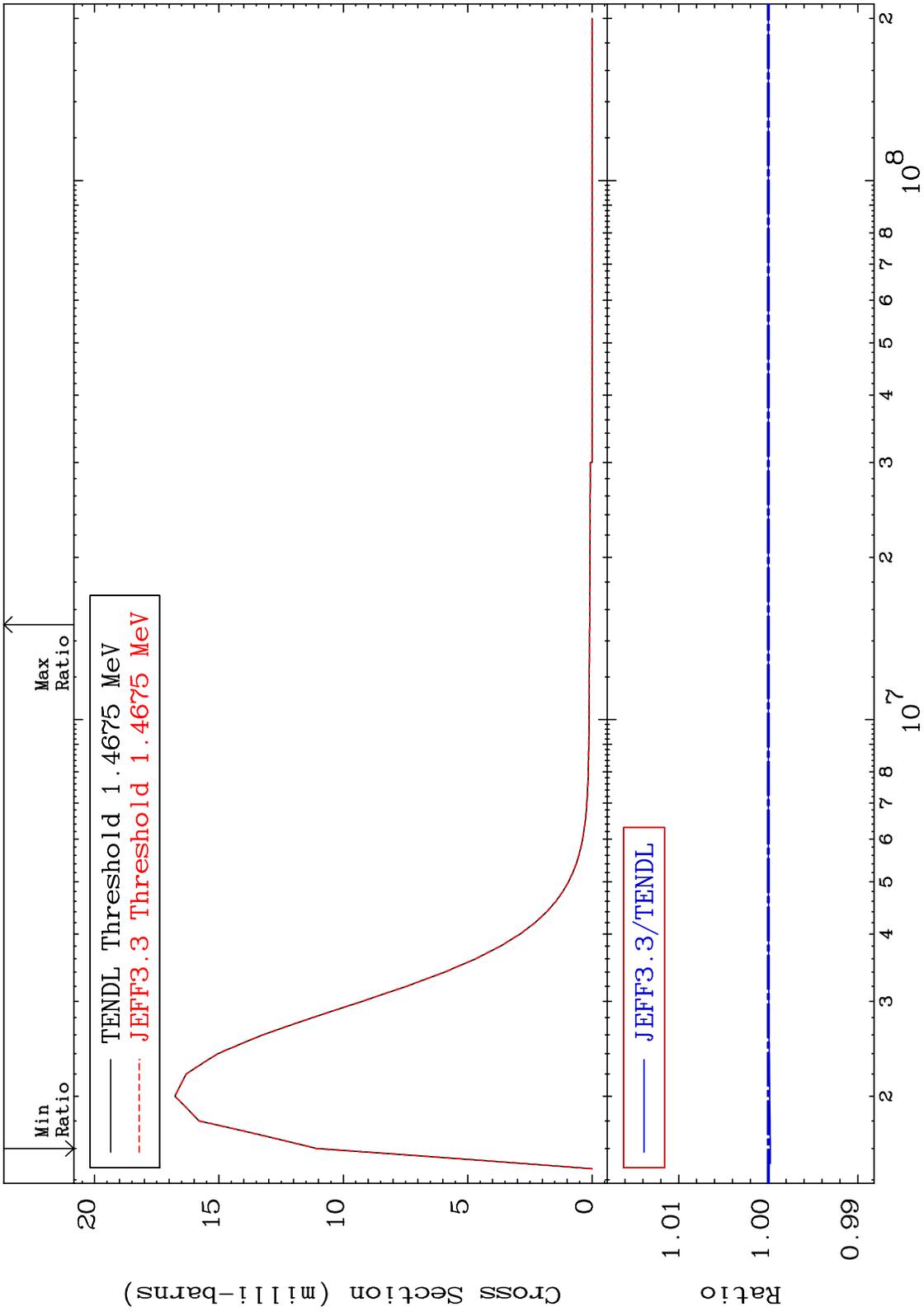
MAT 5446 MT= 73 (n,n') Level Cross Section 54-Xe-131 -0.059 To 0.000 %



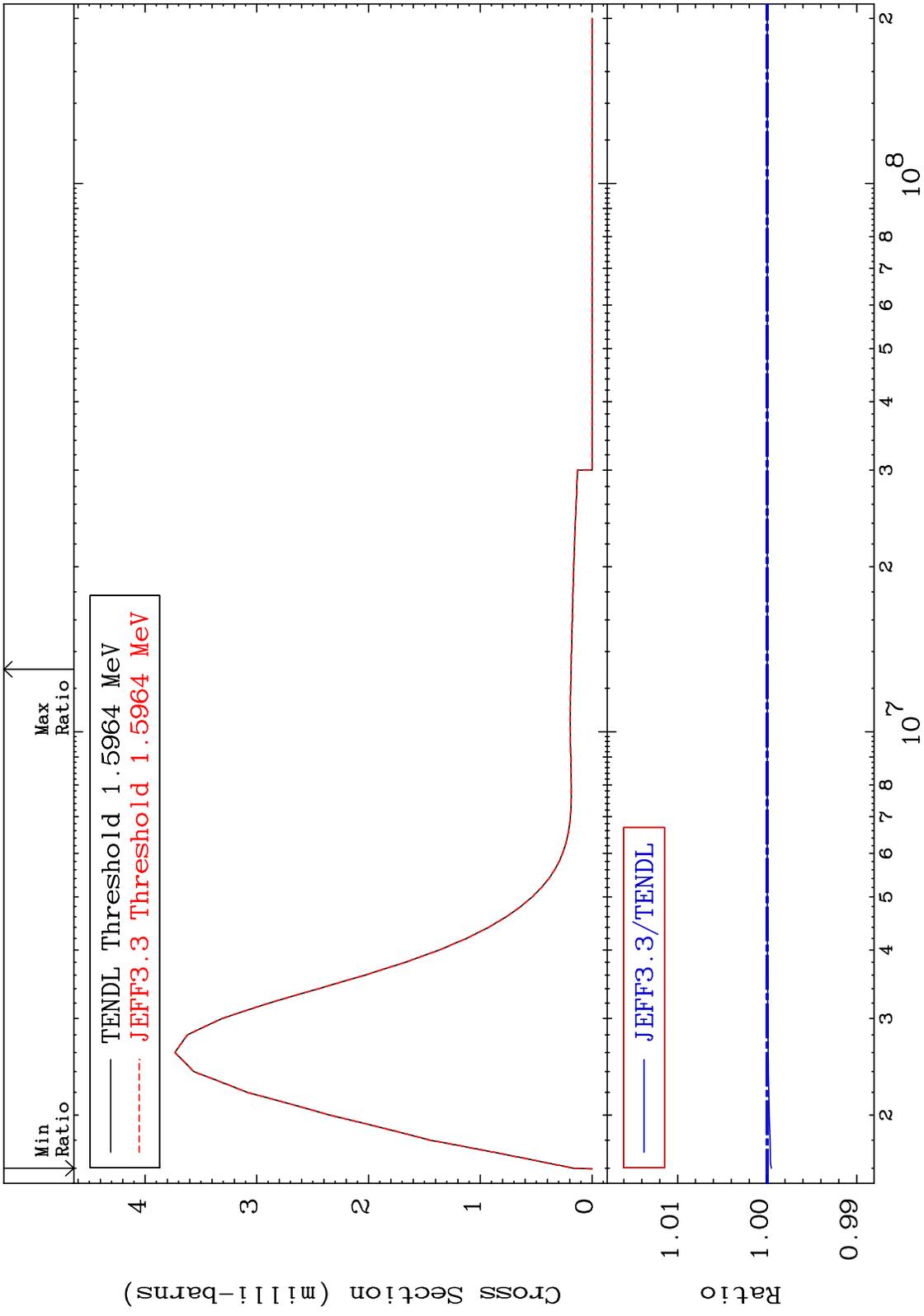
MAT 5446 MT= 74 (n,n') Level Cross Section 54-Xe-131 -0.030 To 0.000 %



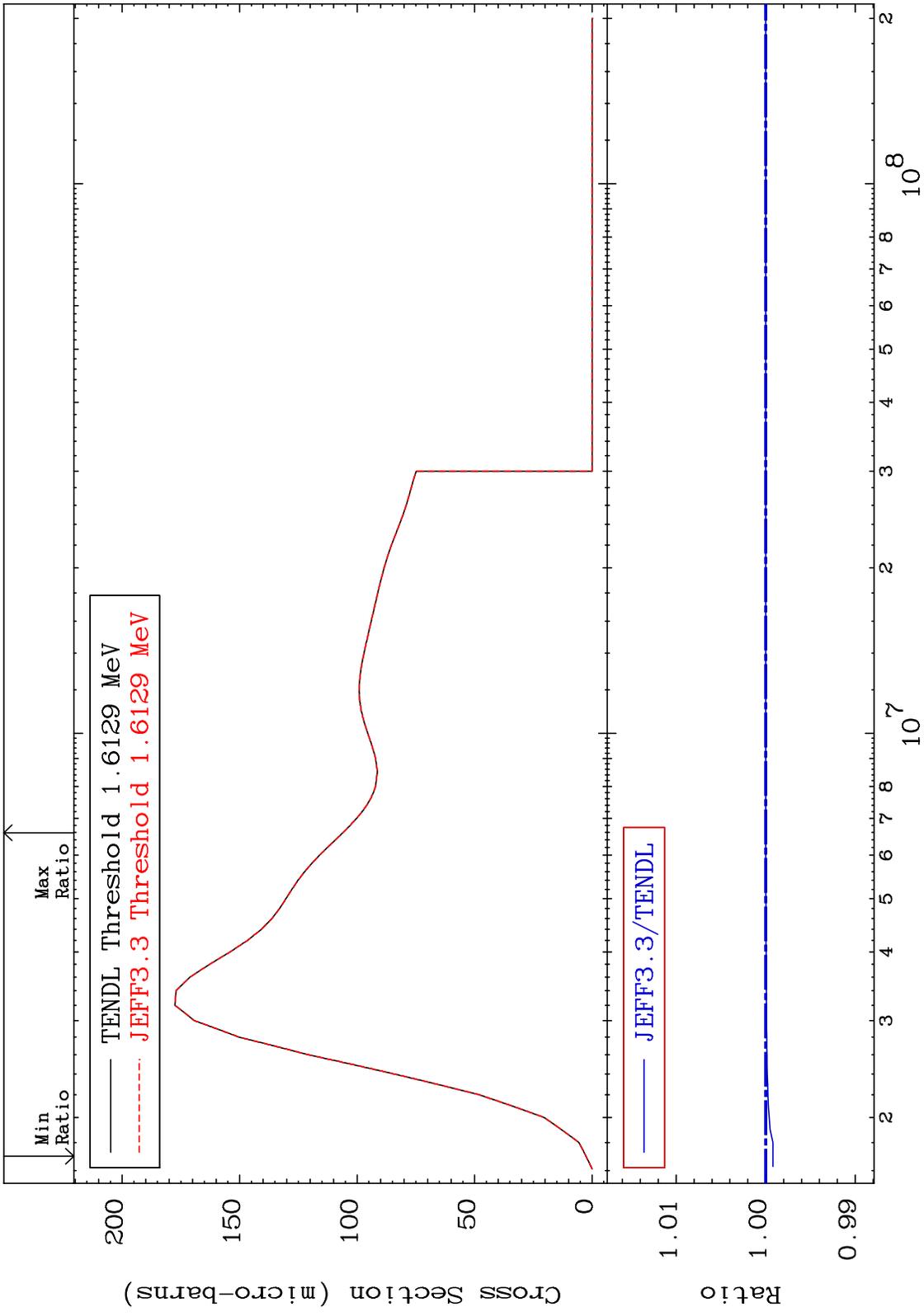
MAT 5446 MT= 75 (n,n') Level Cross Section 54-Xe-131
 -0.023 To 0.000 %



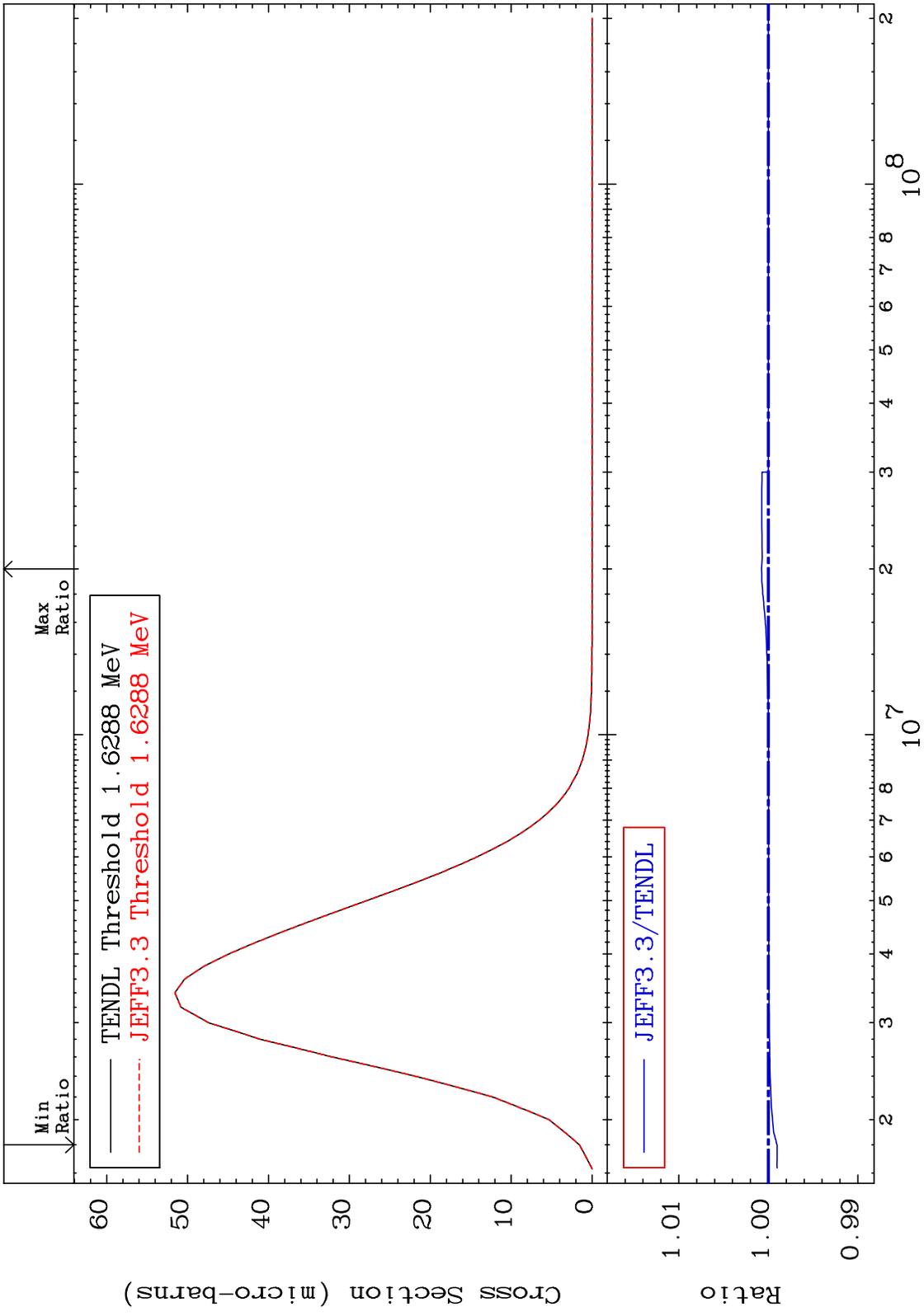
MAT 5446 MT= 76 (n,n') Level Cross Section 54-Xe-131
 -0.048 To 0.000 %



MAT 5446 MT= 77 (n,n') Level Cross Section 54-Xe-131 -0.079 To 0.000 %



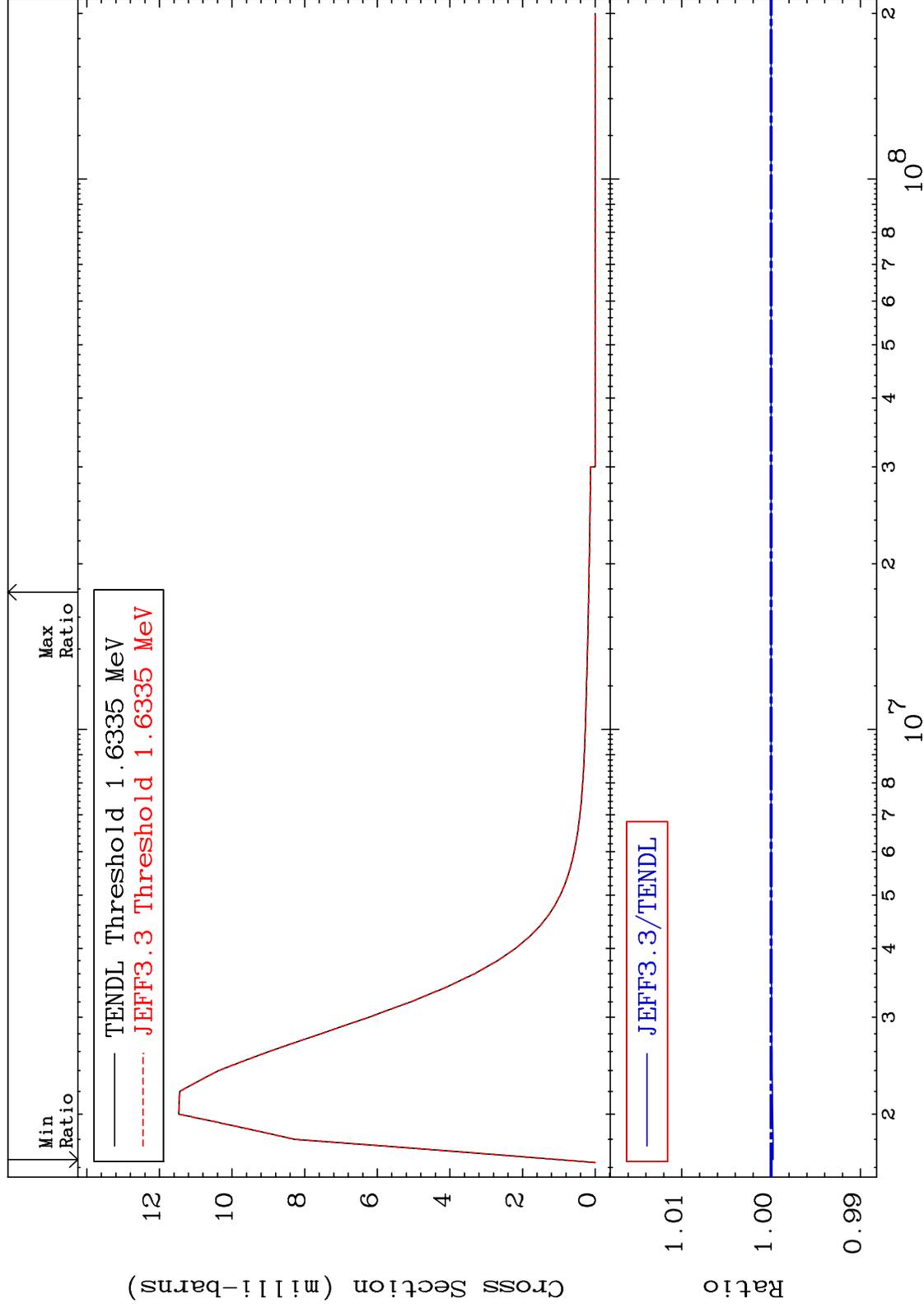
MAT 5446 MT= 78 (n,n') Level Cross Section 54-Xe-131
 -0.097 To 0.076 %



MAT 5446

MT= 79 (n,n') Level
Cross Section

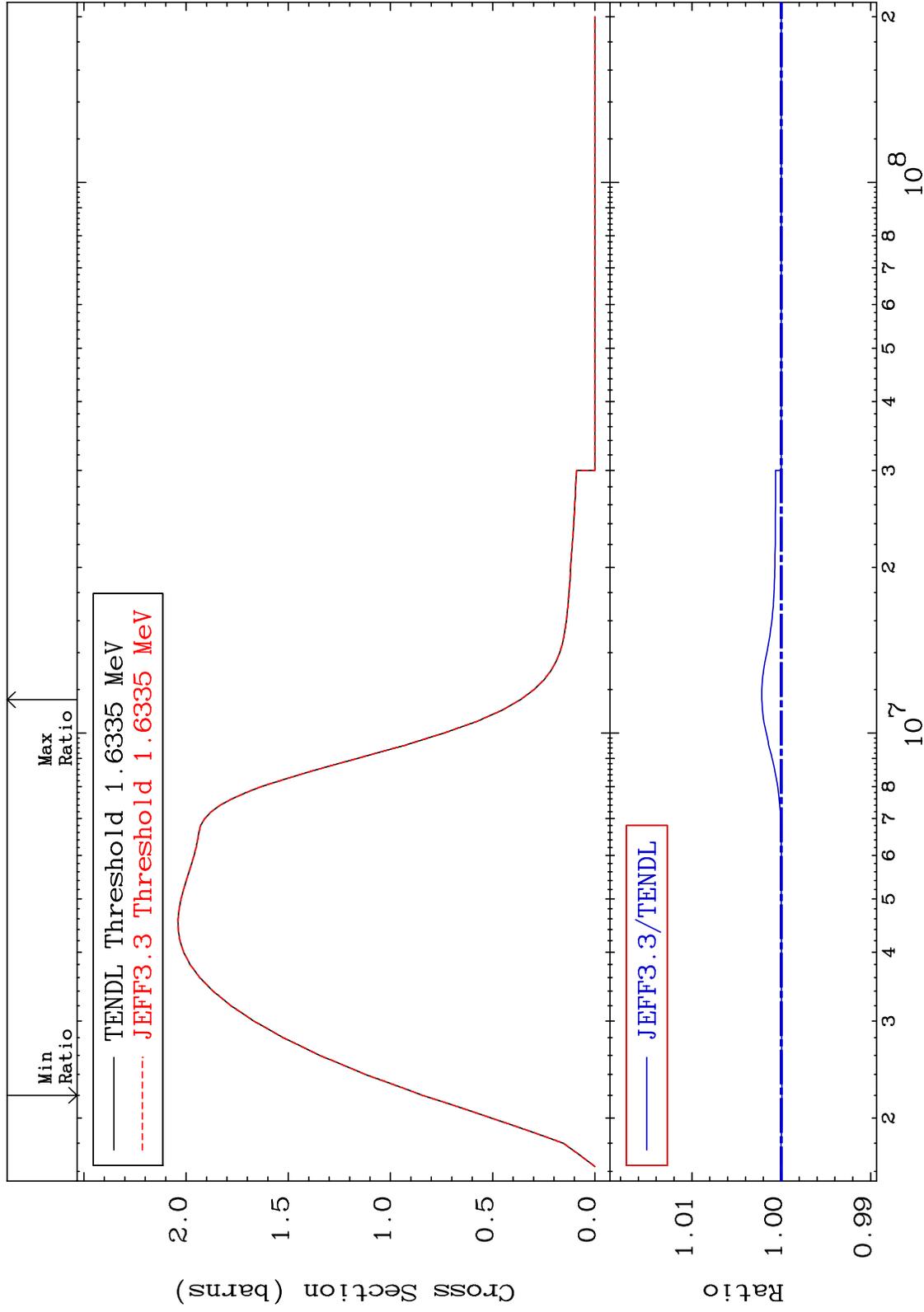
54-Xe-131
-0.021 To 0.000 %



MAT 5446

(n, n') Continuum
Cross Section

54-Xe-131
-0.008 To 0.218 %



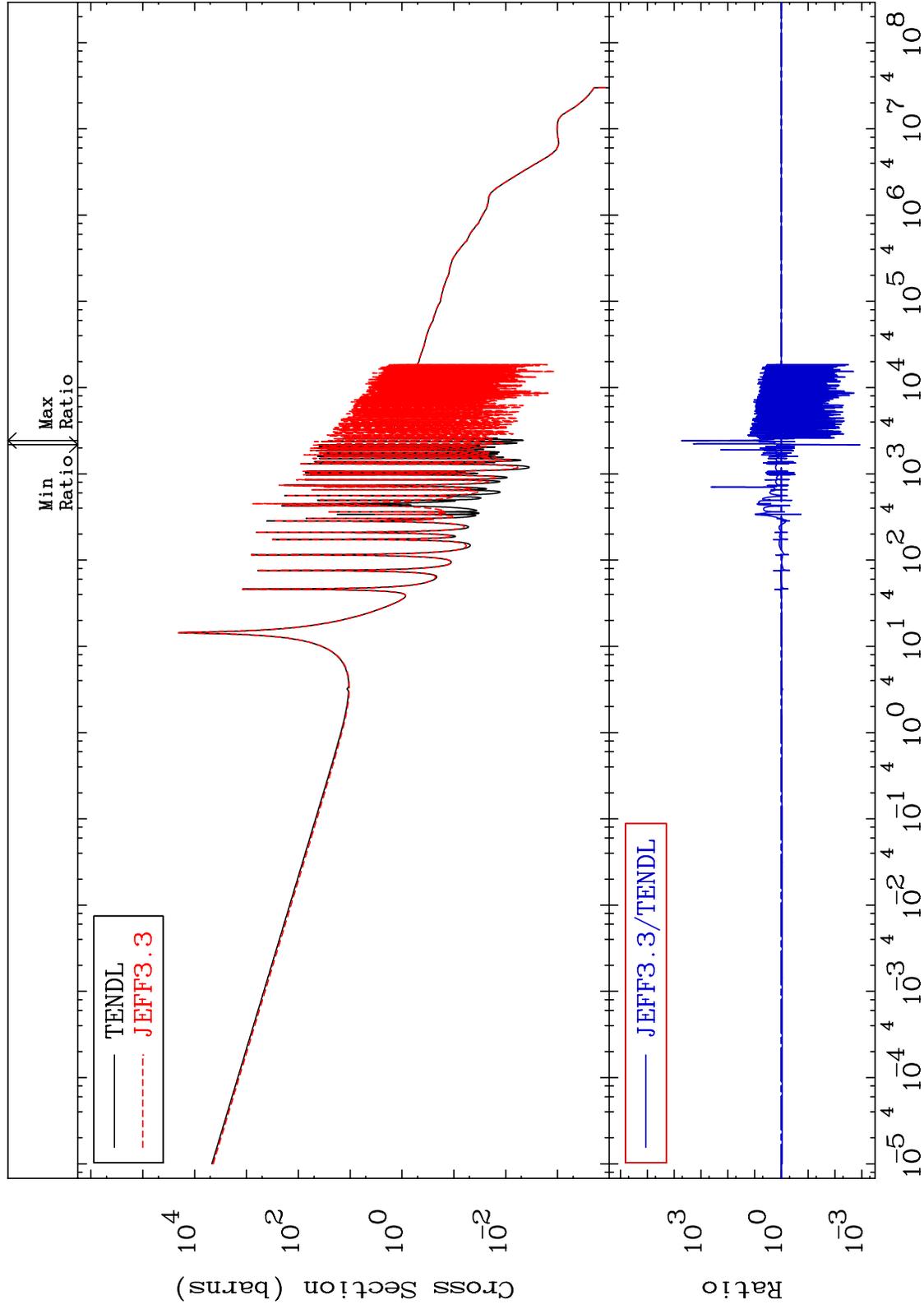
MAT 5446

(n, γ)

