

Program EVALPLOT
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

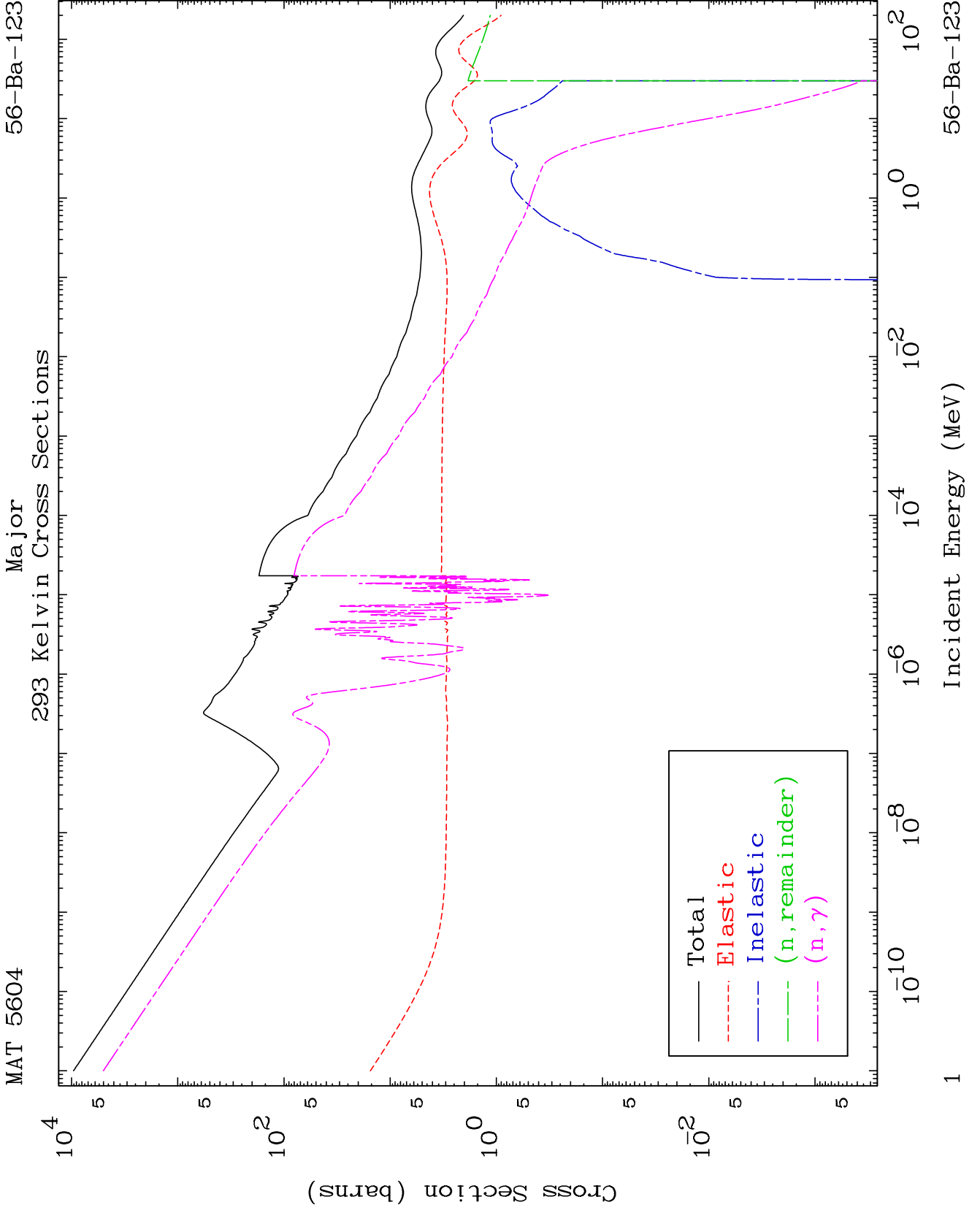
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Livermore, CA 94550
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Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