54-Xe-131

Cross Section

-99.88 To 9999. %



MAT 5446

(n,p)

54-Xe-131

Cross Section

-0.026 To 0.026 %

Min Ratio

Max Ratio

— TENDL Threshold 189.95 keV
- - - JEFF3.3 Threshold 189.95 keV

— JEFF3.3/TENDL

Cross Section (milli-barns)

Ratio

20
15
10
5
0

1.01
1.00
0.99

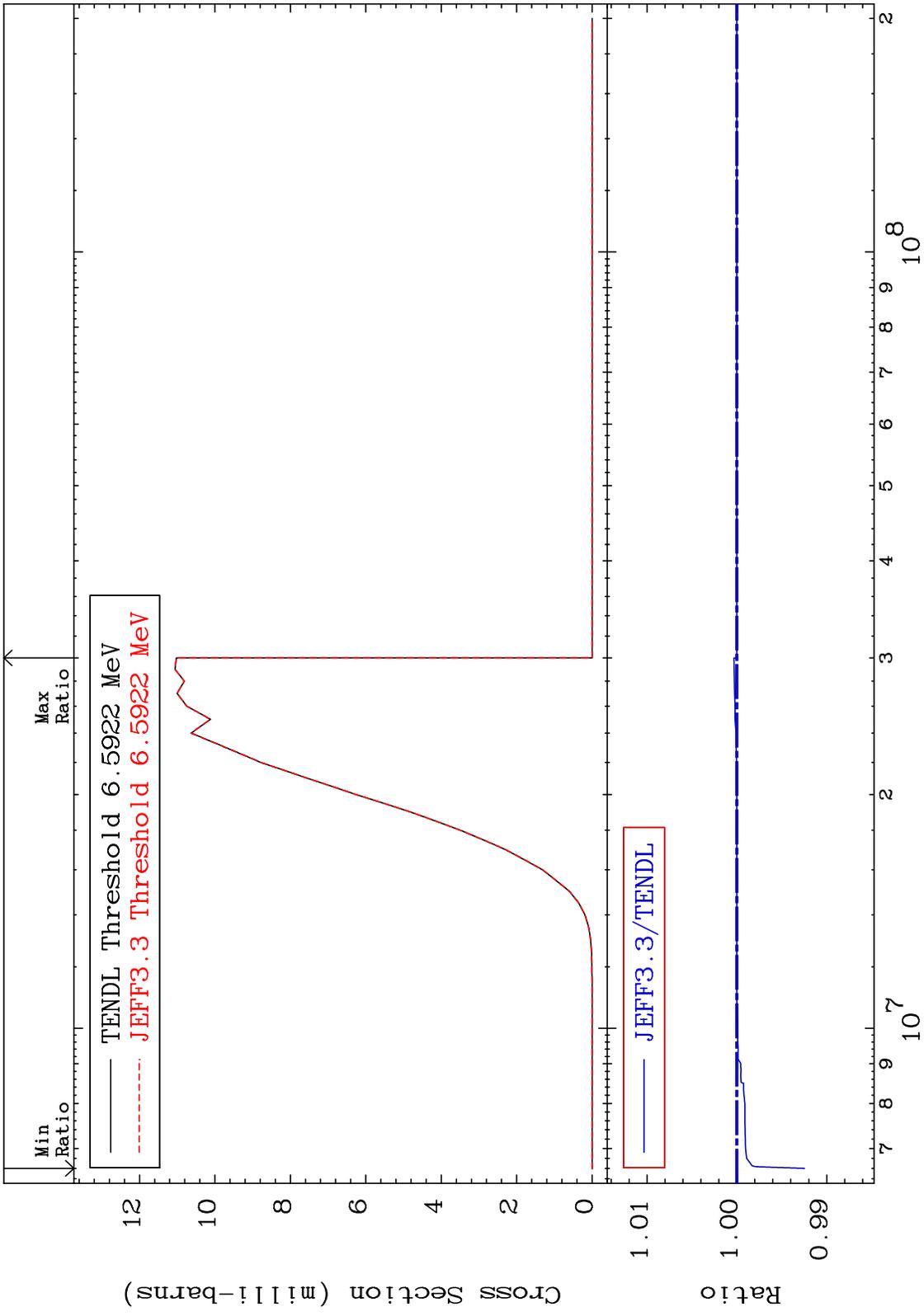
10⁷
10⁸

50

Incident Energy (eV)

54-Xe-131

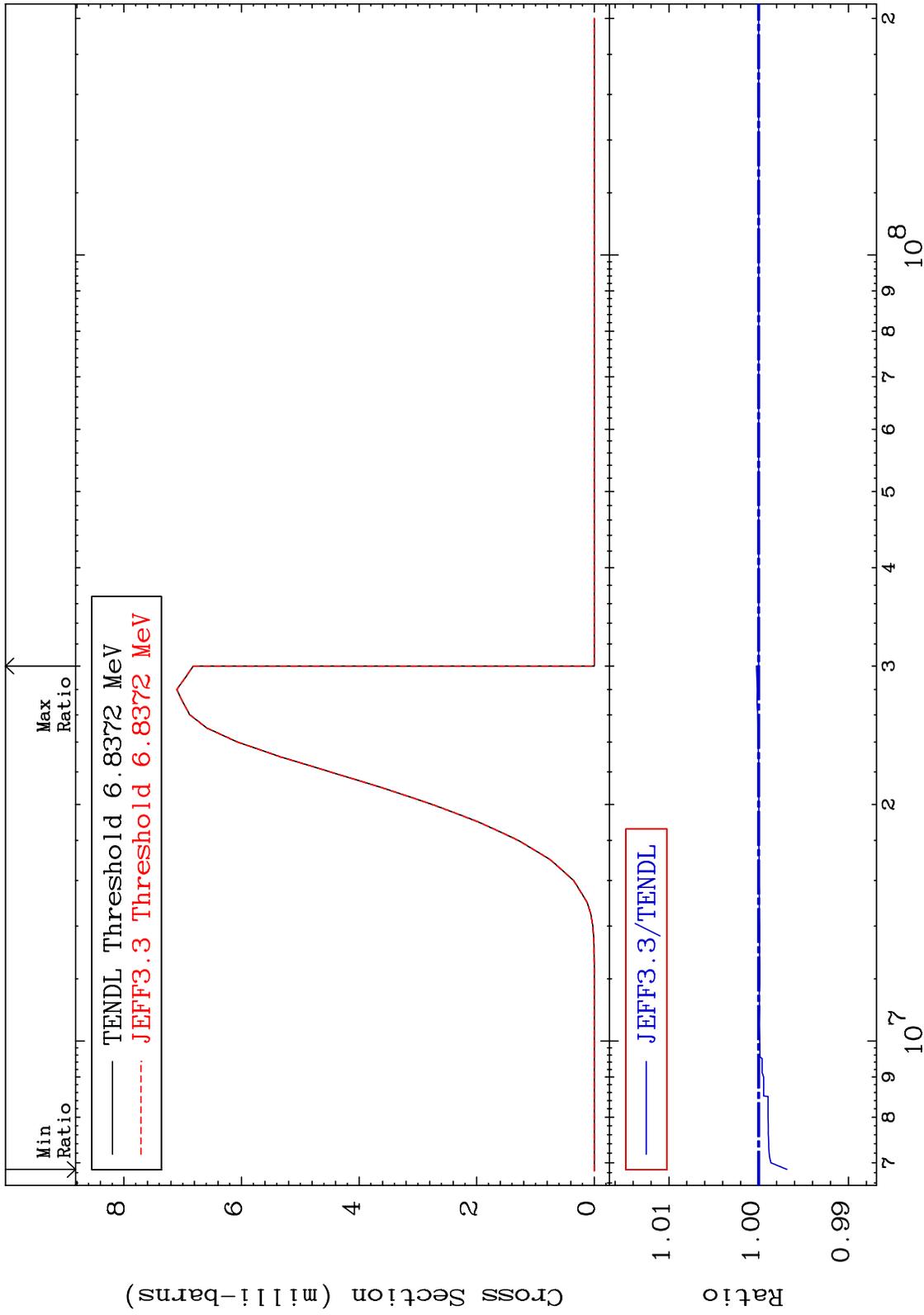
MAT 5446 54-Xe-131
(n, d)
Cross Section
-0.753 To 0.032 %



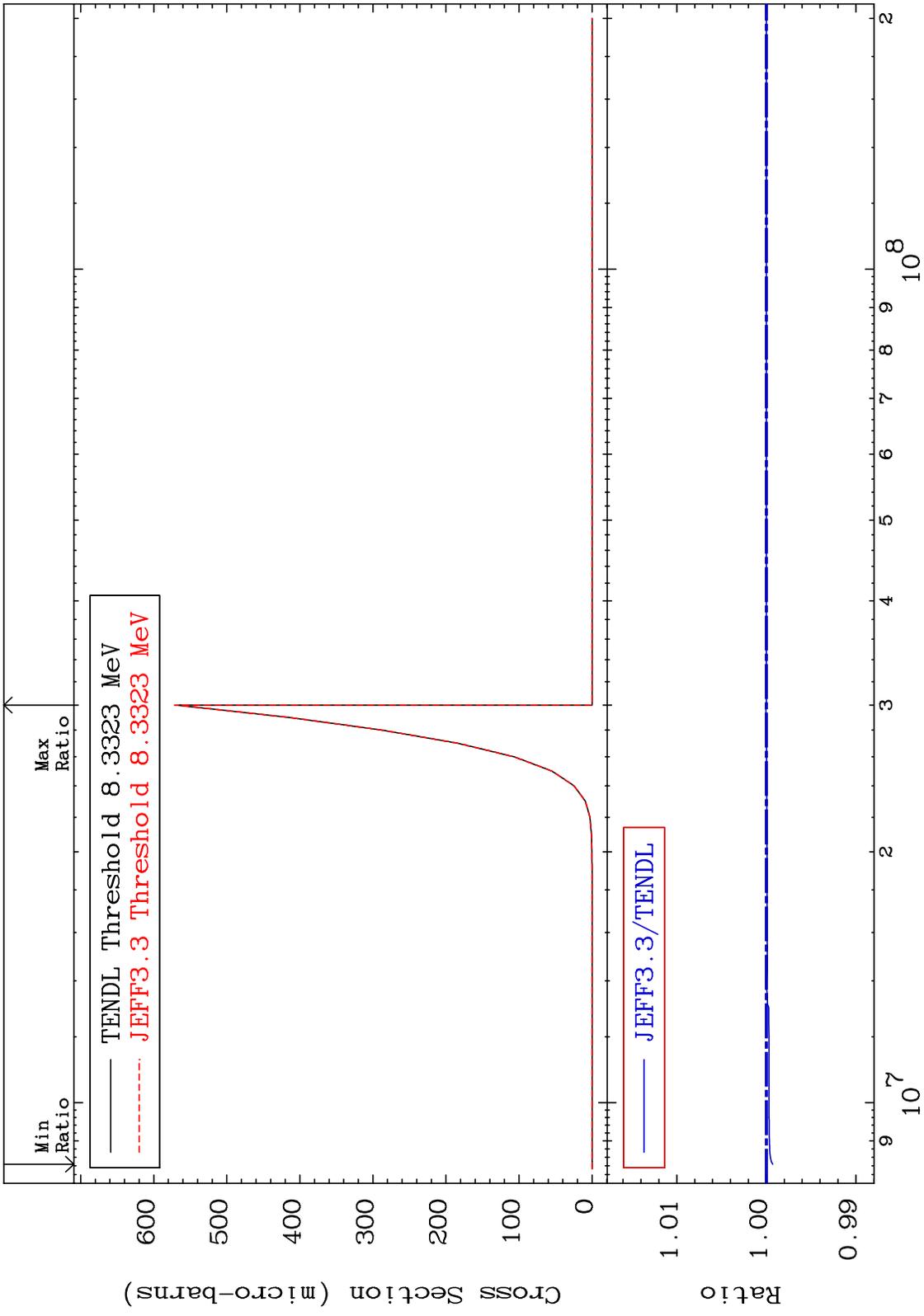
51 54-Xe-131
Incident Energy (eV)

MAT 5446

(n, t) Cross Section
54-Xe-131
-0.314 To 0.025 %



MAT 5446 (n, He-3) 54-Xe-131
 Cross Section -0.072 To 0.006 %

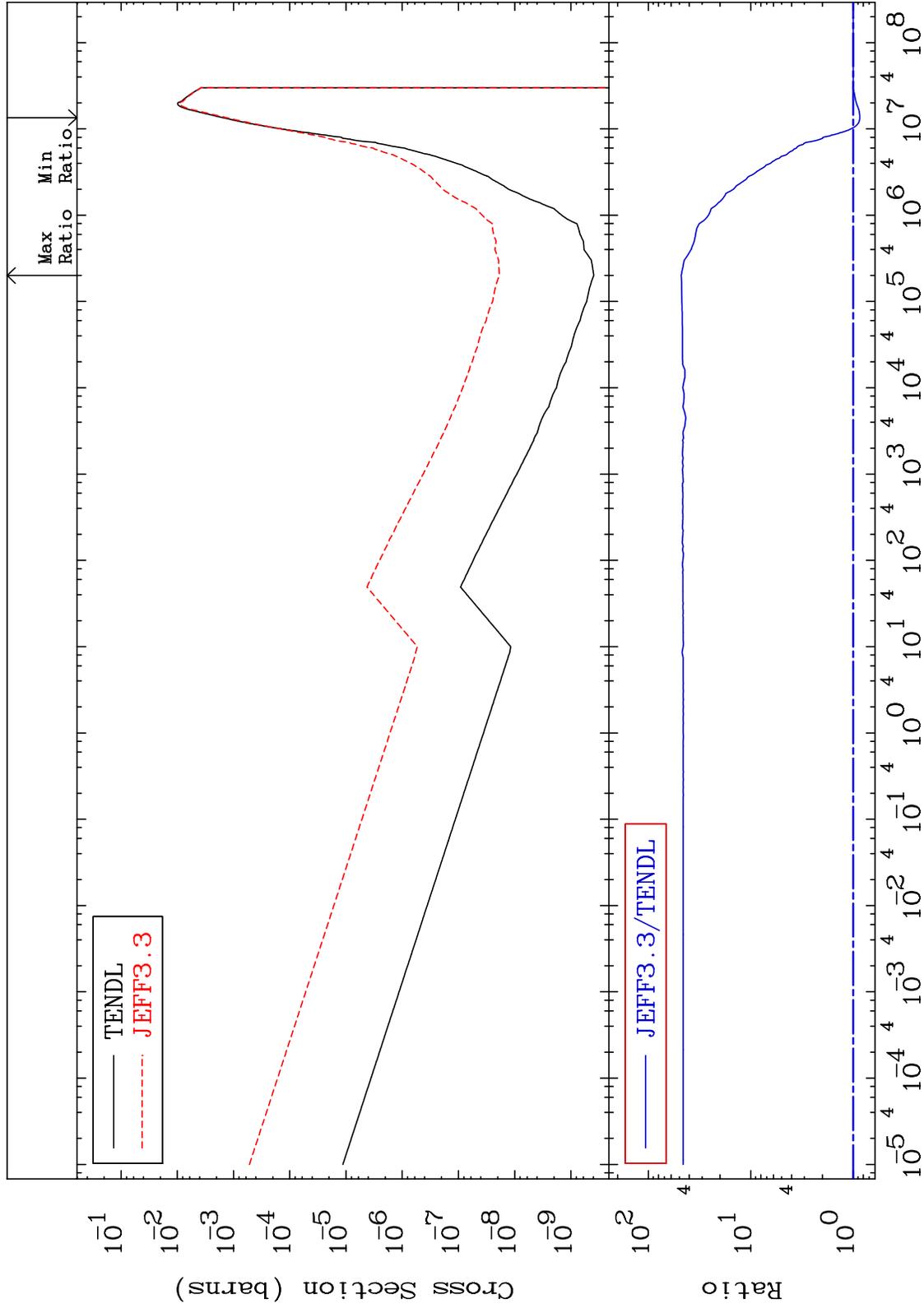


MAT 5446

(n, α)

54-Xe-131

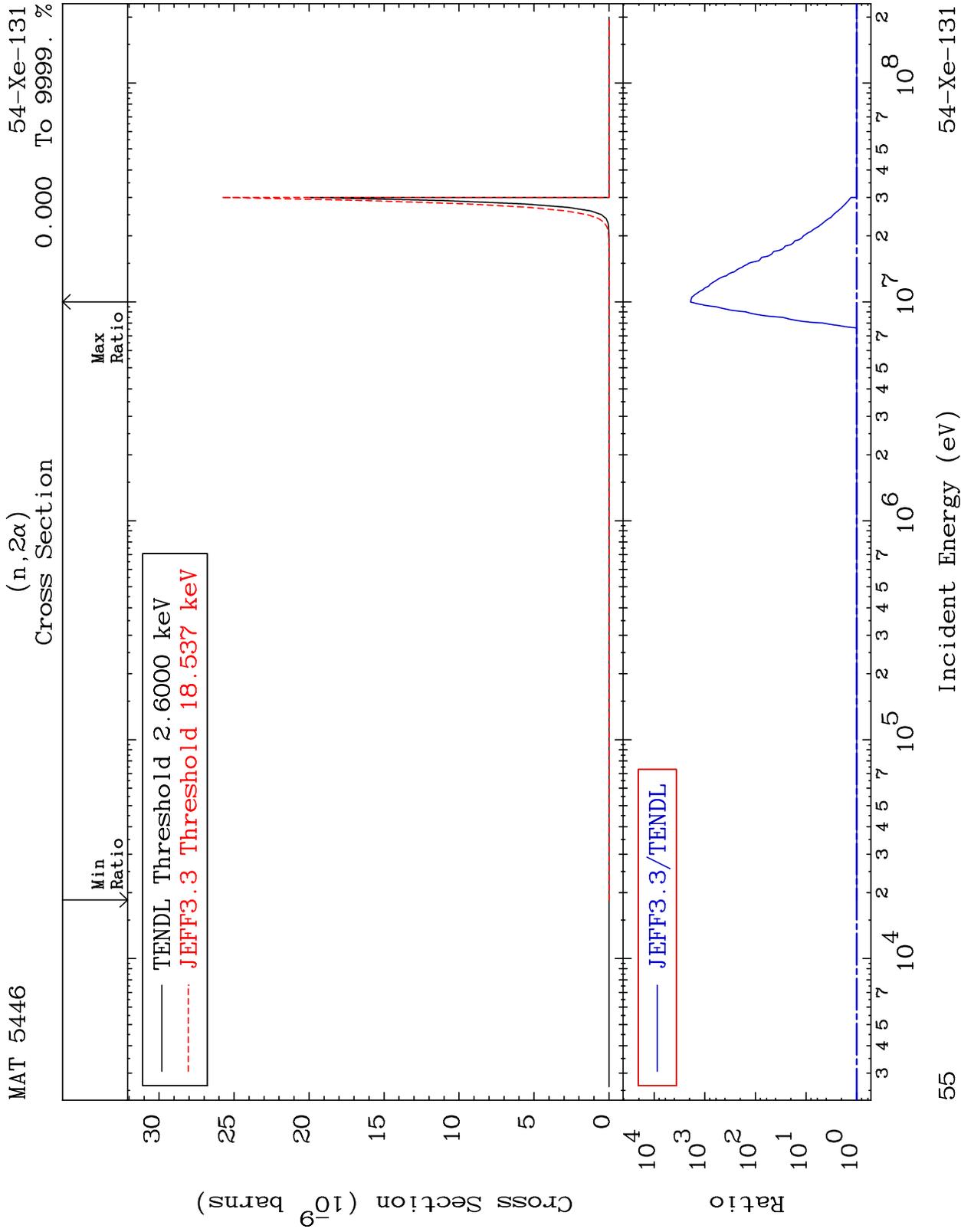
-13.72 To 4688. %



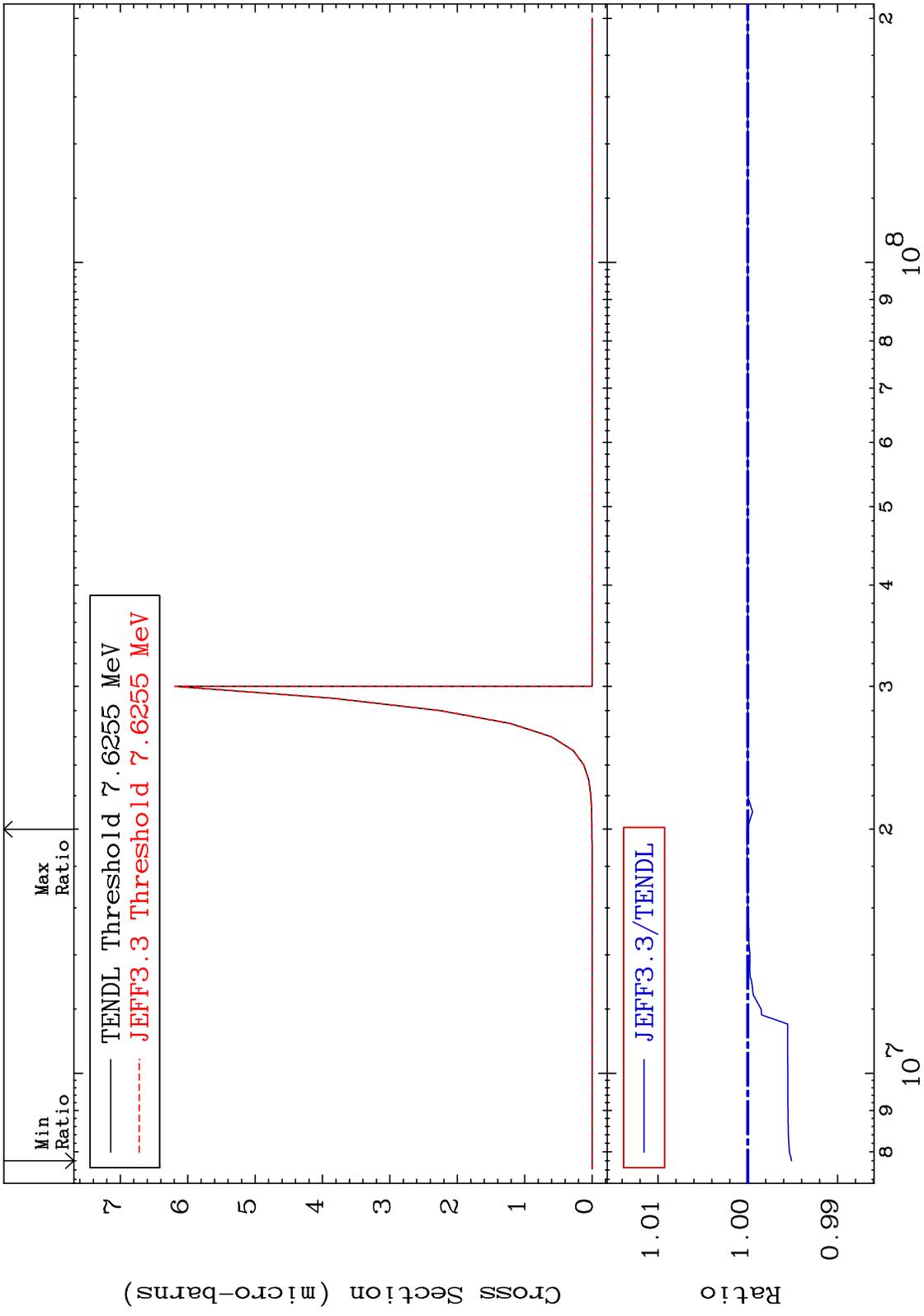
54

Incident Energy (eV)

54-Xe-131



MAT 5446 (n,2p) Cross Section 54-Xe-131 -0.487 To 0.009 %



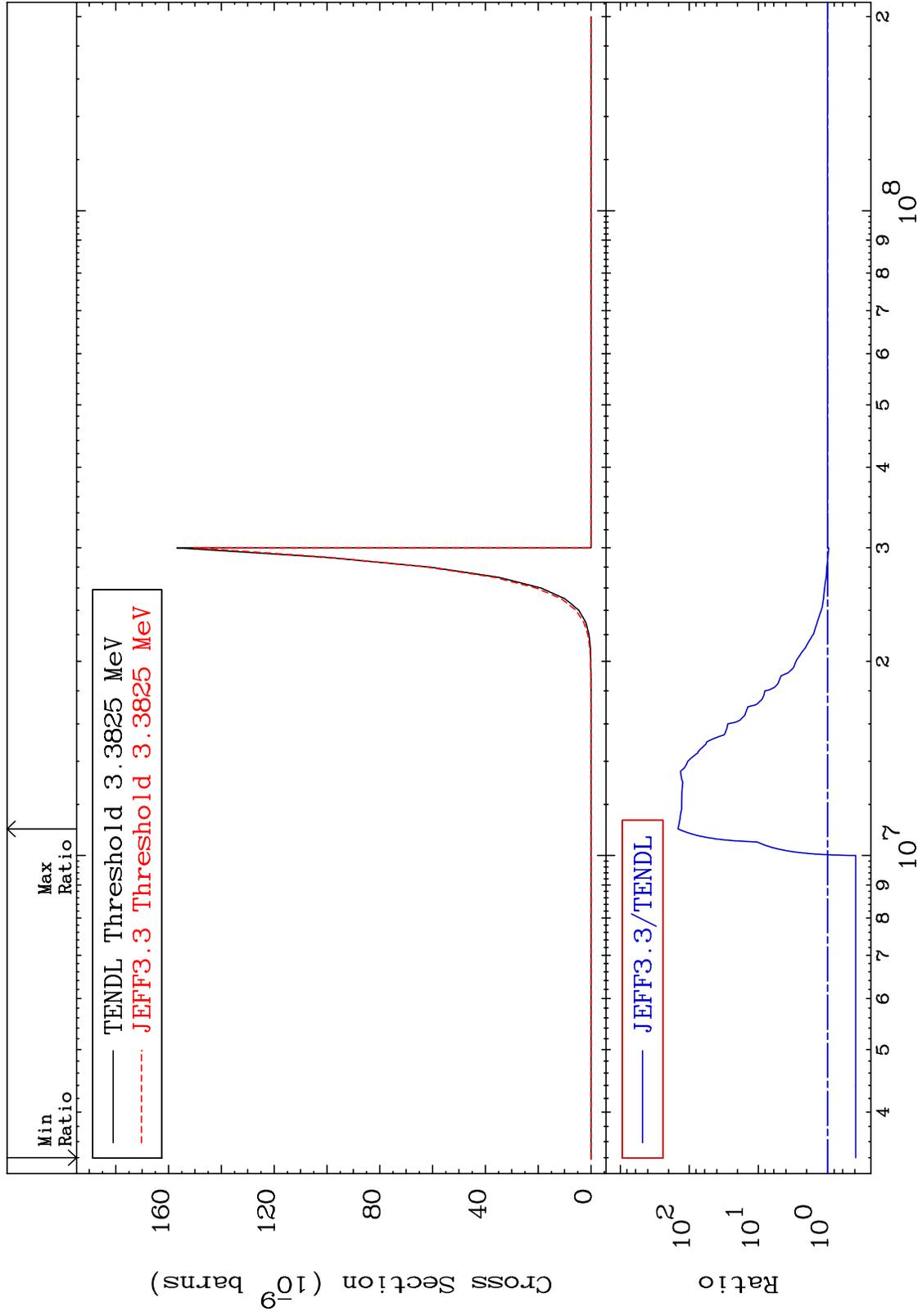
MAT 5446

(n,p) α

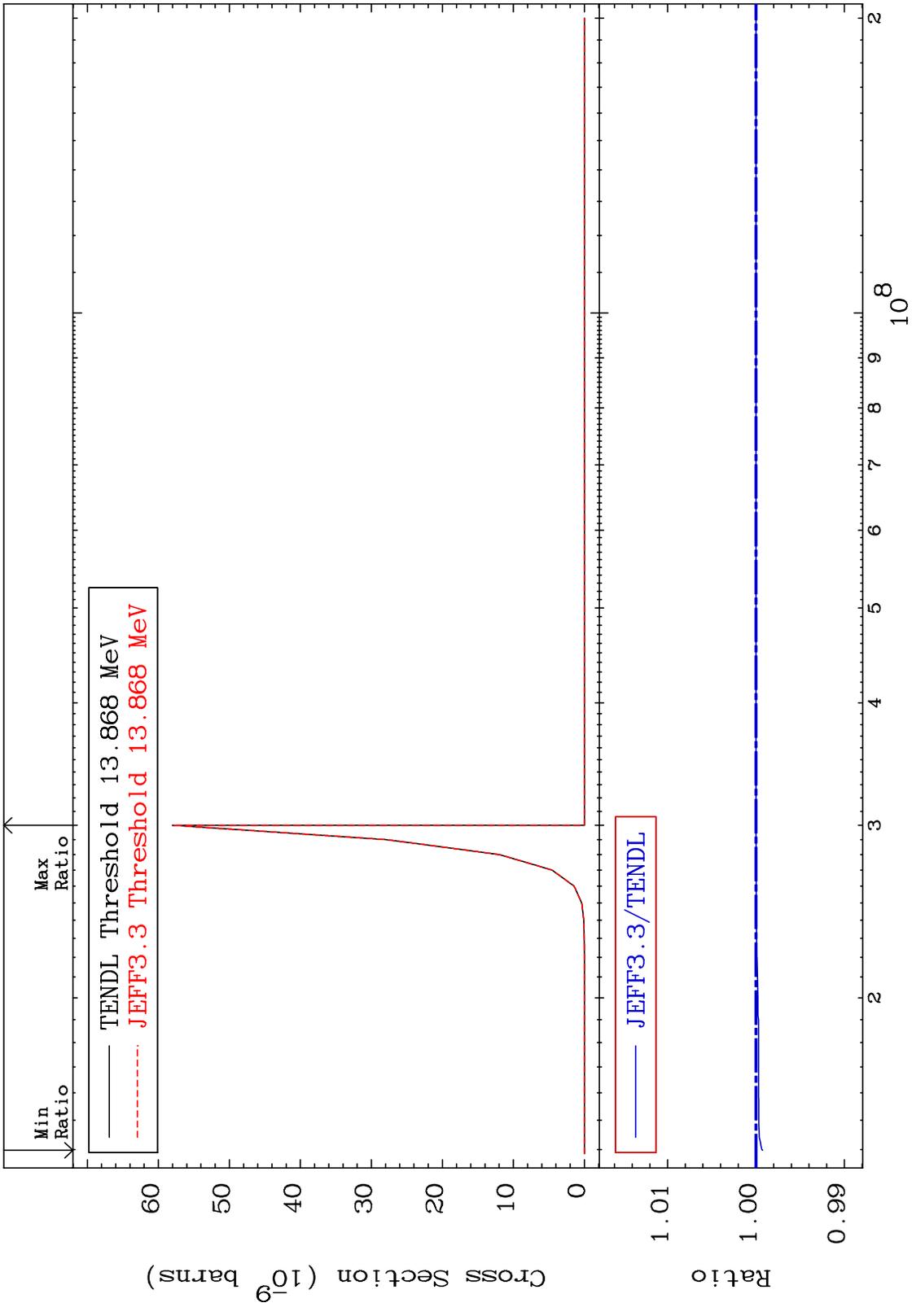
54-Xe-131

-61.13 To 9999. %

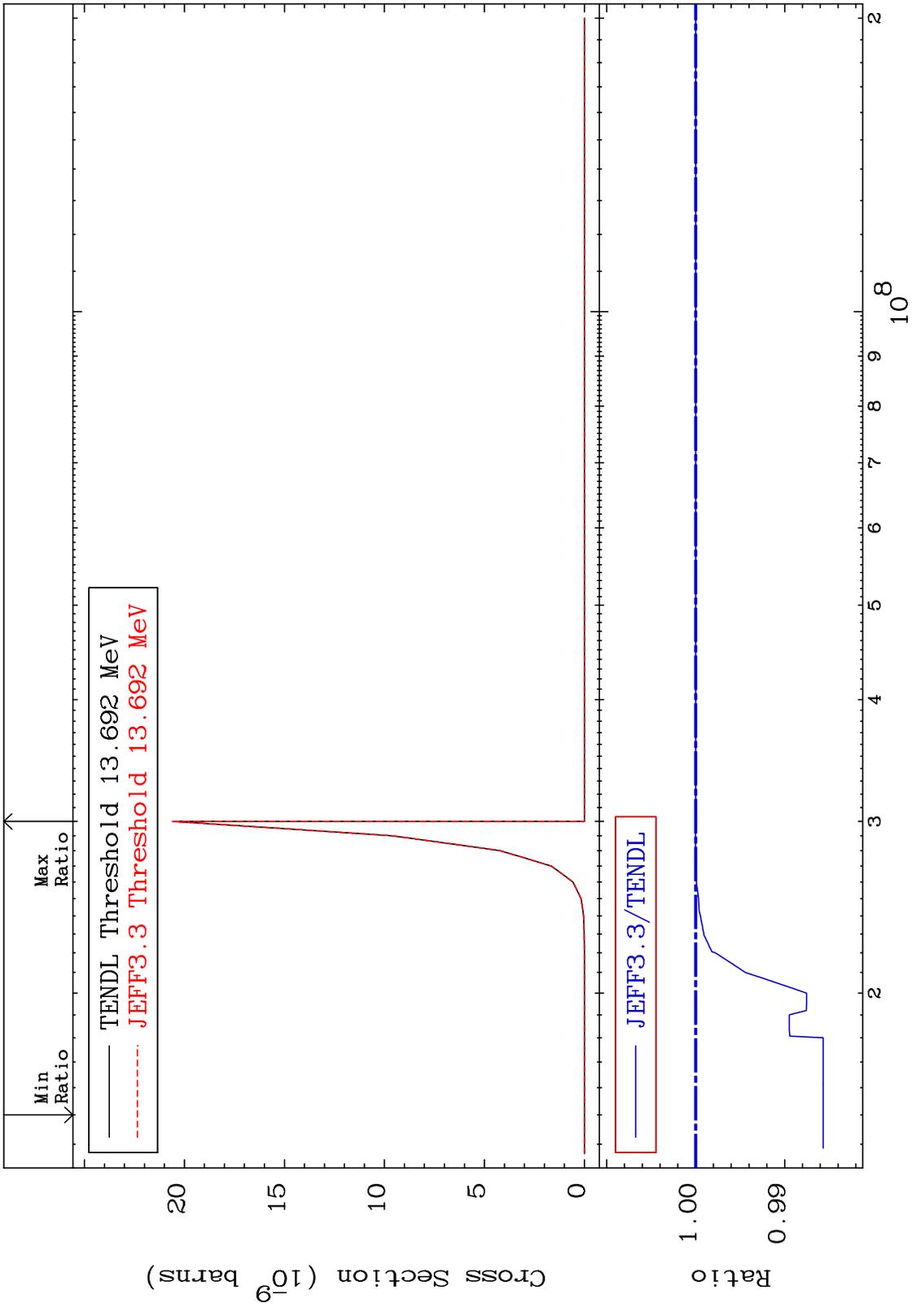
Cross Section



MAT 5446 (n,p) d 54-Xe-131
 Cross Section -0.075 To 0.000 %



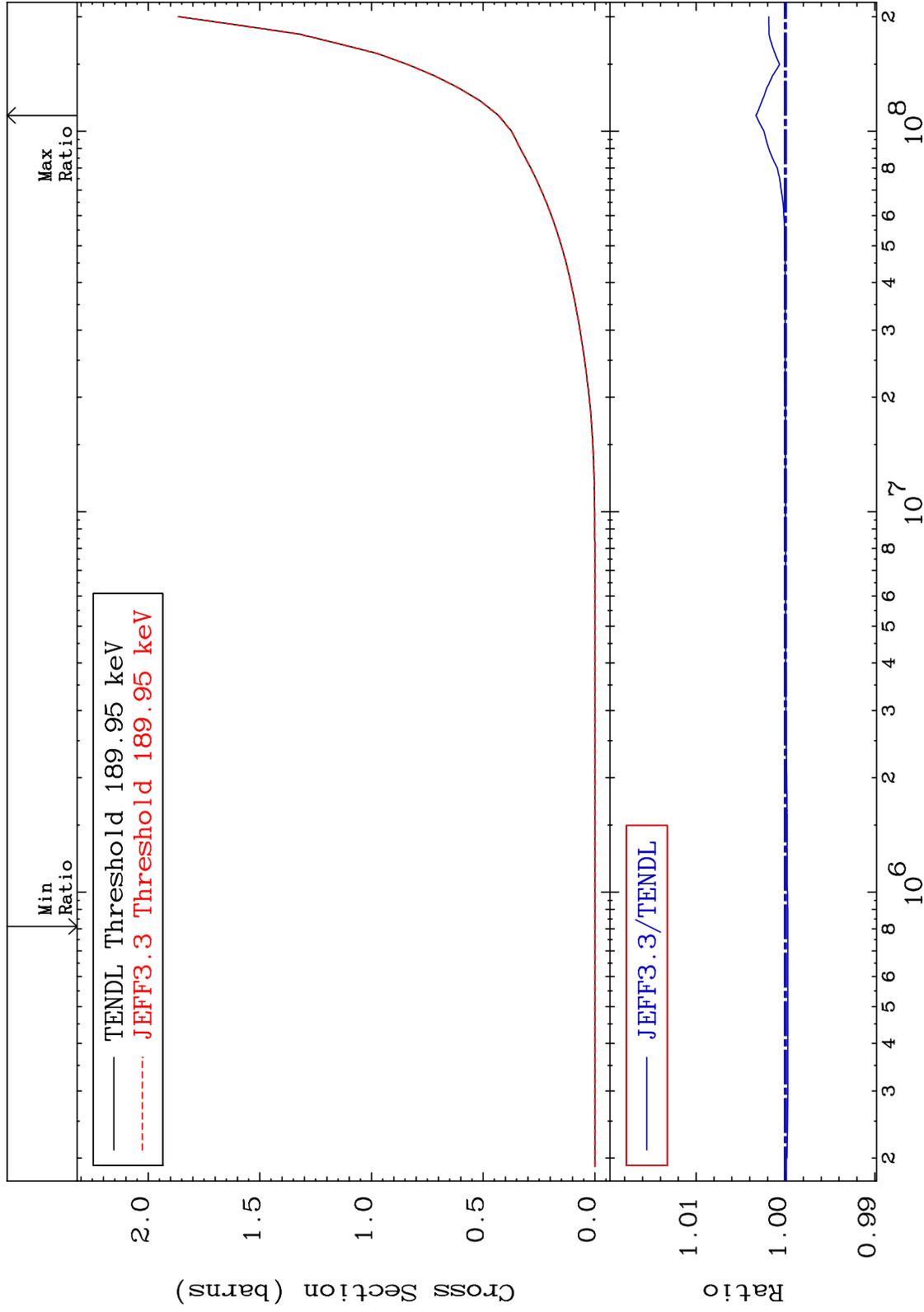
MAT 5446 (n,p) t 54-Xe-131
 Cross Section -1.433 To 0.002 %



MAT 5446

Hydrogen Production
Cross Section

54-Xe-131
-0.026 To 0.330 %



60

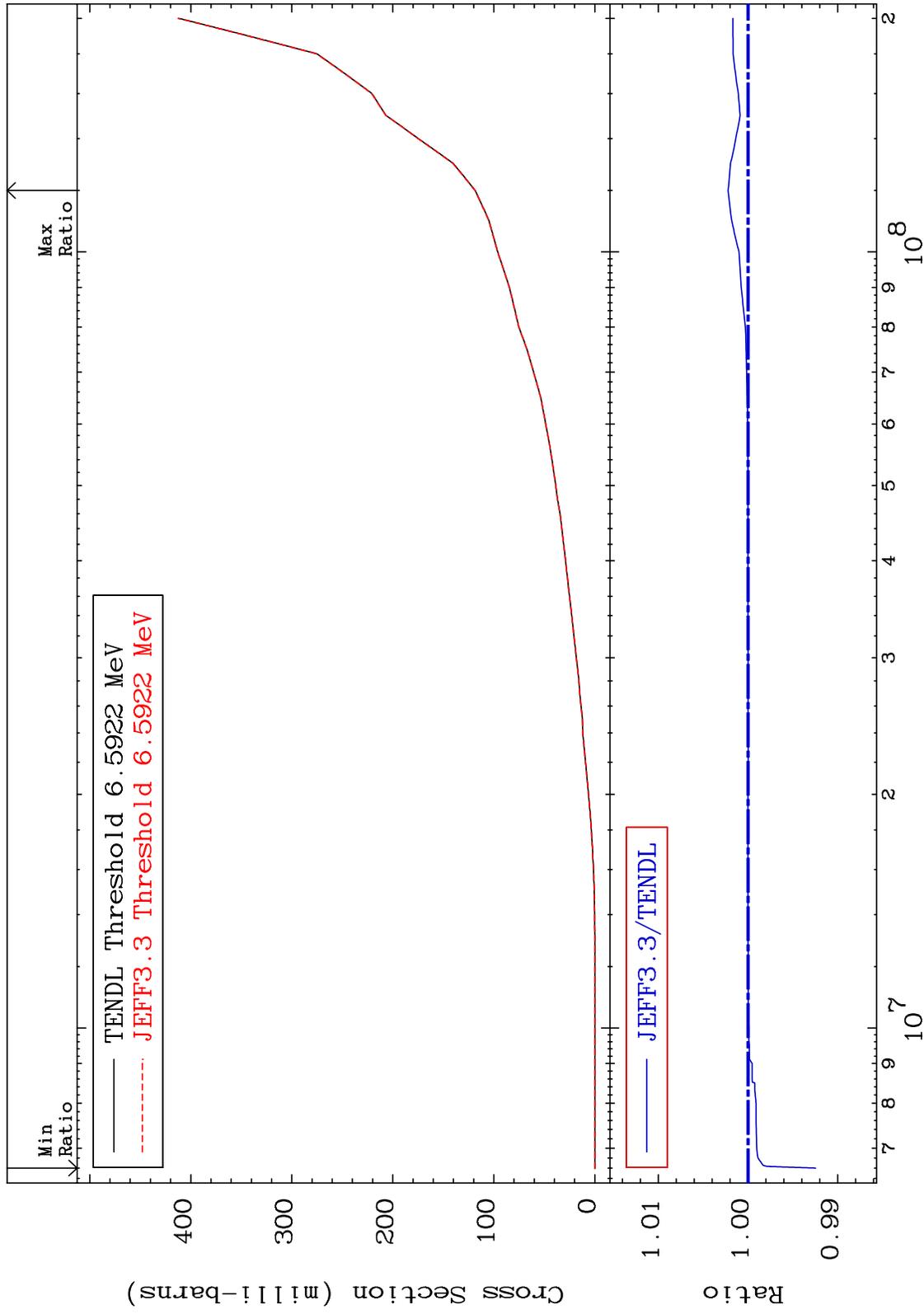
Incident Energy (eV)

54-Xe-131

MAT 5446

Deuterium Production
Cross Section

54-Xe-131
-0.753 To 0.222 %



61

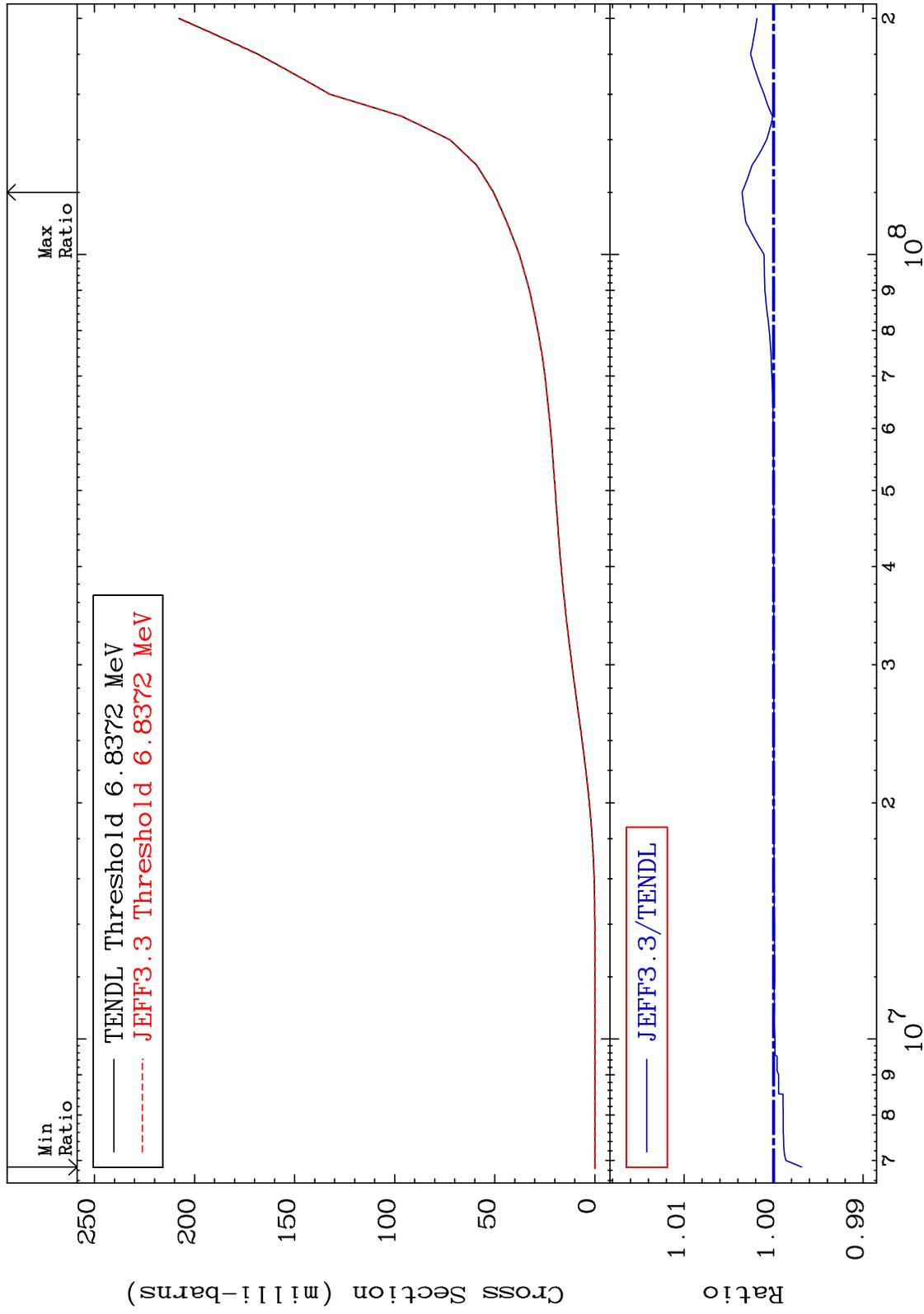
Incident Energy (eV)

54-Xe-131

MAT 5446

Tritium Production
Cross Section

54-Xe-131
-0.314 To 0.353 %



62

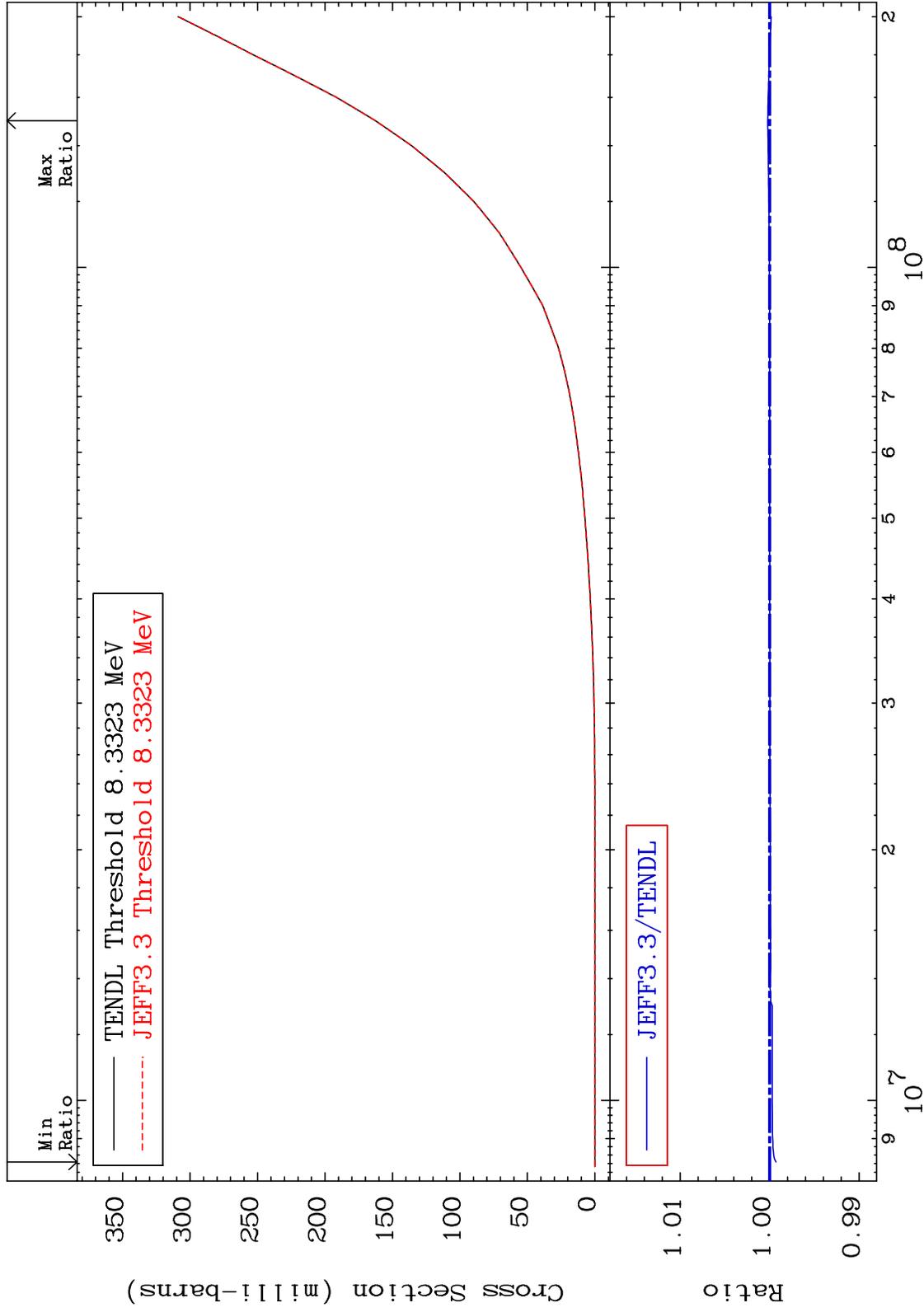
Incident Energy (eV)

54-Xe-131

MAT 5446

He-3 Production
Cross Section

54-Xe-131
-0.072 To 0.022 %



63

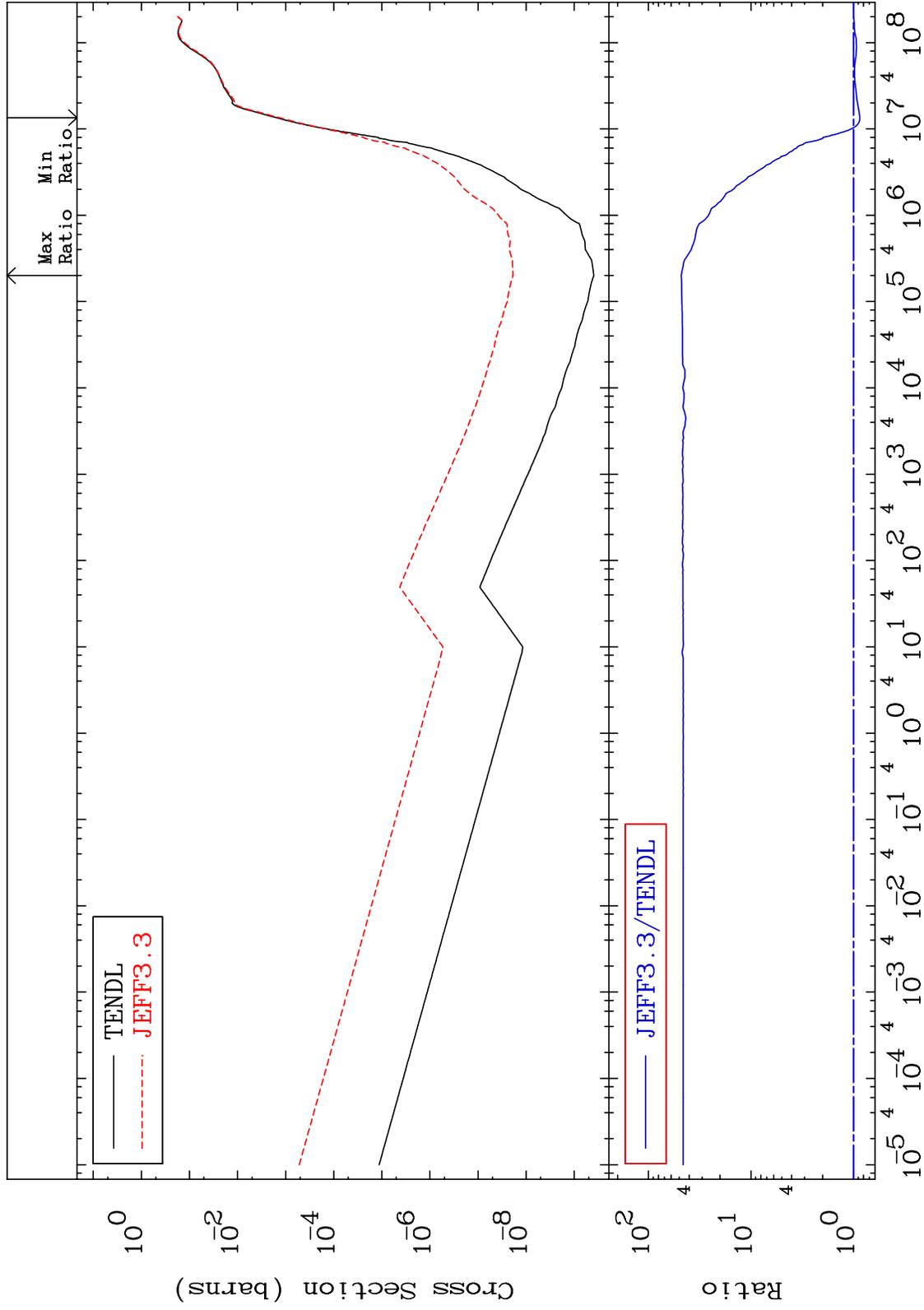
Incident Energy (eV)

54-Xe-131

MAT 5446

He-4 Production
Cross Section

54-Xe-131
-13.30 To 4688. %

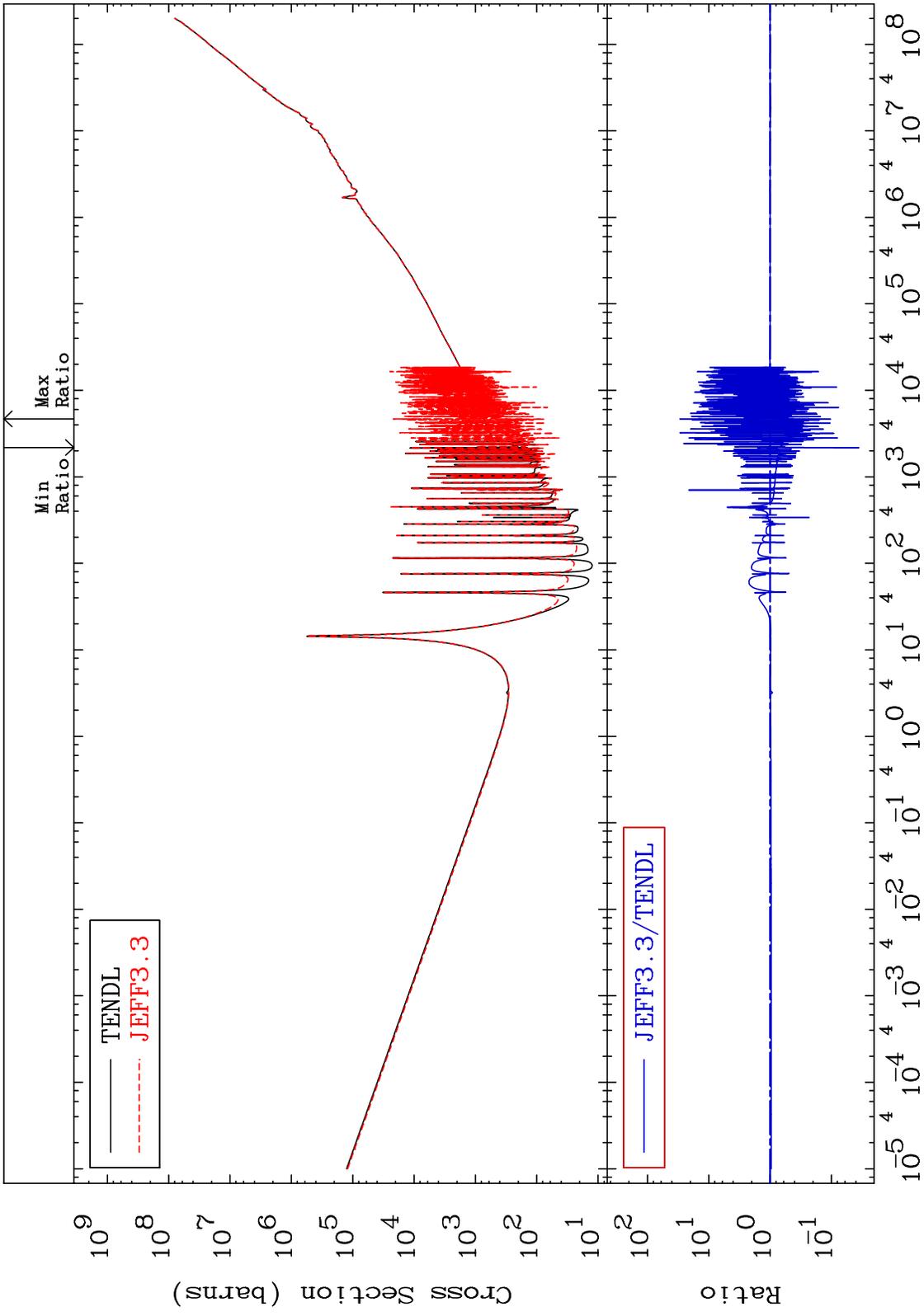


64

Incident Energy (eV)

54-Xe-131

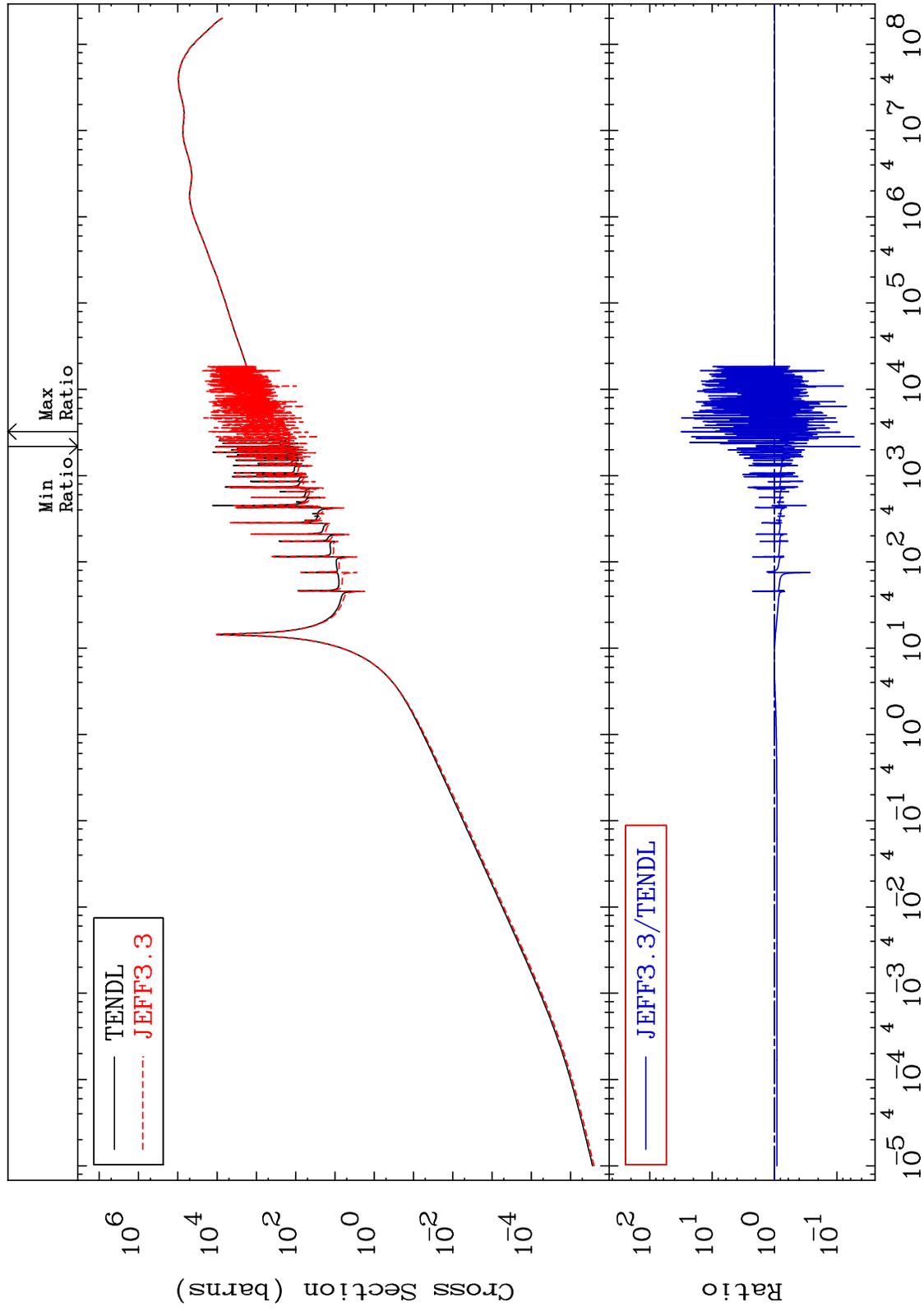
MAT 5446 Kerma total (eV-barns) 54-Xe-131
 Cross Section -96.42 To 2875. %



MAT 5446

Kerma elastic
Cross Section

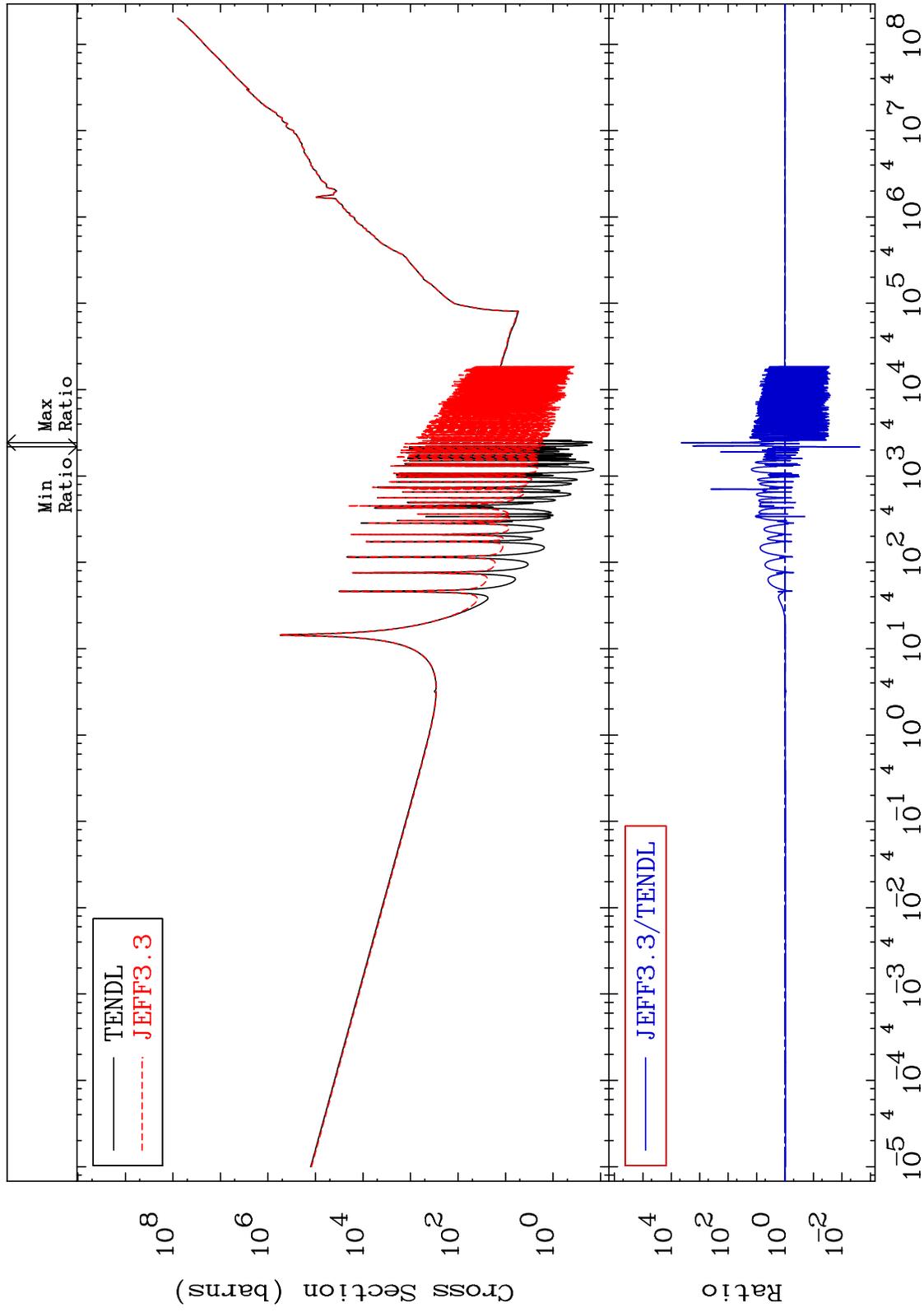
54-Xe-131
-95.73 To 3002. %



MAT 5446

Kerma non-elastic (all but mt2)
Cross Section

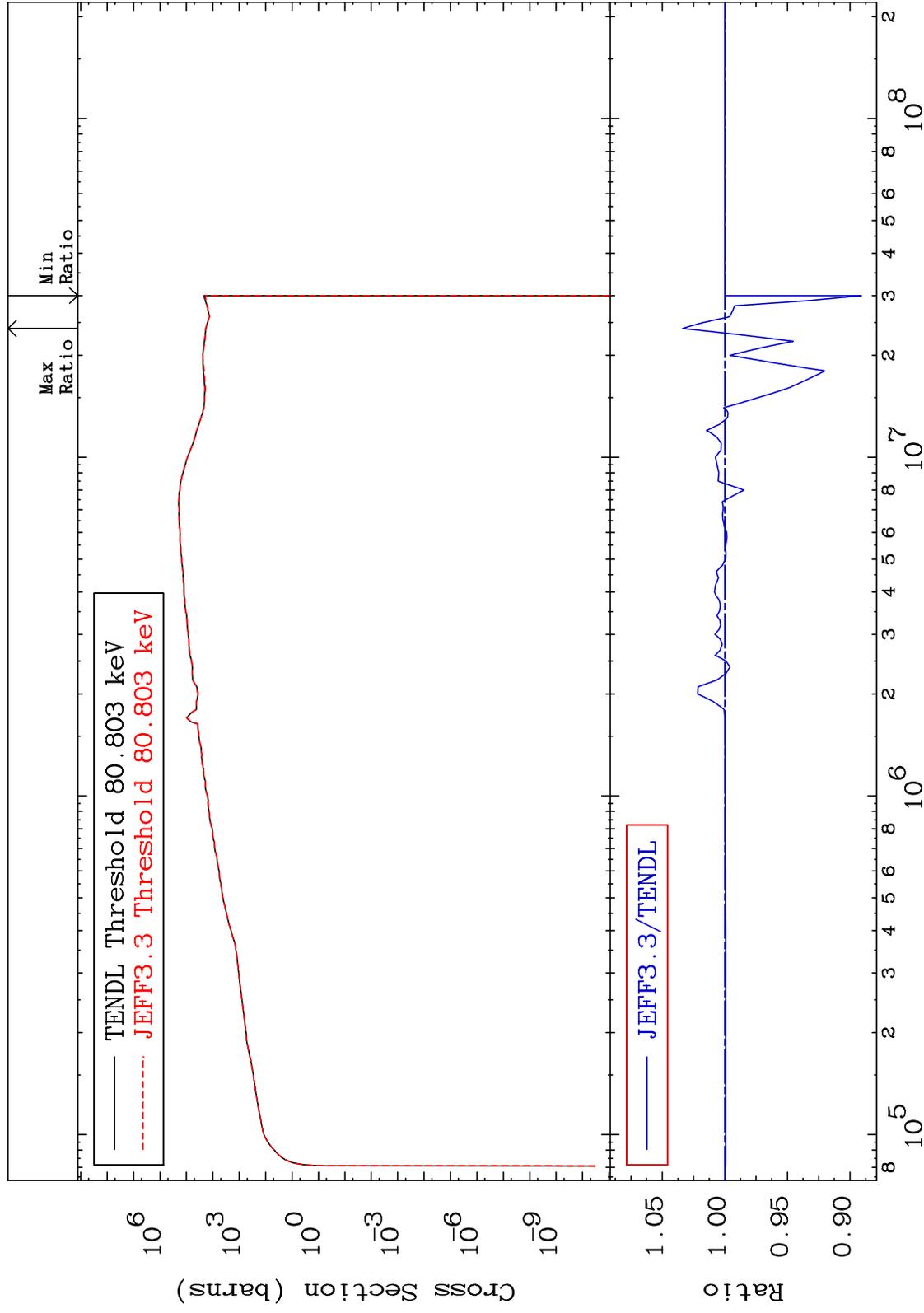
54-Xe-131
-99.77 To 9999. %



MAT 5446

Kerma inelastic (mt51-91)
Cross Section

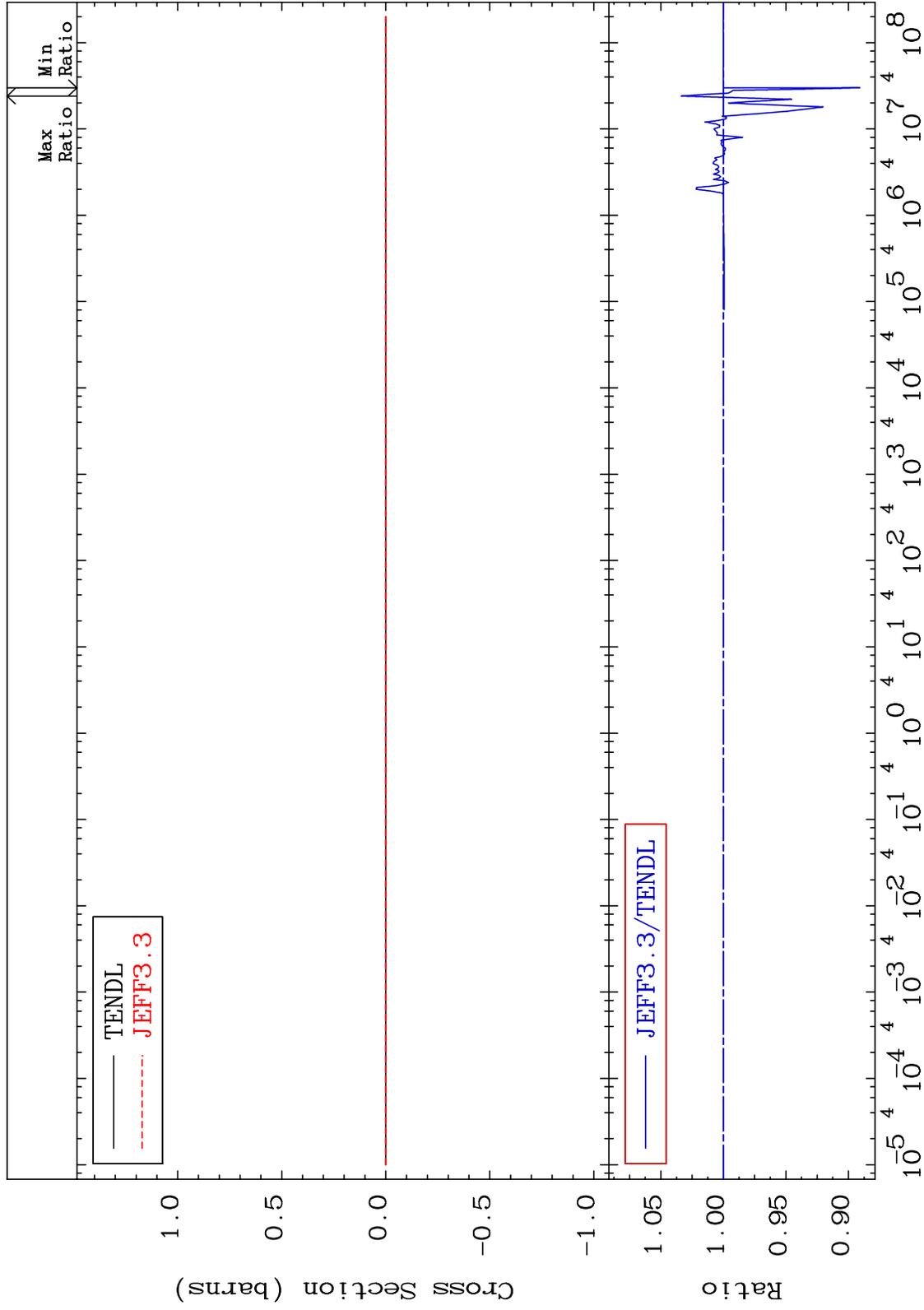
54-Xe-131
-10.91 To 3.370 %



MAT 5446

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

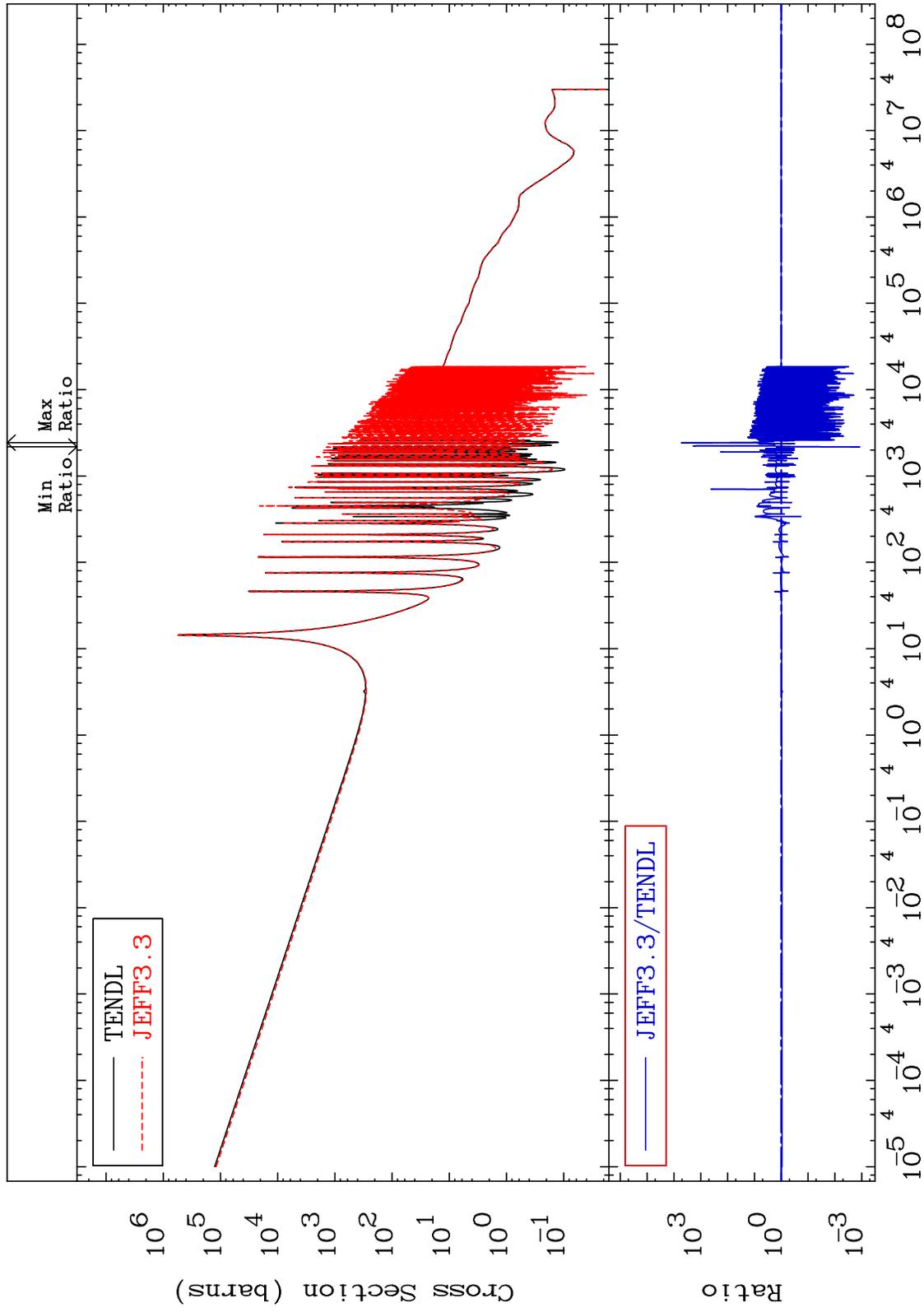
54-Xe-131
-10.91 To 3.370 %



MAT 5446

Kerma capture (mt102)
Cross Section

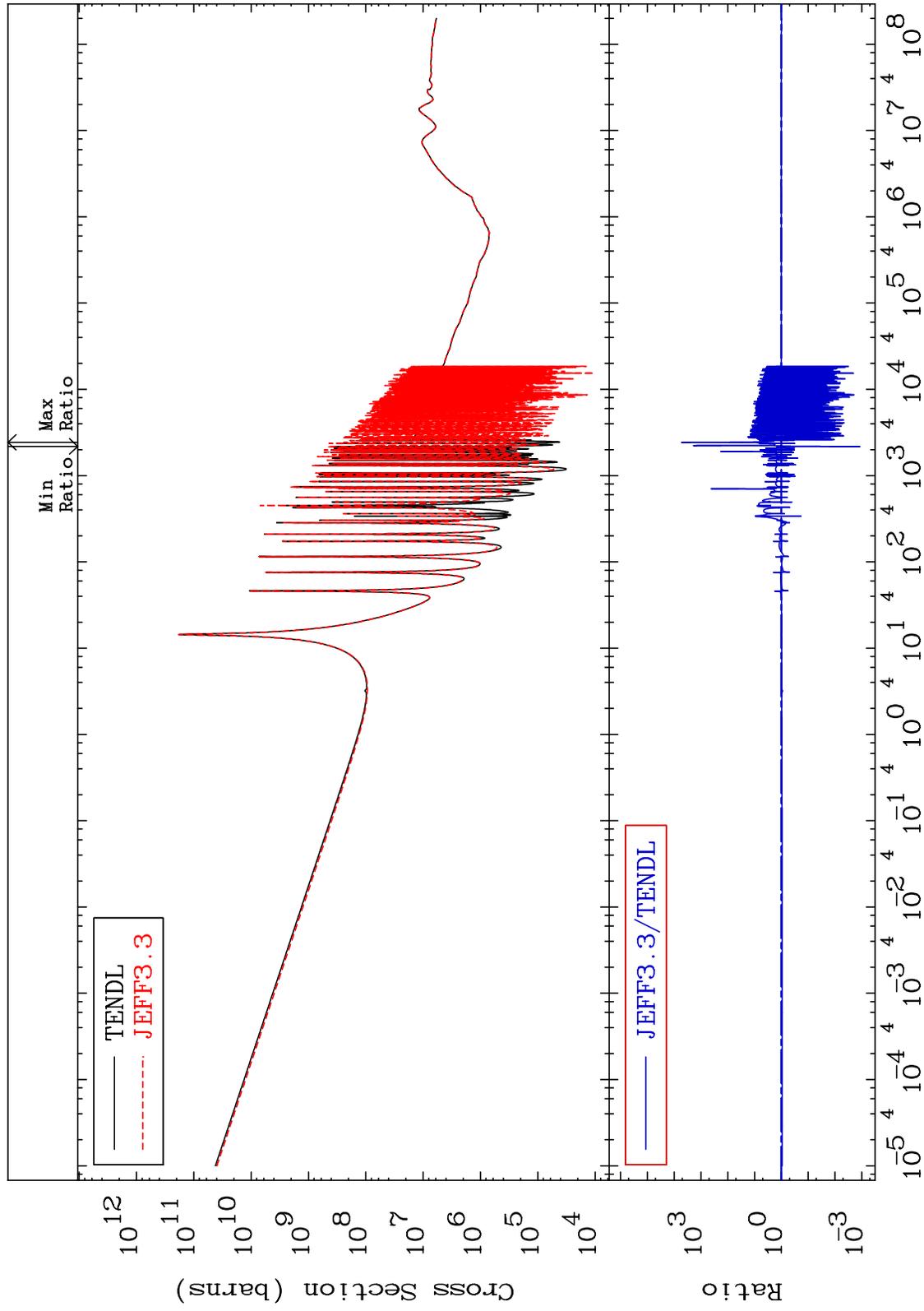
54-Xe-131
-99.88 To 9999. %



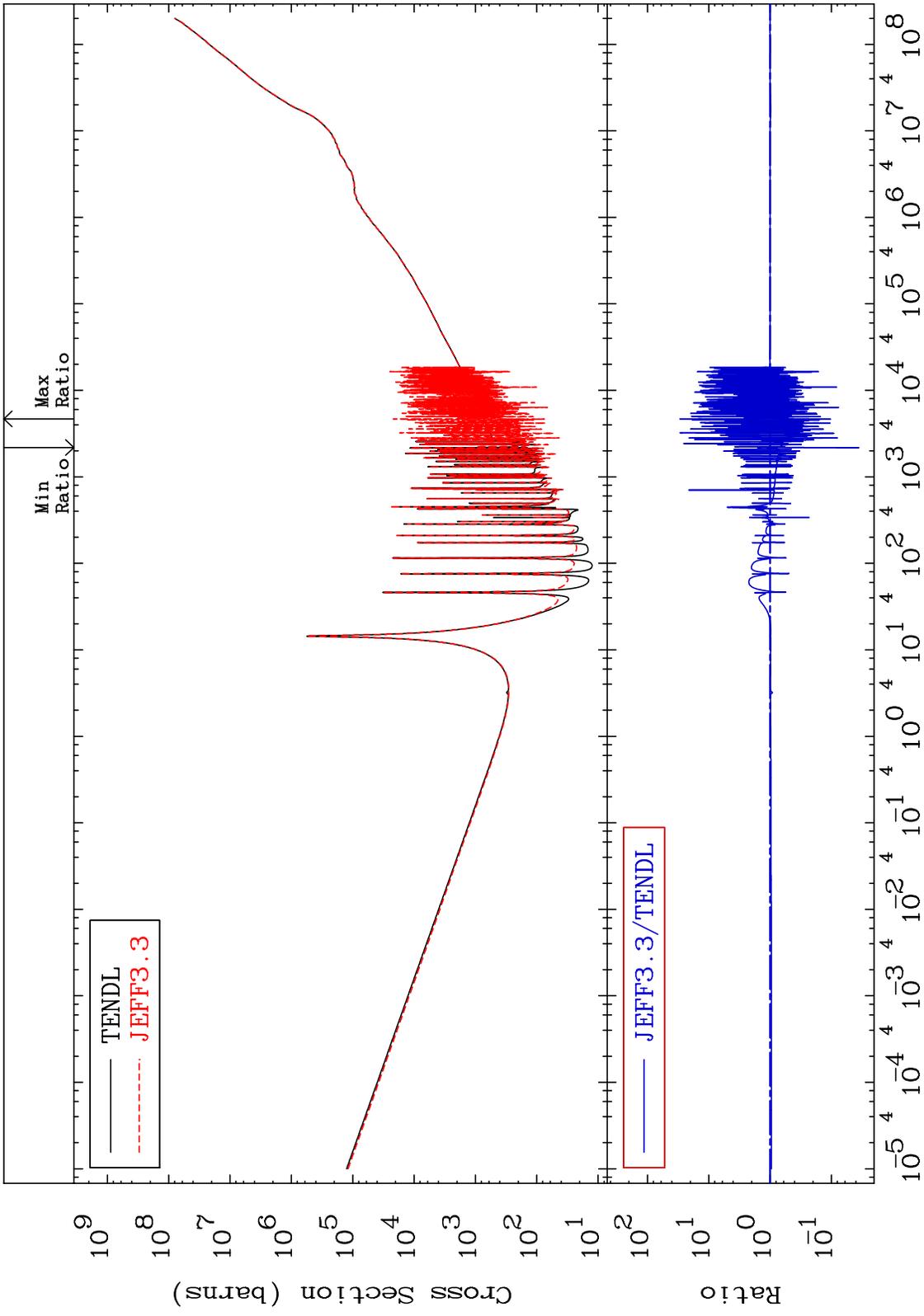
MAT 5446

Total photon (eV-barns)
Cross Section

54-Xe-131
-99.88 To 9999. %



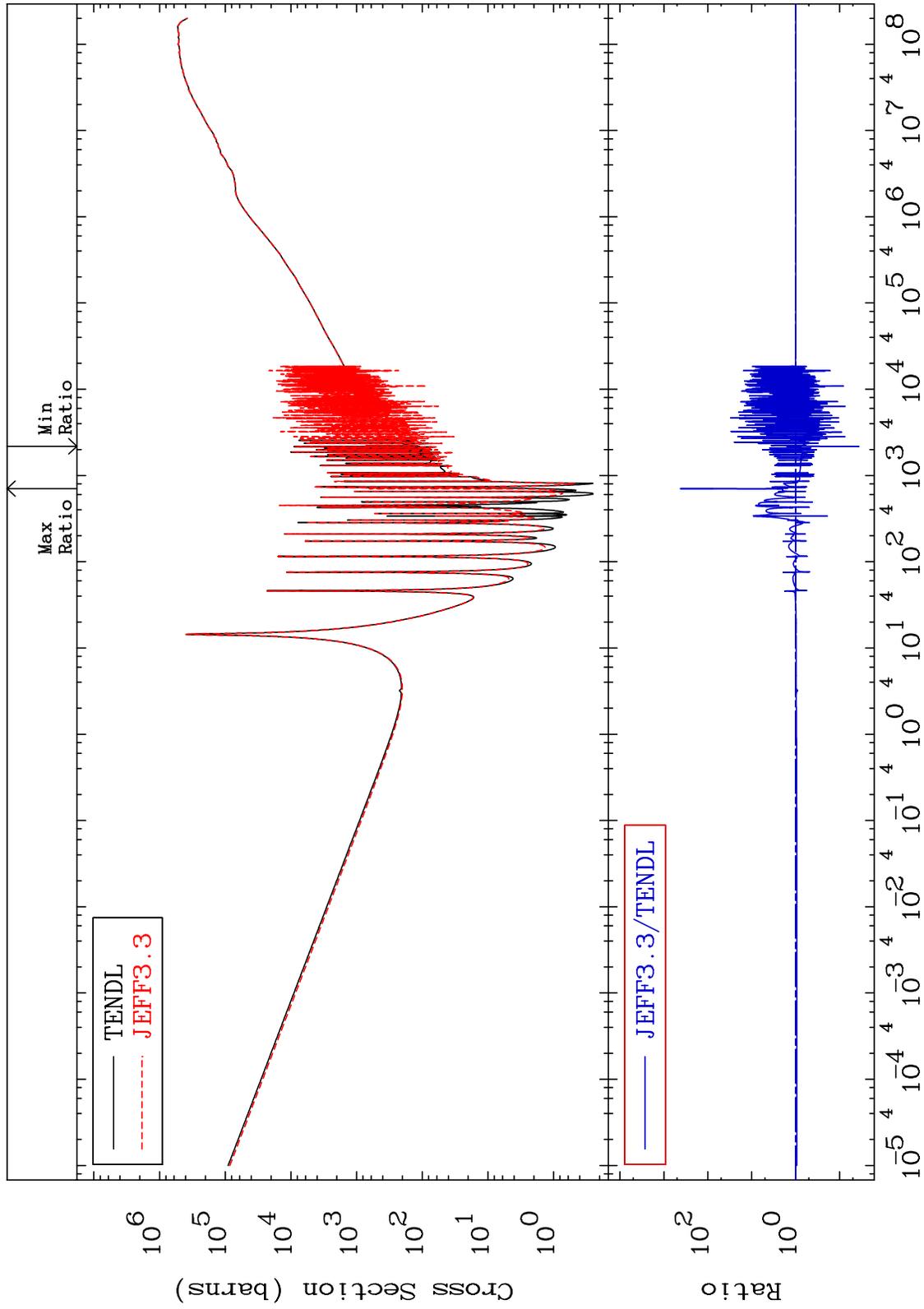
MAT 5446 Total kinematic kerma (high limit) 54-Xe-131
Cross Section -96.42 To 2875. %



MAT 5446

Dpa total (eV-barns)
Cross Section

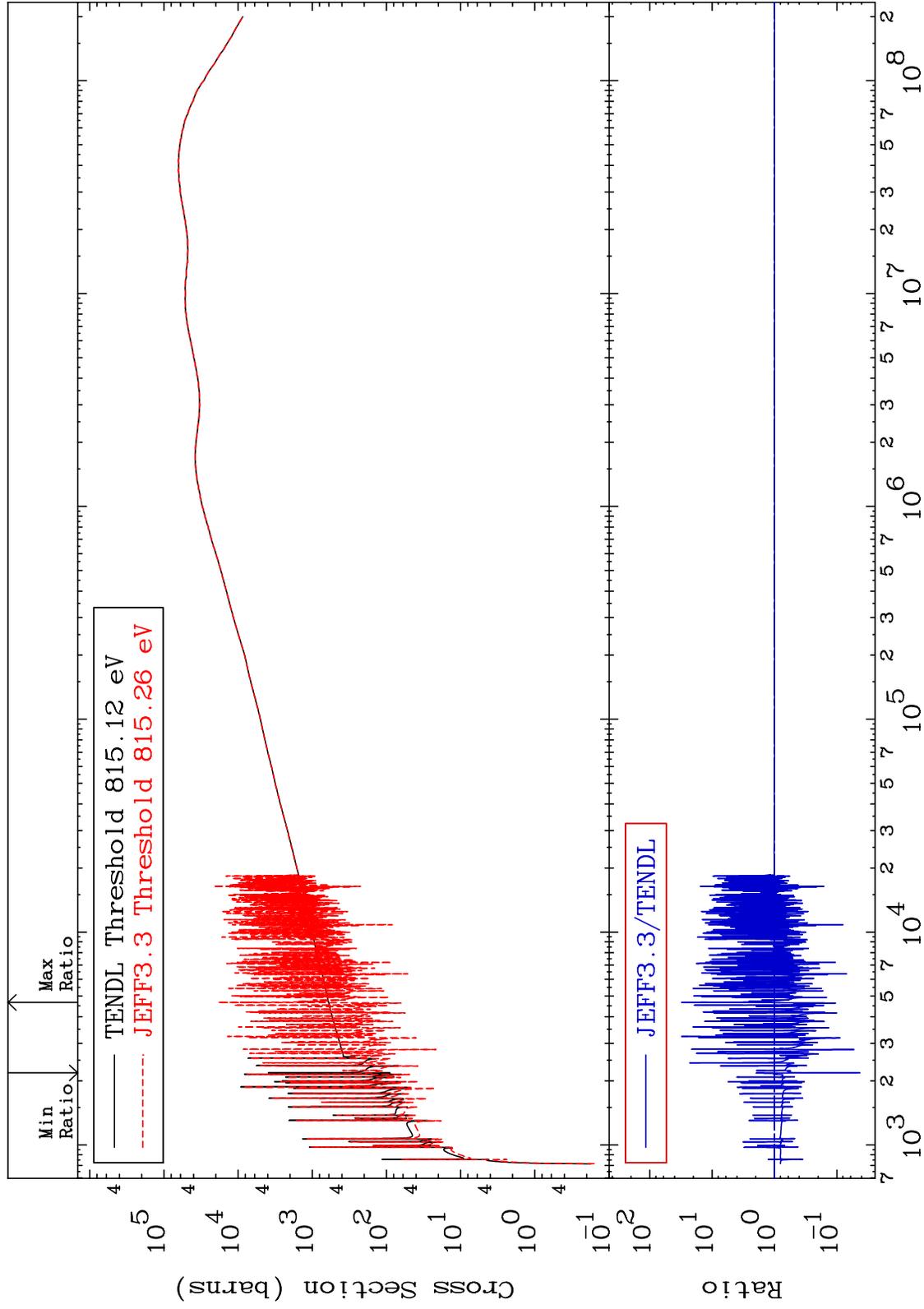
54-Xe-131
-96.39 To 9999. %



MAT 5446

Dpa elastic (mt2)
Cross Section

54-Xe-131
-95.73 To 3001. %

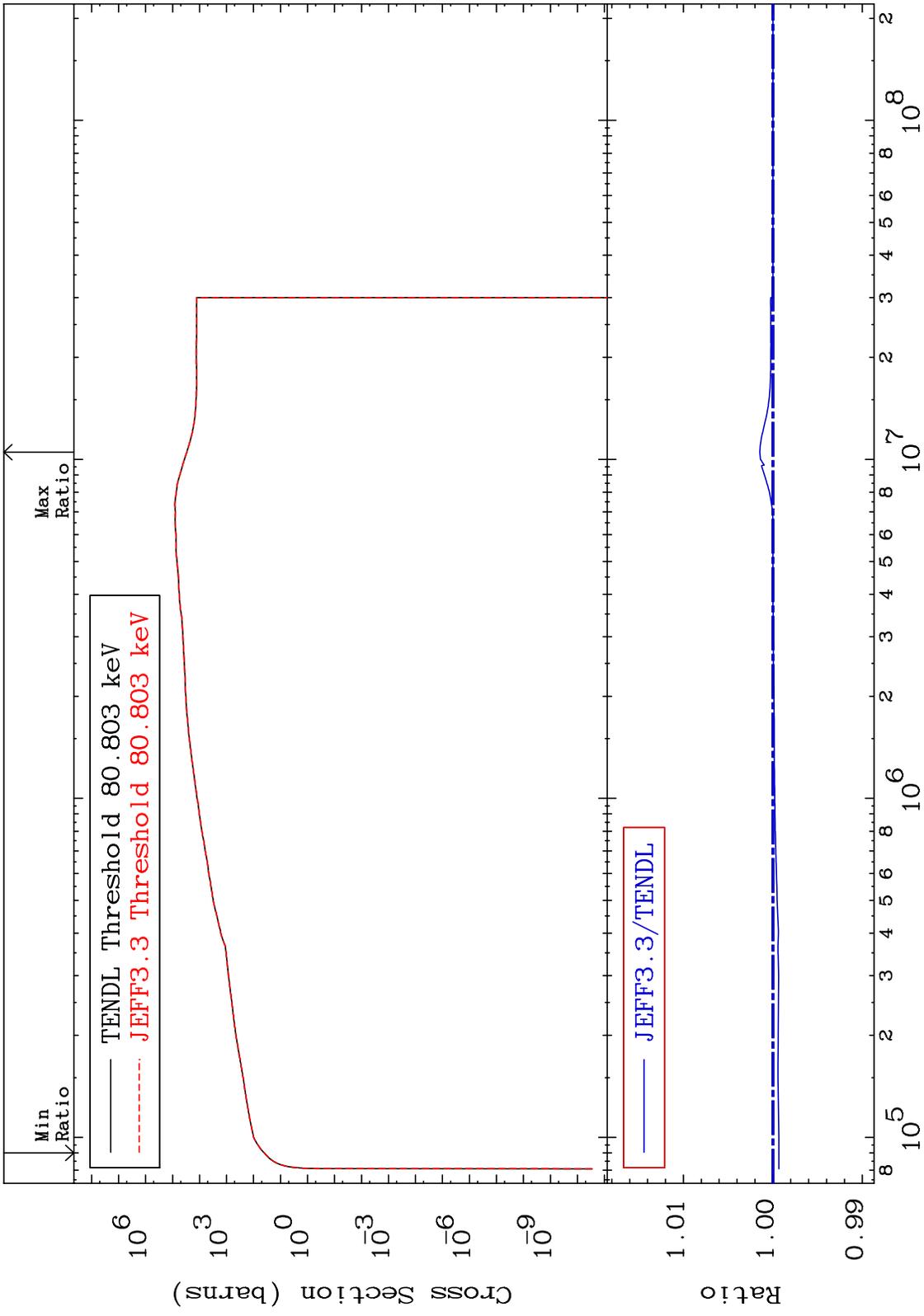


74

Incident Energy (eV)

54-Xe-131

MAT 5446 Dpa inelastic (mt51-91) 54-Xe-131
Cross Section -0.066 To 0.146 %

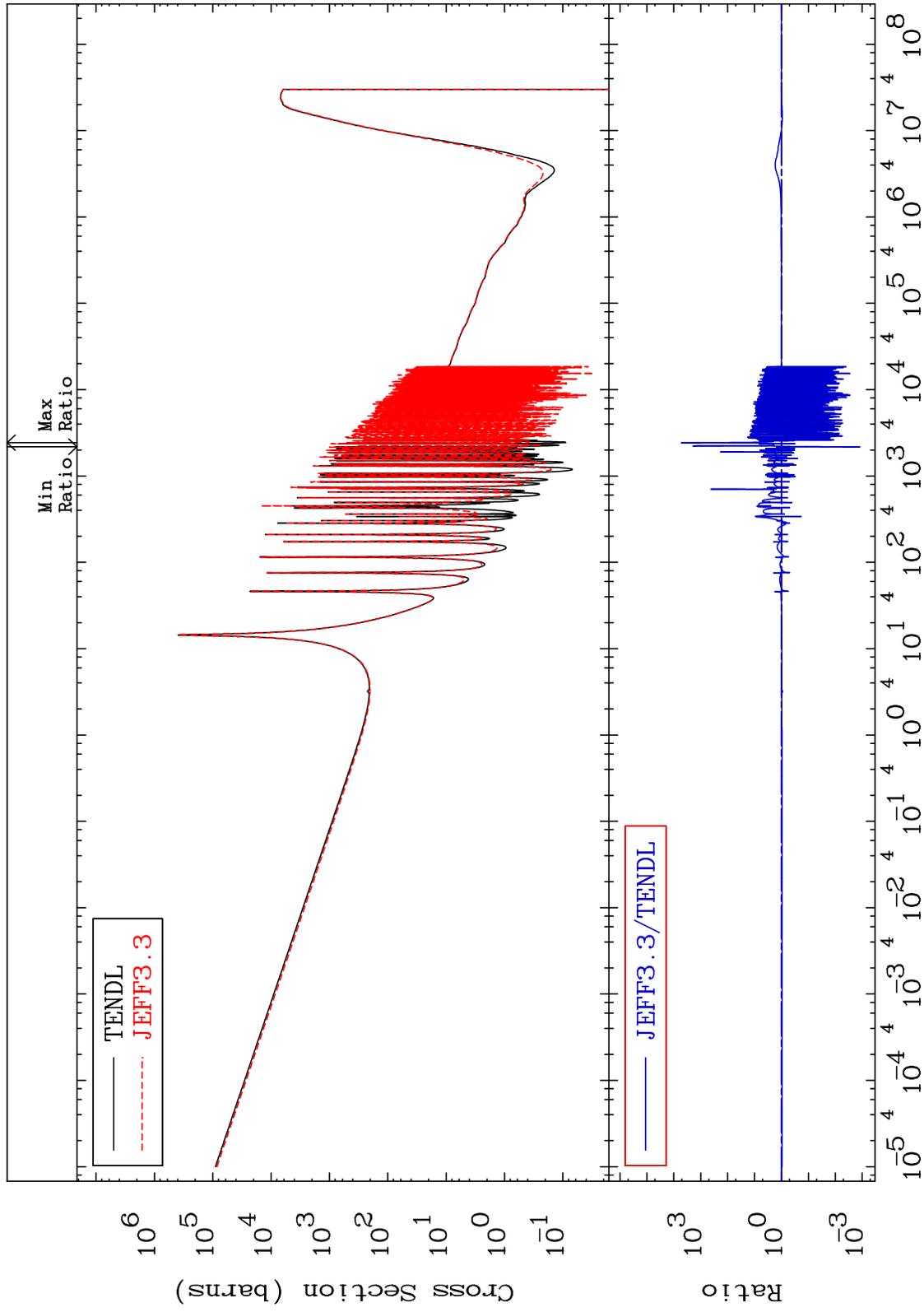


75 54-Xe-131

MAT 5446

Dpa disappearance (mt102 -120)
Cross Section

54-Xe-131
-99.88 To 9999. %

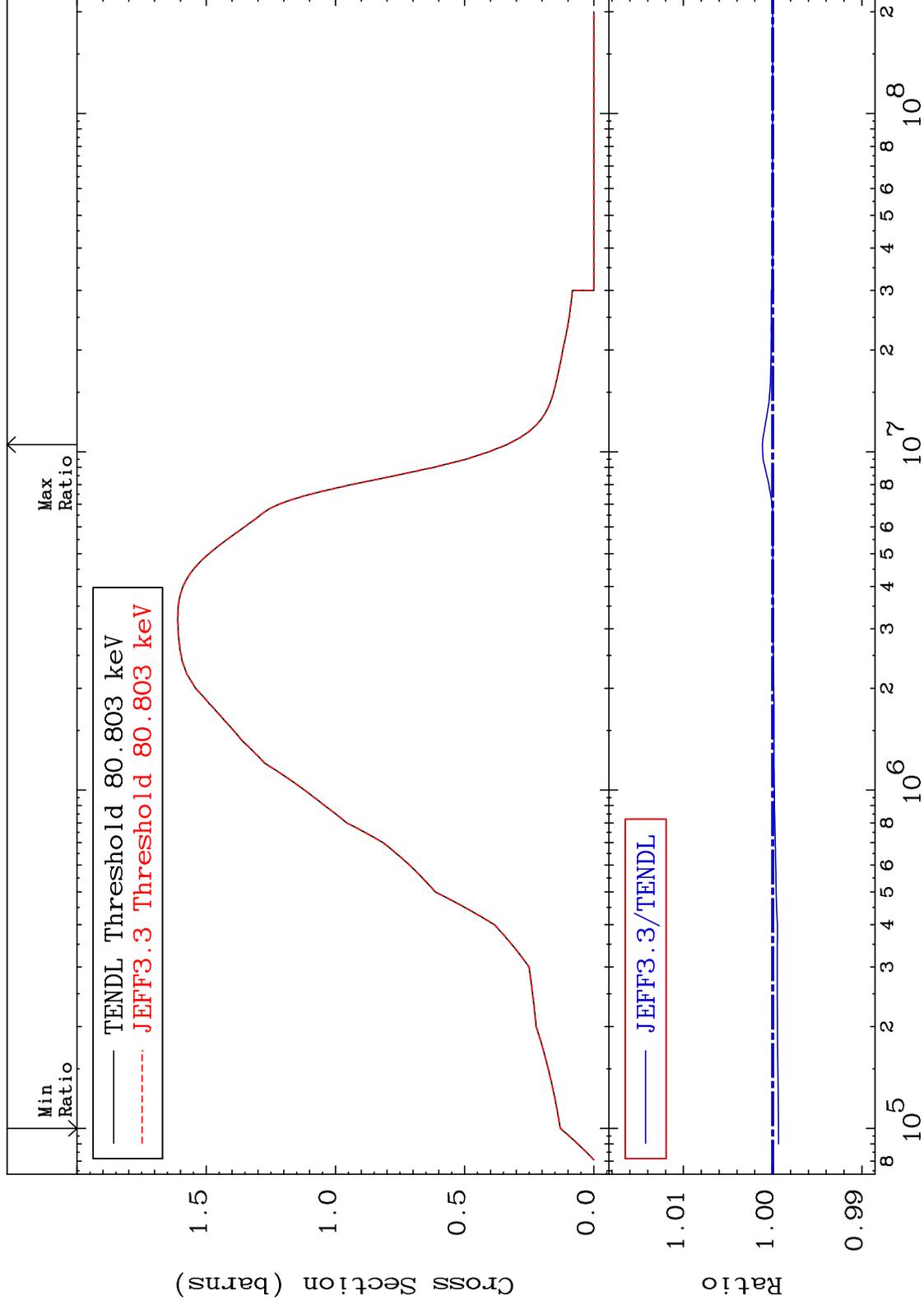


MAT 5446

Inelastic:54-Xe-131g

54-Xe-131

Radionuclide Production Cross Section -0.066 To 0.115 %



77

Incident Energy (eV)

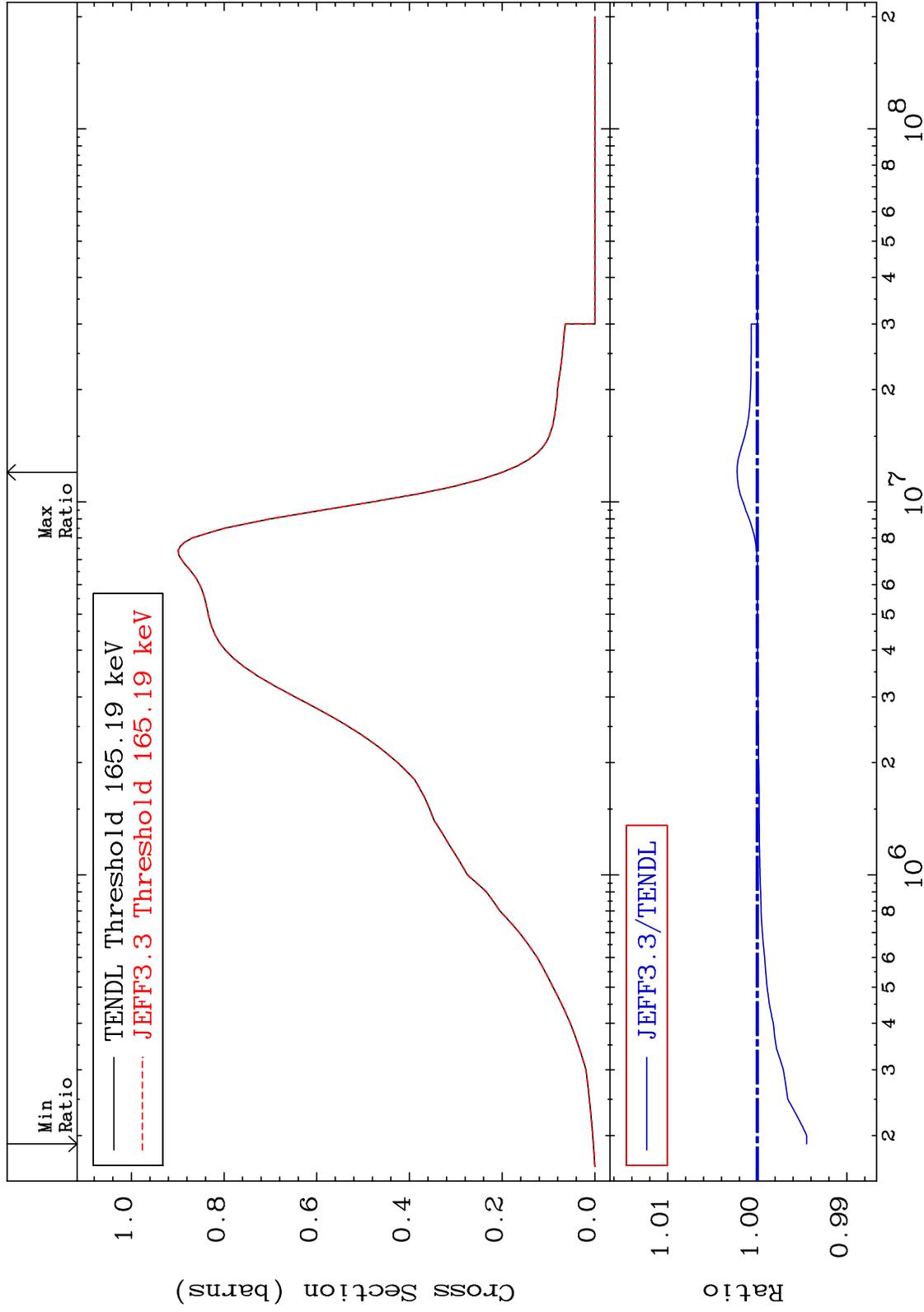
54-Xe-131

MAT 5446

Inelastic:54-Xe-131m2

54-Xe-131

Radionuclide Production Cross Section -0.551 To 0.226 %



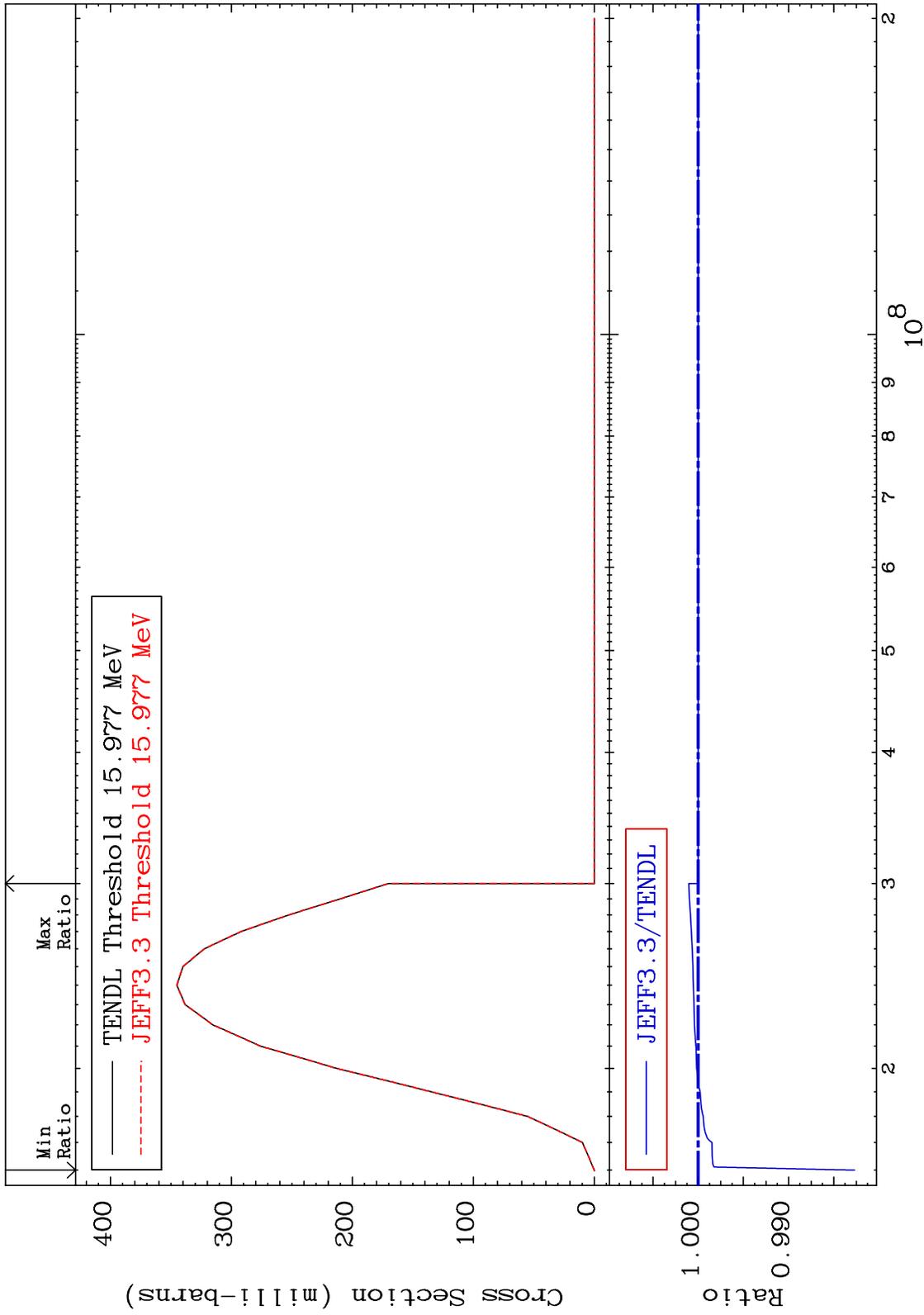
78

Incident Energy (eV)

54-Xe-131

MAT 5446

(n,3n):54-Xe-129g 54-Xe-131
Radionuclide Production Cross Section -1.731 To 0.106 %



79

Incident Energy (eV)

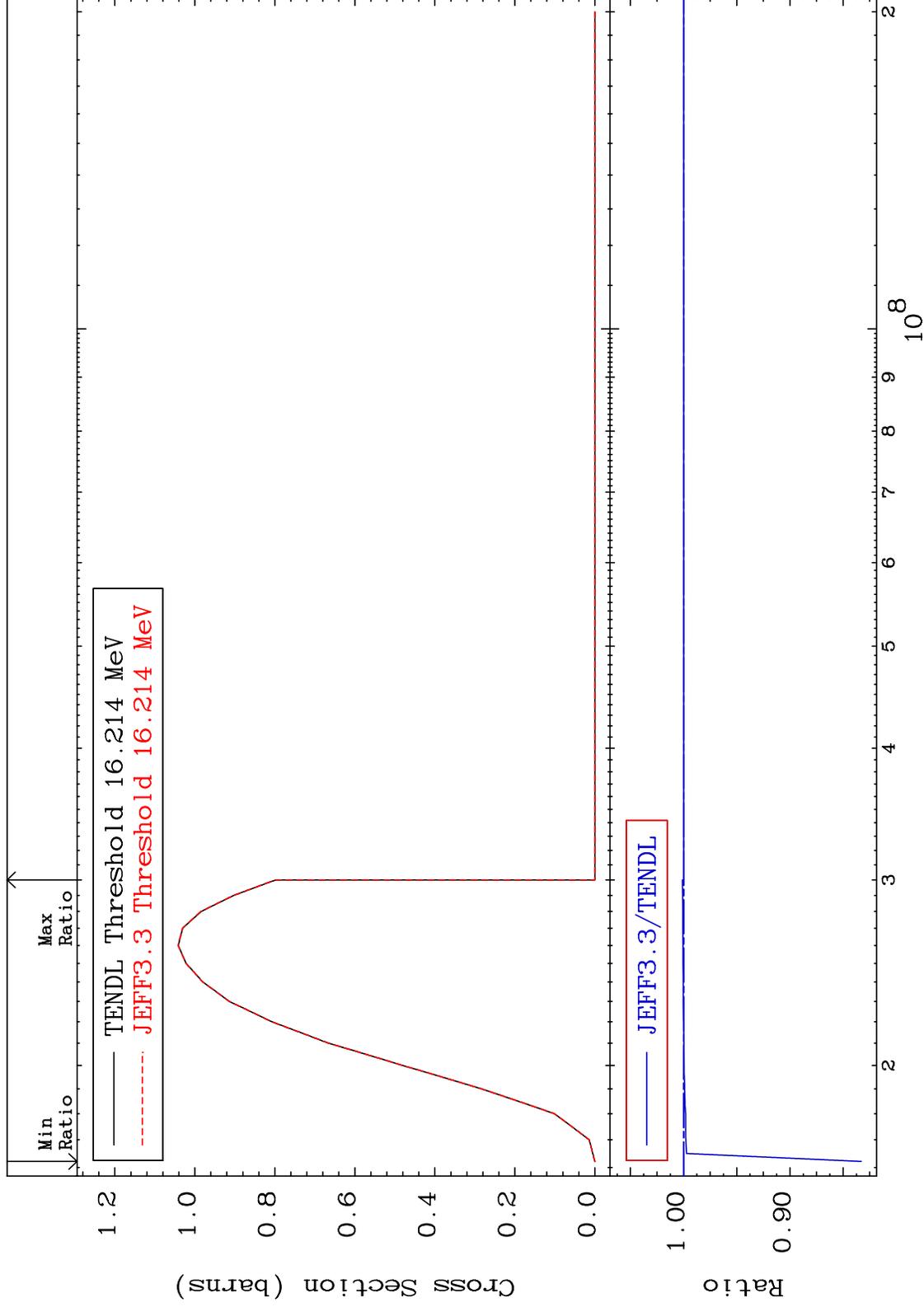
54-Xe-131

MAT 5446

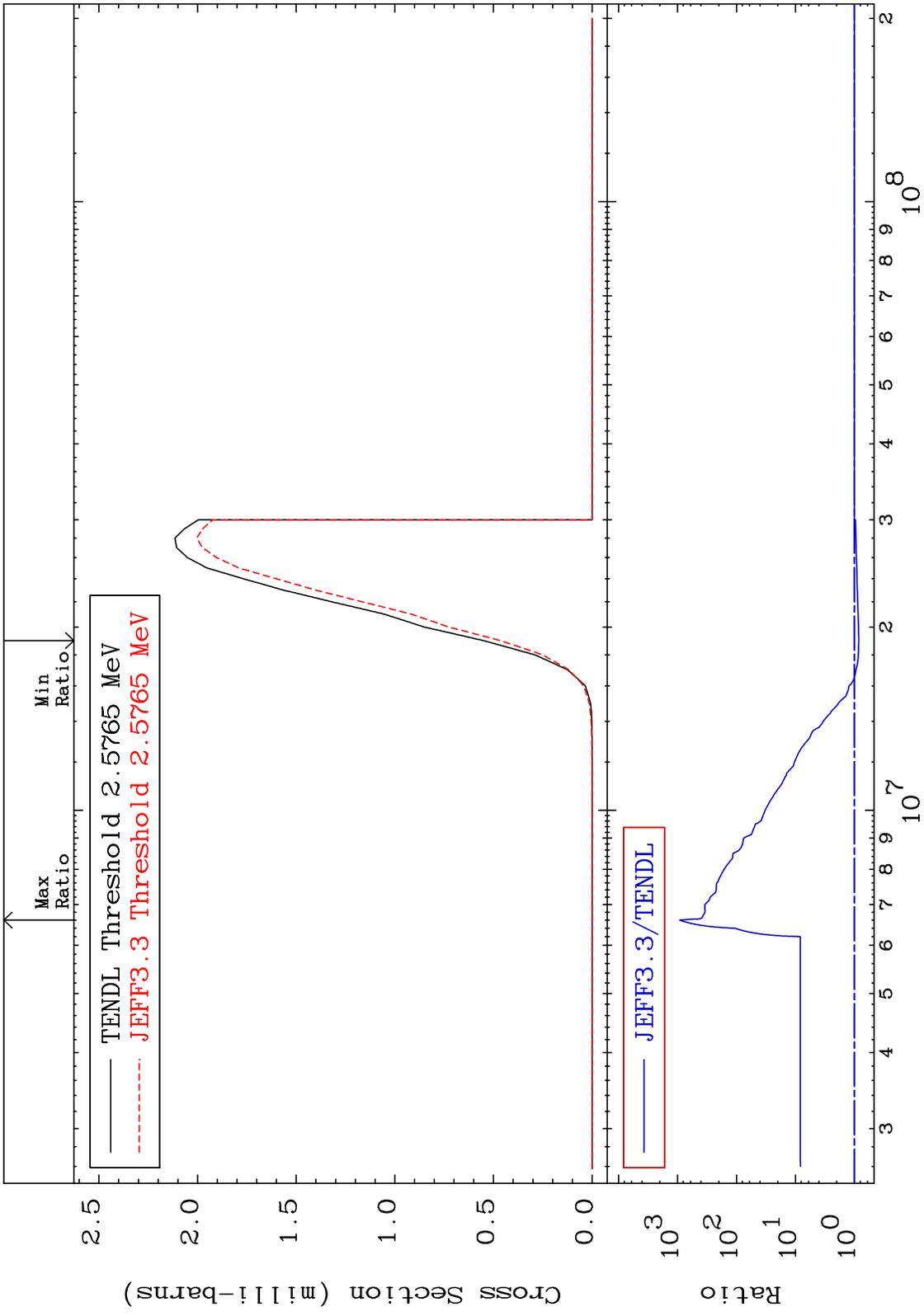
(n,3n):54-Xe-129m2

54-Xe-131

Radionuclide Production Cross Section -16.71 To 0.108 %



MAT 5446 (n, n') α :52-Te-127g 54-Xe-131
 Radionuclide Production Cross Section -15.51 To 9999. %

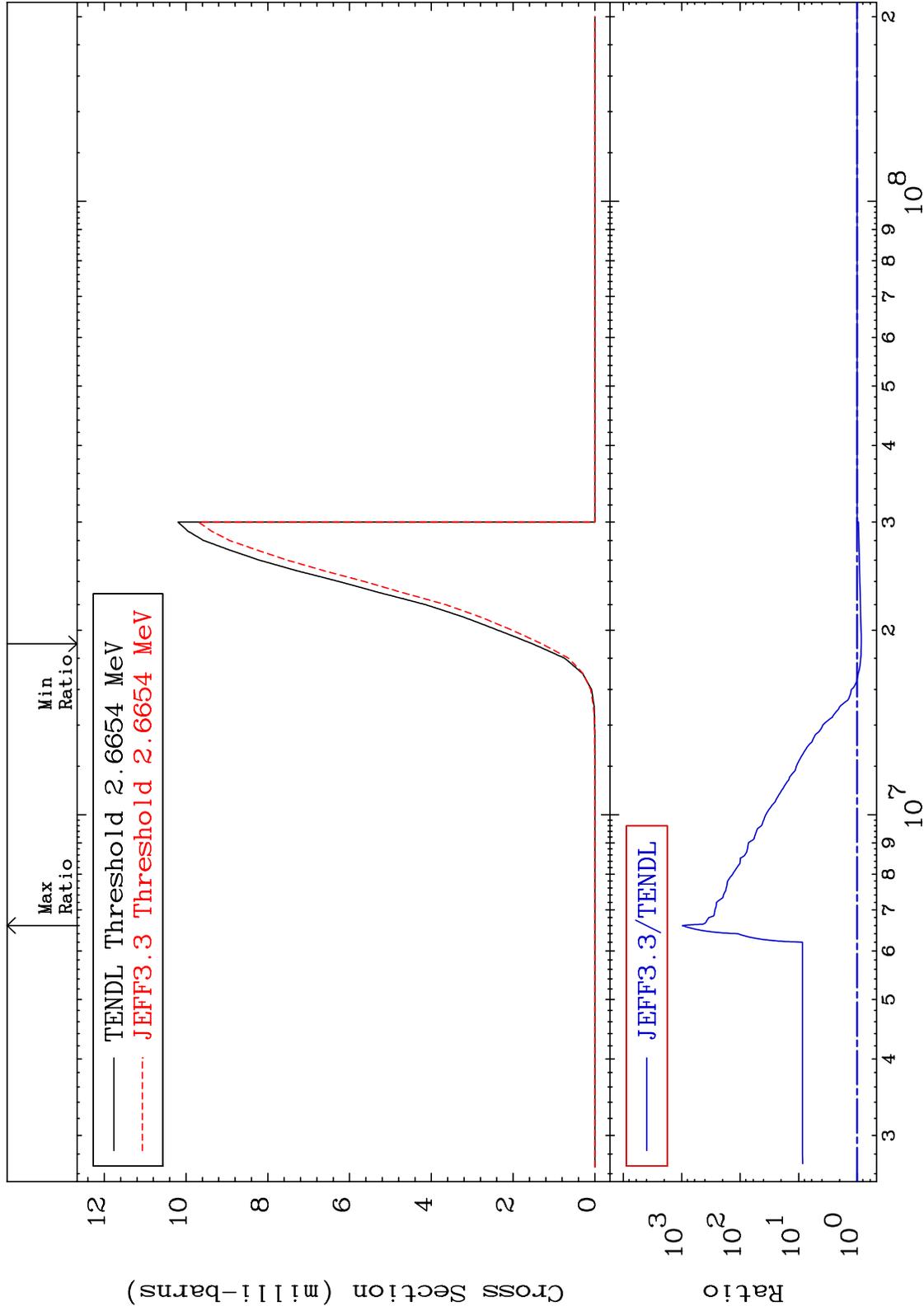


MAT 5446

(n, n') α :52-Te-127m2

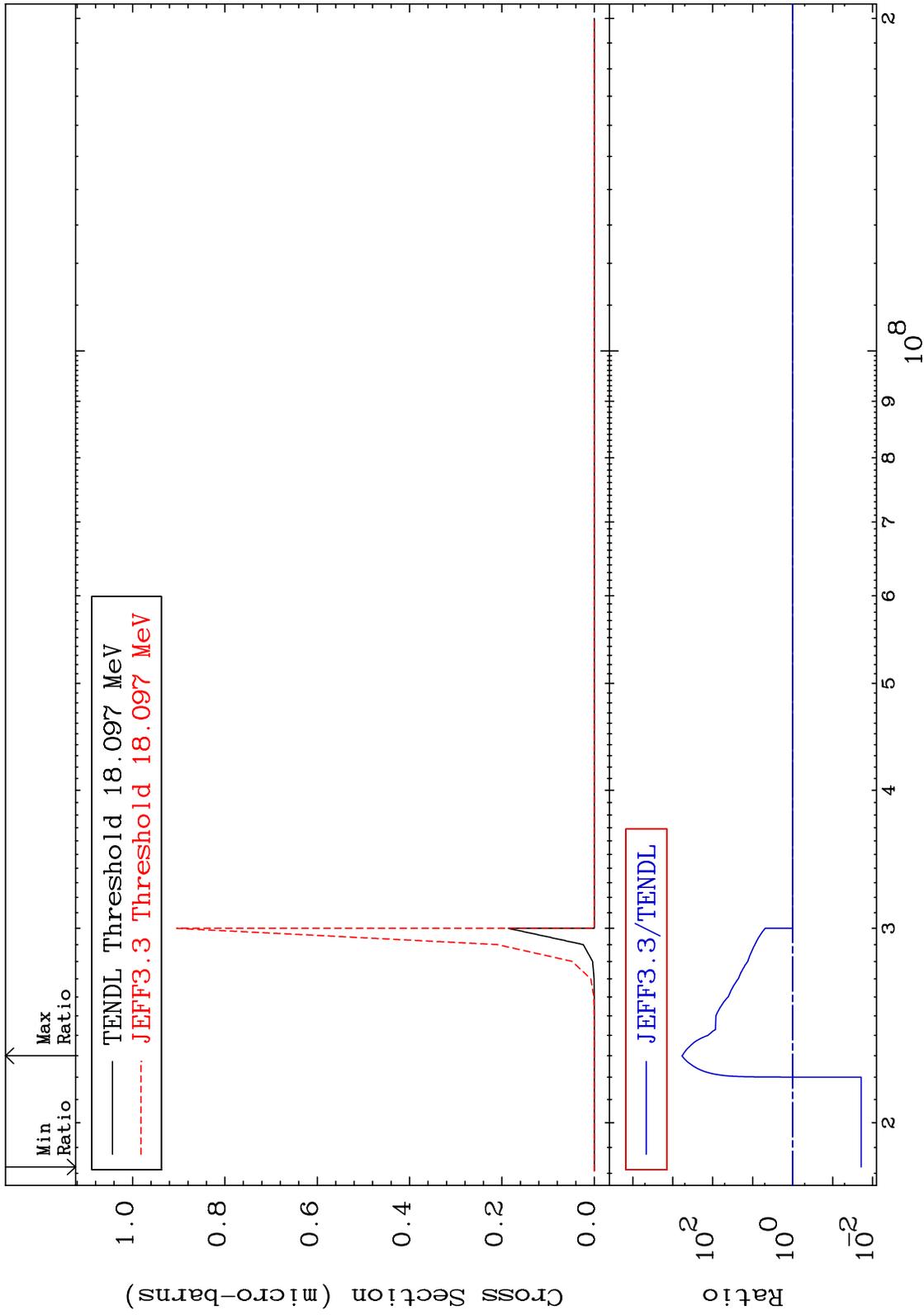
54-Xe-131

Radionuclide Production Cross Section -15.03 To 9999. %

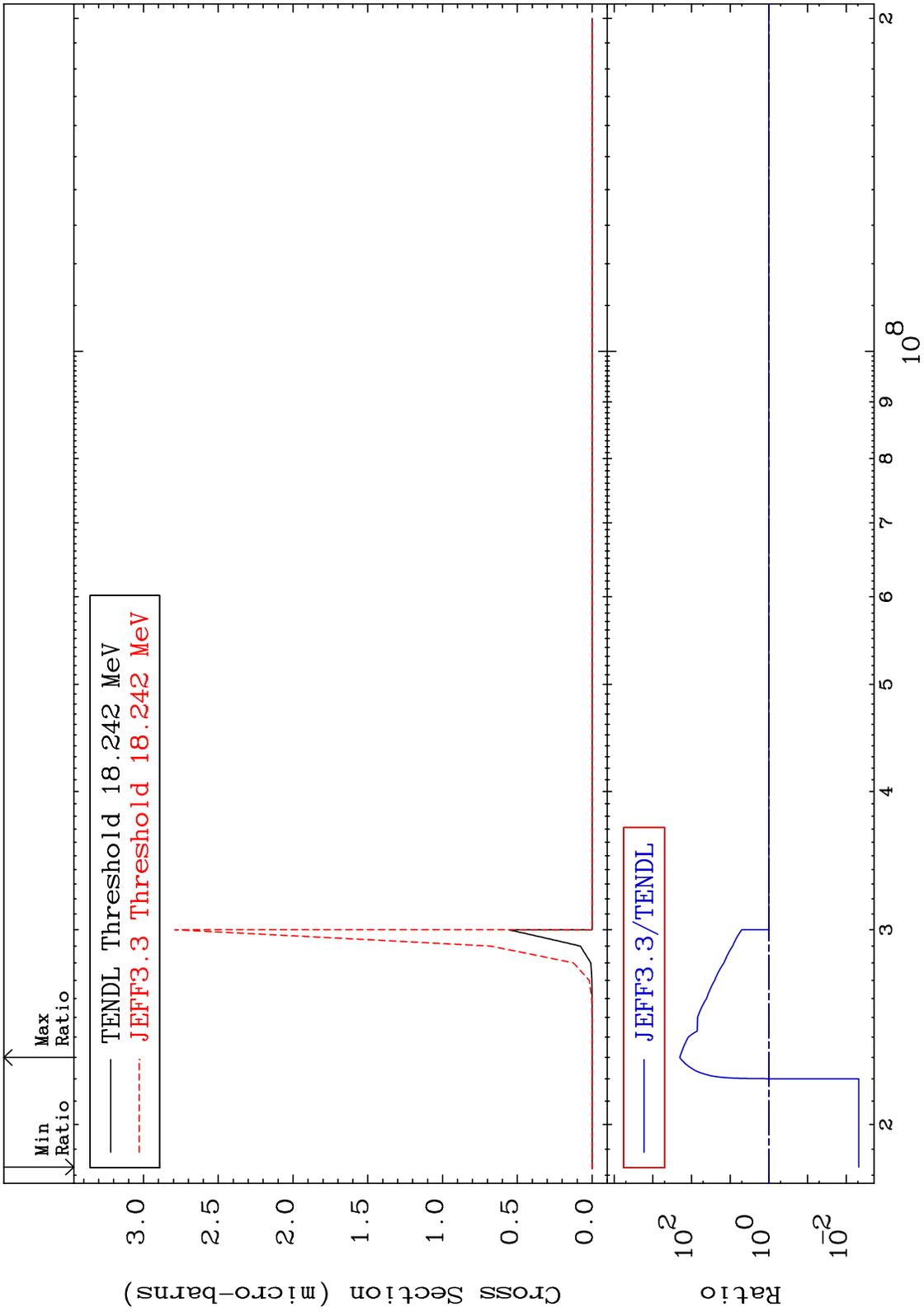


MAT 5446

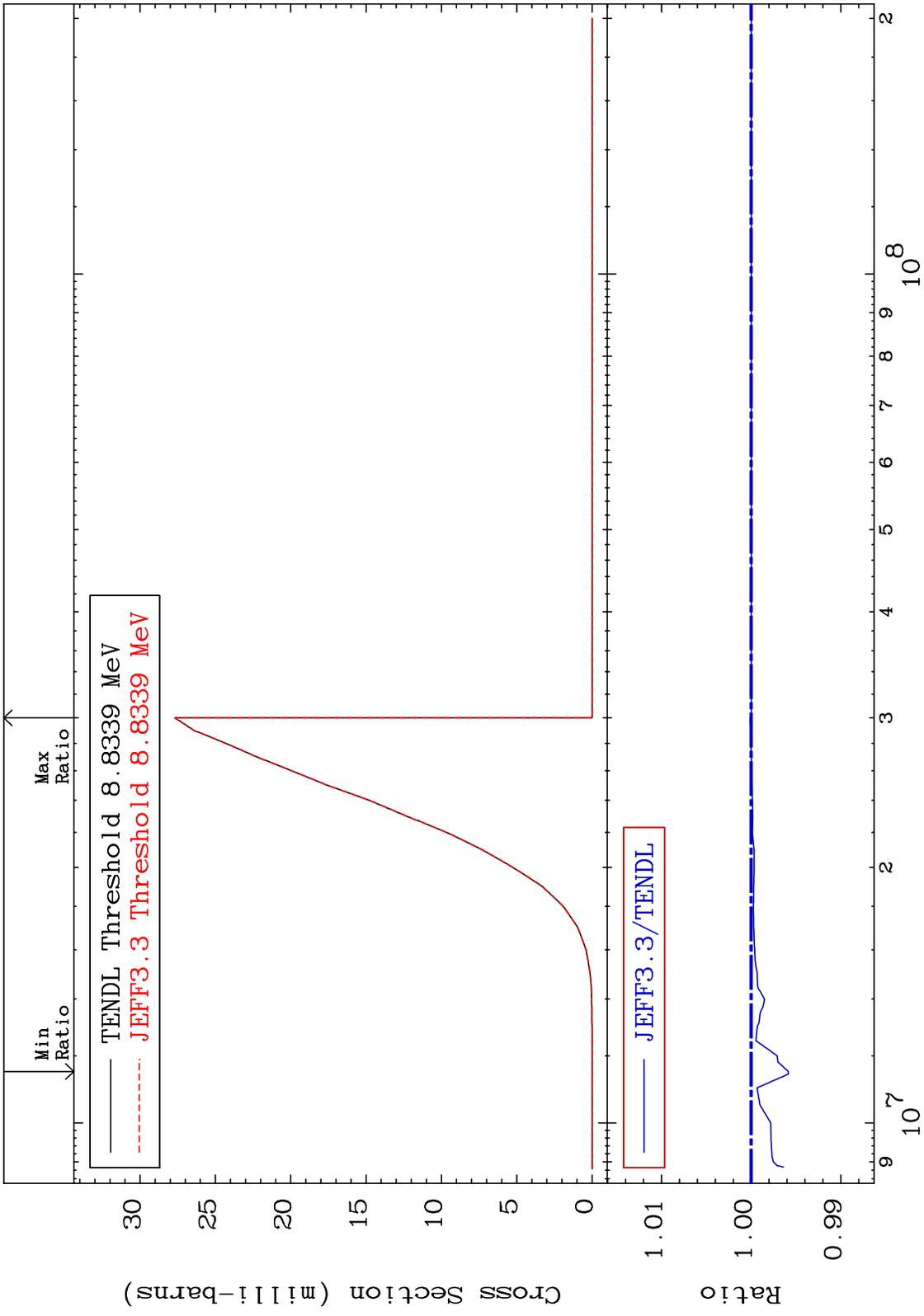
(n,3n) α :52-Te-125g 54-Xe-131
Radionuclide Production Cross Section -98.08 To 9999. %



MAT 5446 (n,3n) α :52-Te-125m2 54-Xe-131
 Radionuclide Production Cross Section -99.53 To 9999. %



MAT 5446 (n, n') p:53-I -130g 54-Xe-131
 Radionuclide Production Cross Section -0.415 To 0.011 %

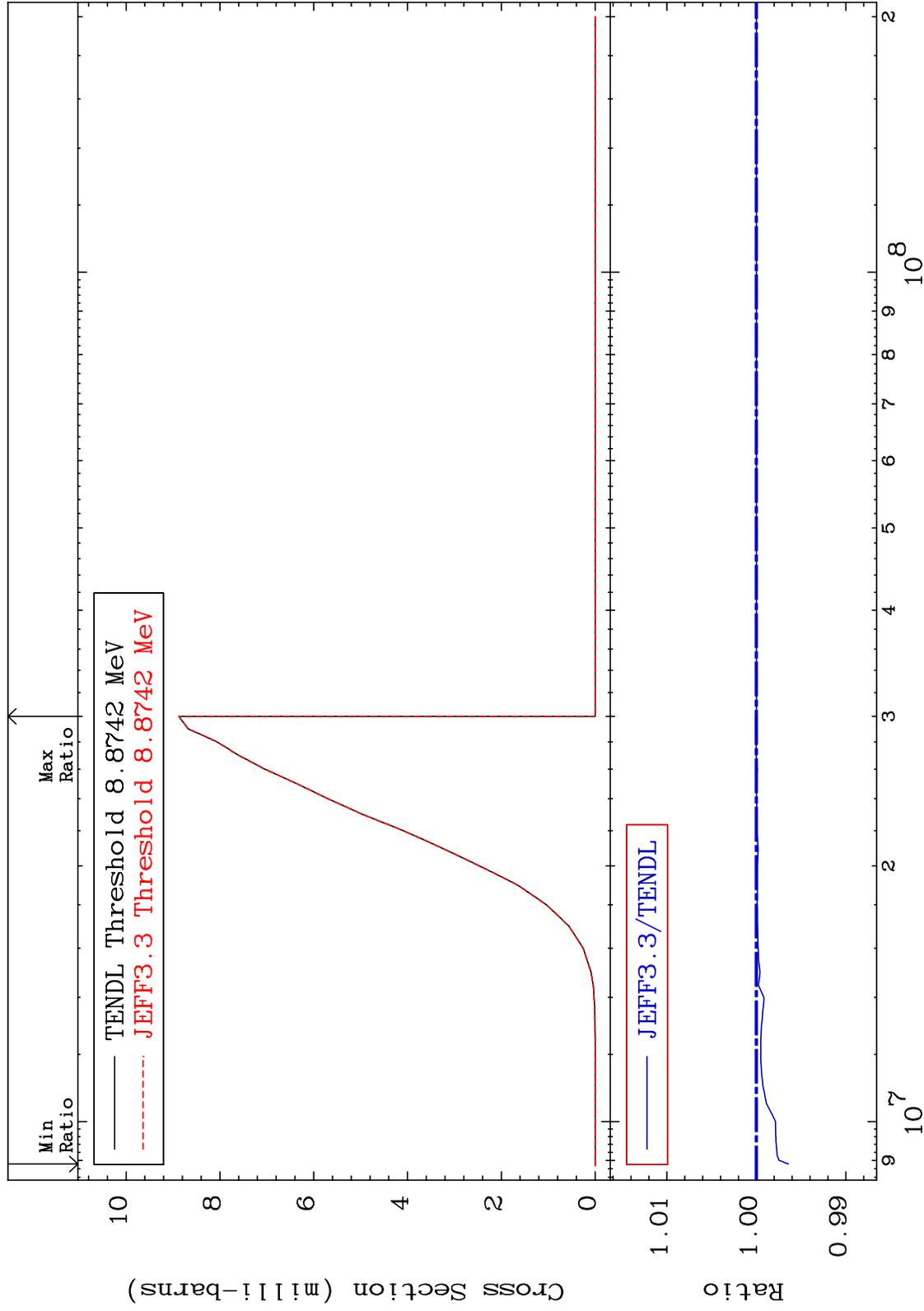


MAT 5446

(n, n') p:53-I -130m1

54-Xe-131

Radionuclide Production Cross Section -0.357 To 0.007 %



86

Incident Energy (eV)

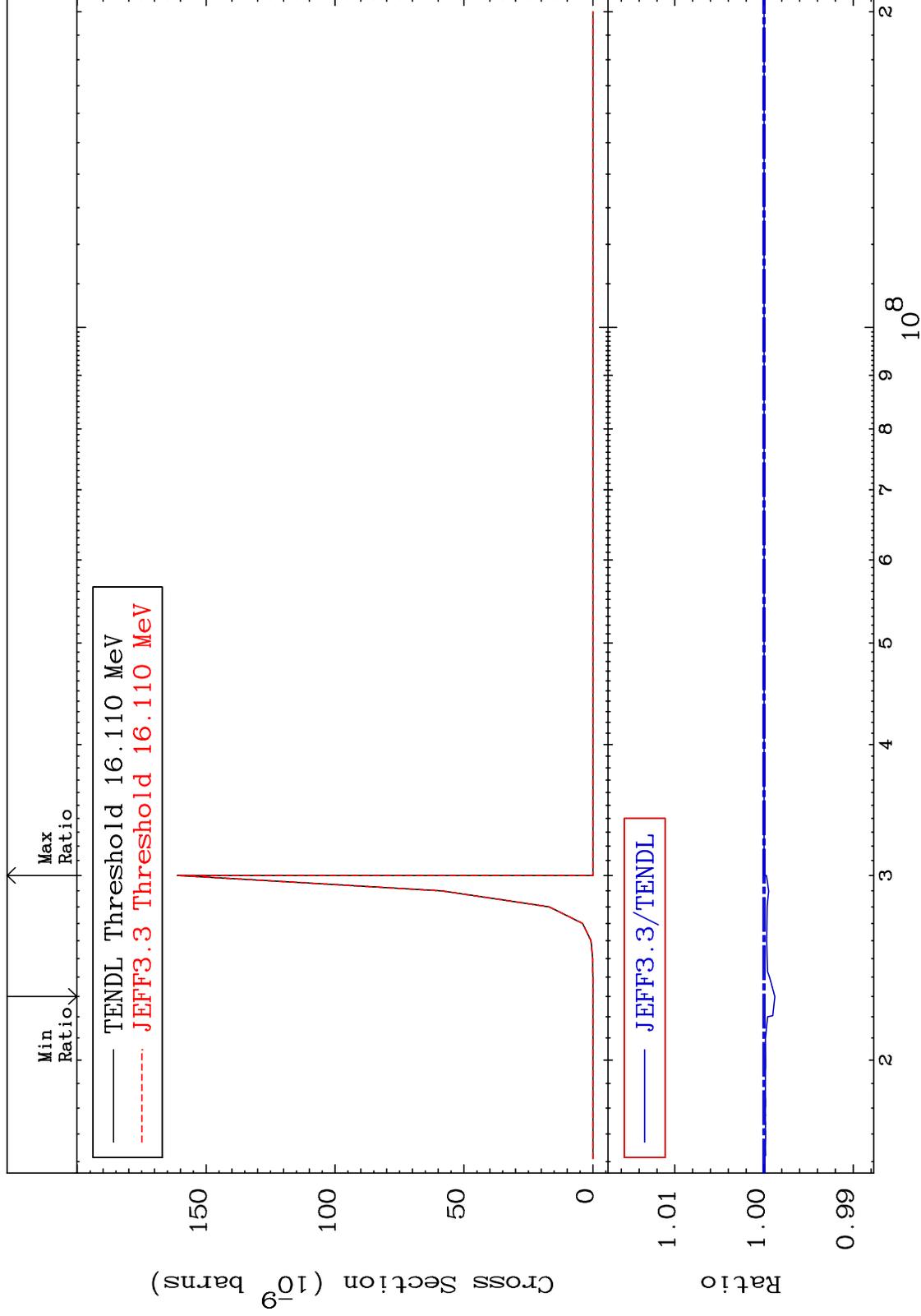
54-Xe-131

MAT 5446

(n,2n) p:52-Te-129g

54-Xe-131

Radionuclide Production Cross Section -0.121 To 0.000 %



87

Incident Energy (eV)

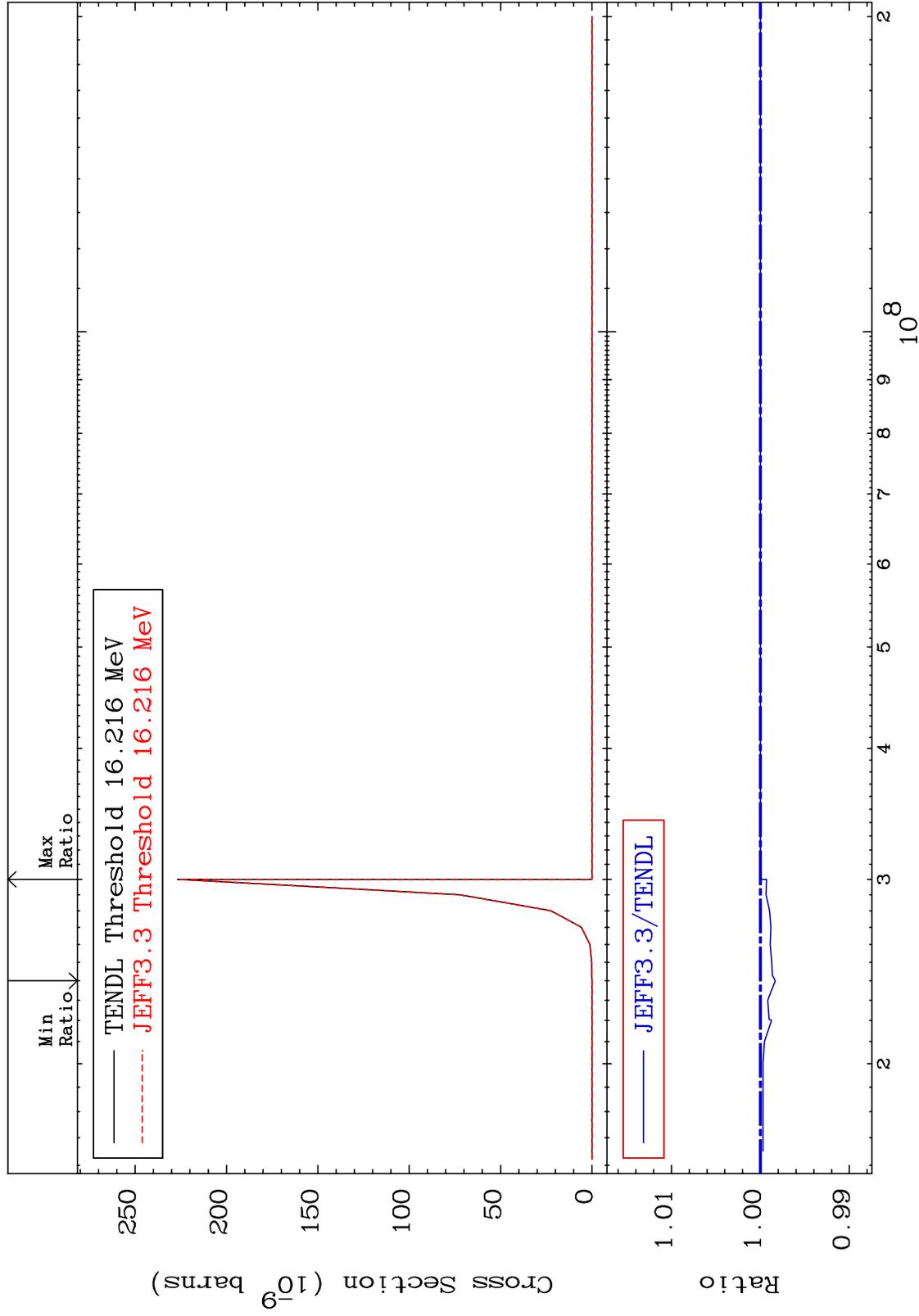
54-Xe-131

MAT 5446

(n,2n) p:52-Te-129m1

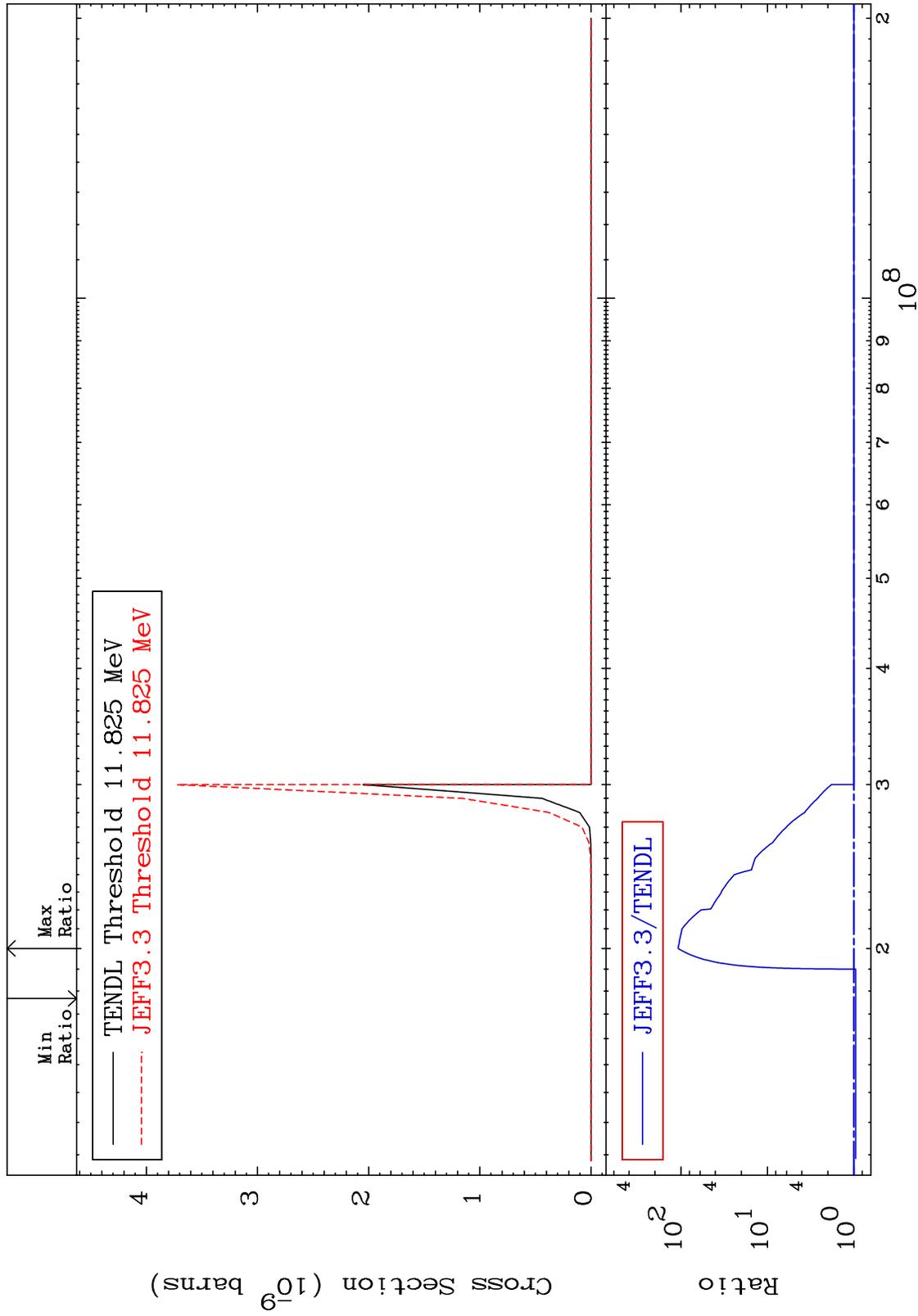
54-Xe-131

Radionuclide Production Cross Section -0.167 To 0.000 %



MAT 5446

(n,n') p α :51-Sb-126g 54-Xe-131
Radionuclide Production Cross Section -4.864 To 9999. %

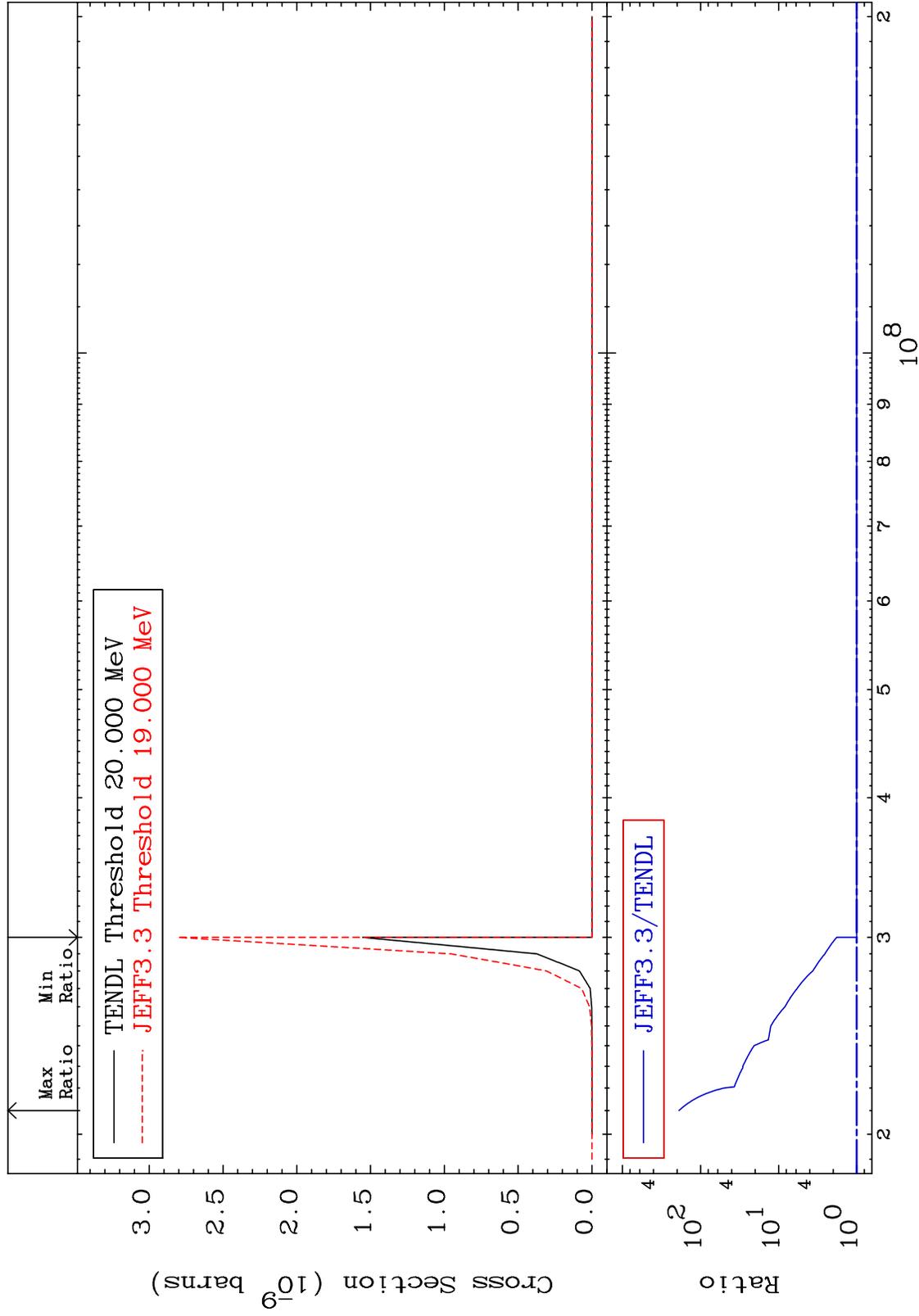


MAT 5446

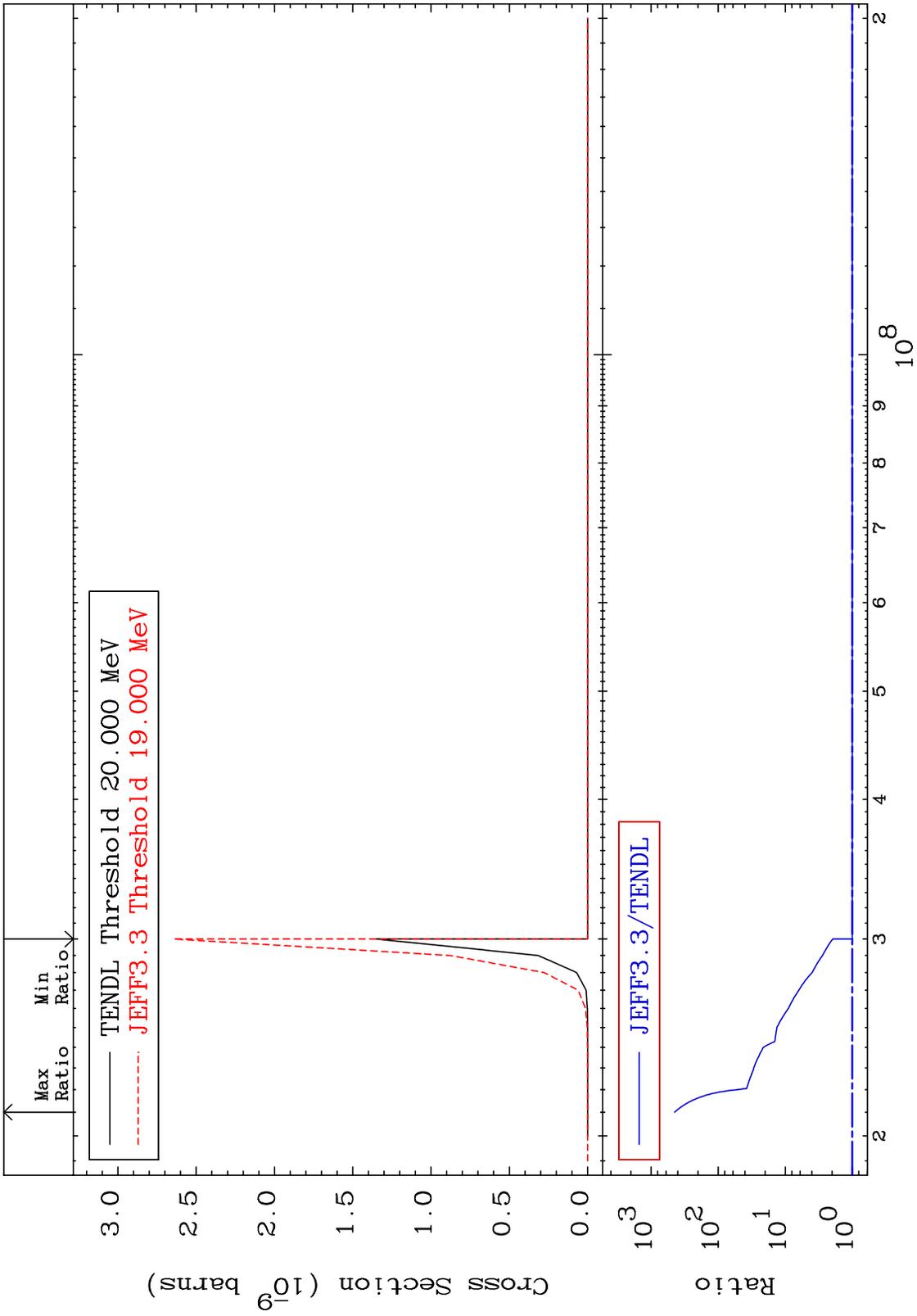
(n,n') p α :51-Sb-126m1

54-Xe-131

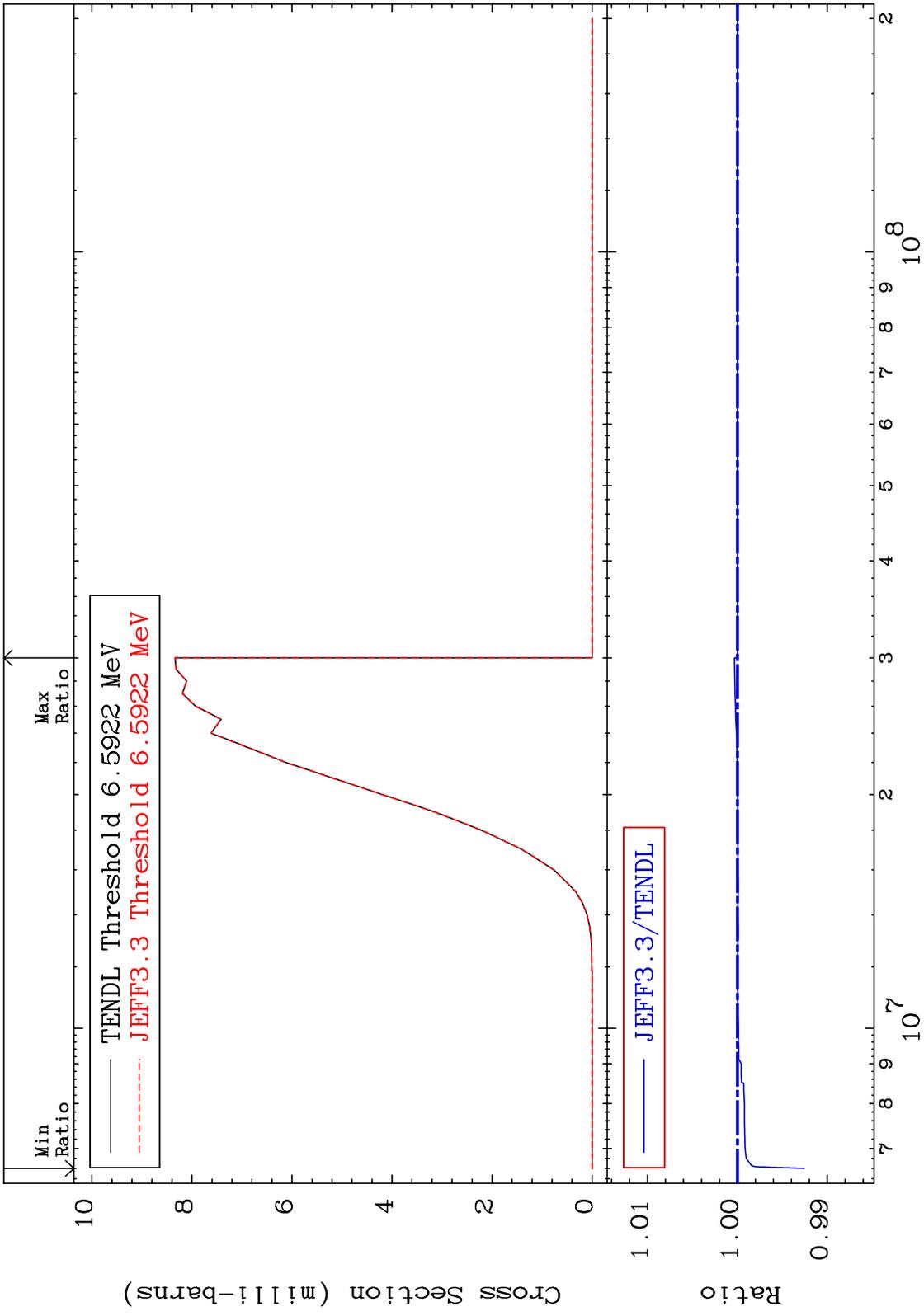
Radionuclide Production Cross Section 0.000 To 9999. %



MAT 5446 (n,n') p α:51-Sb-126m2 54-Xe-131
 Radionuclide Production Cross Section 0.000 To 9999. %



MAT 5446 (n,d):53-I -130g 54-Xe-131
 Radionuclide Production Cross Section -0.743 To 0.033 %

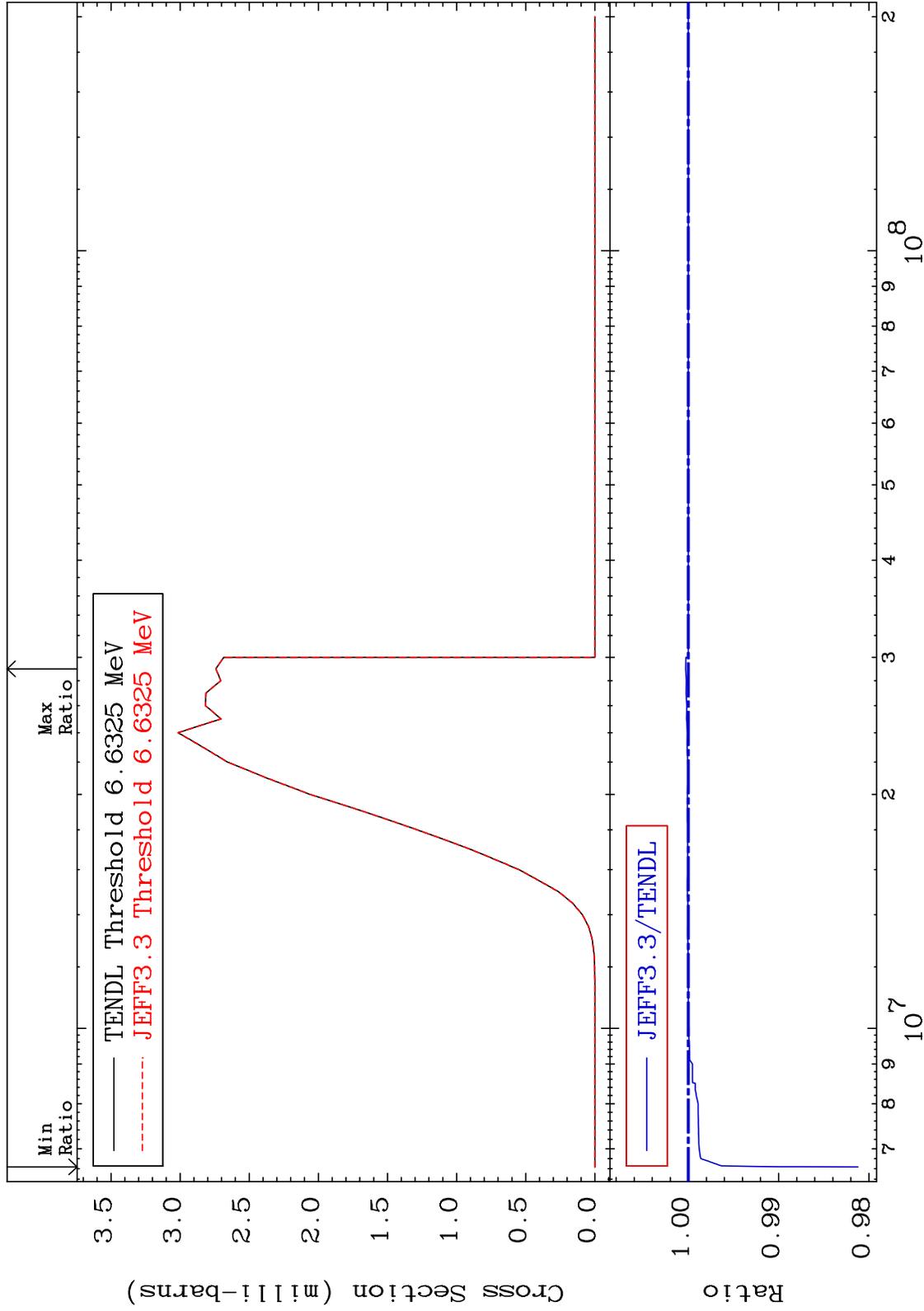


MAT 5446

(n,d):53-I -130m1

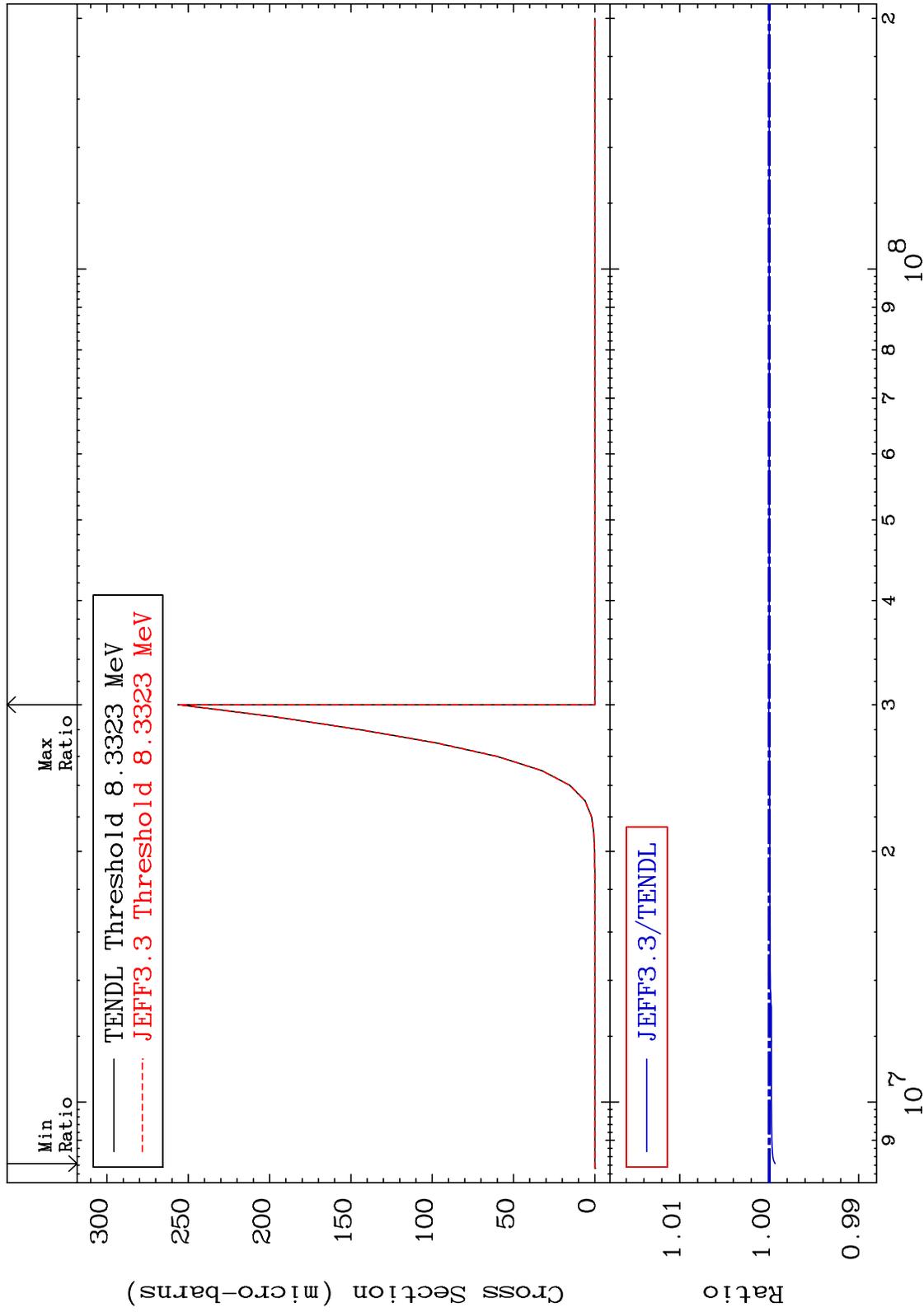
54-Xe-131

Radionuclide Production Cross Section -1.881 To 0.030 %



MAT 5446

(n, He-3):52-Te-129g 54-Xe-131
Radionuclide Production Cross Section -0.067 To 0.007 %



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Incident Energy (eV)

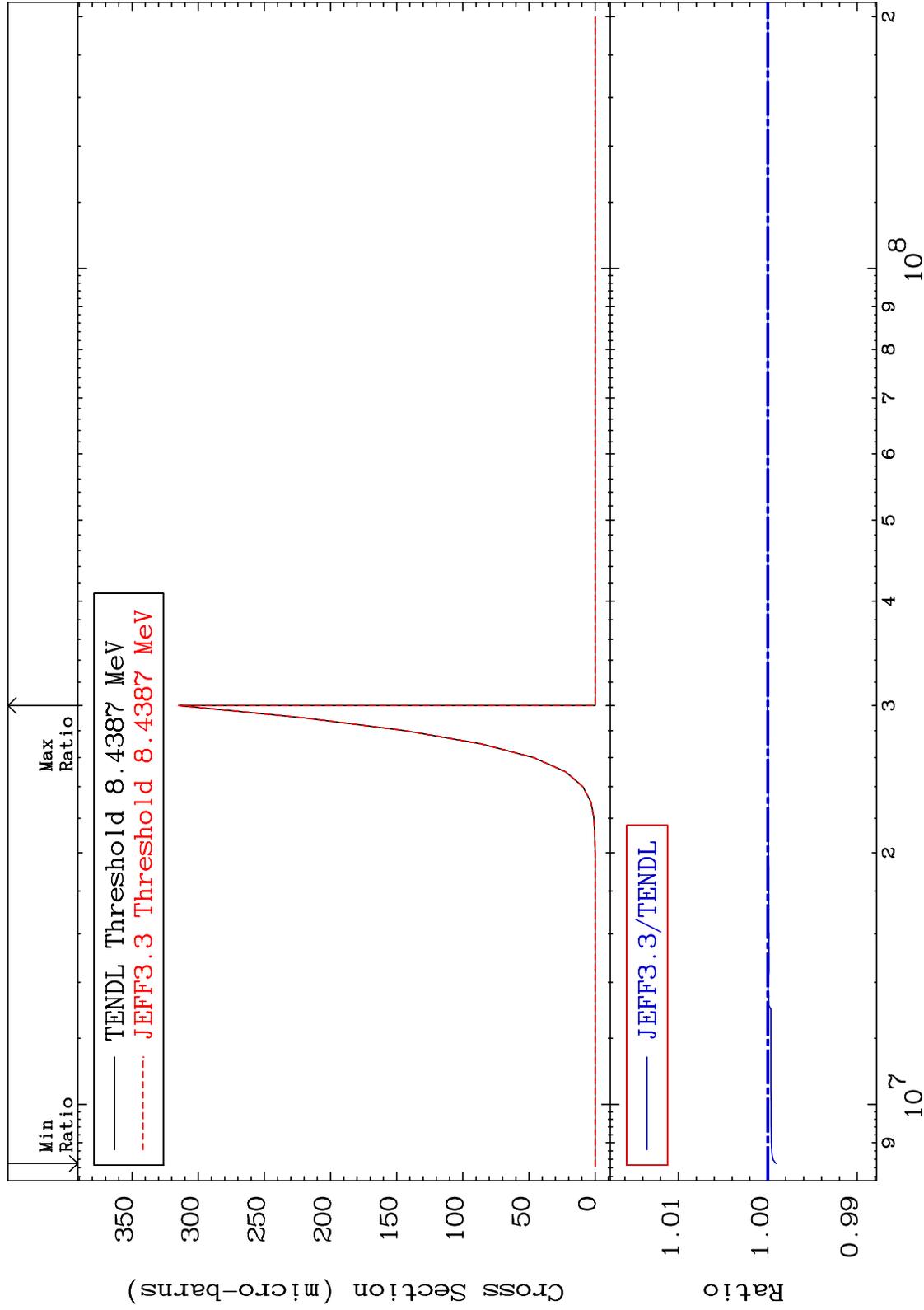
54-Xe-131

MAT 5446

(n, He-3) : 52-Te-129m1

54-Xe-131

Radionuclide Production Cross Section -0.098 To 0.005 %



MAT 5446

(n,p) d:52-Te-129m1

54-Xe-131

Radionuclide Production Cross Section -0.307 To 0.000 %