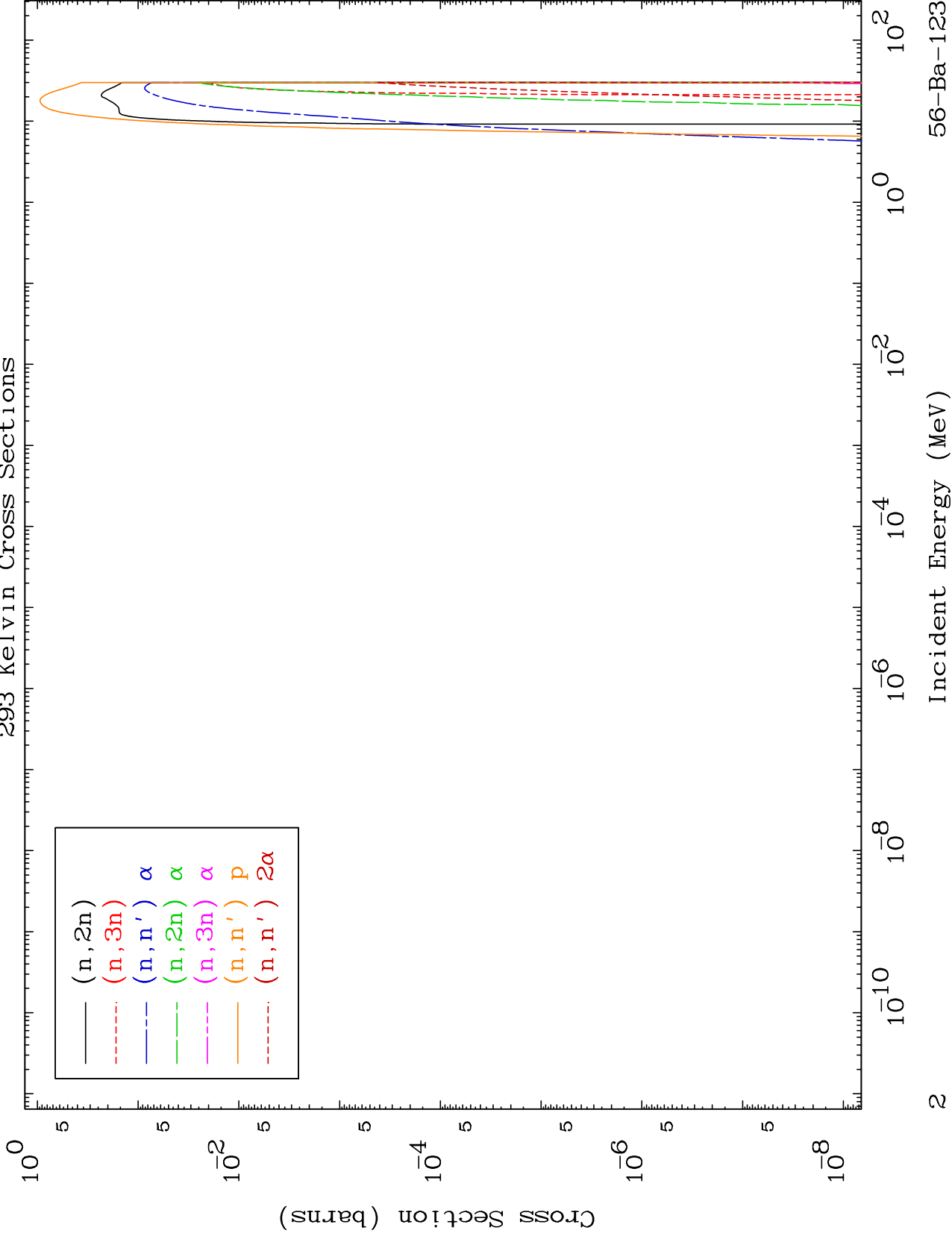
Press Mouse Button to Start



MAT 5604

Neutron Production
293 Kelvin Cross Sections

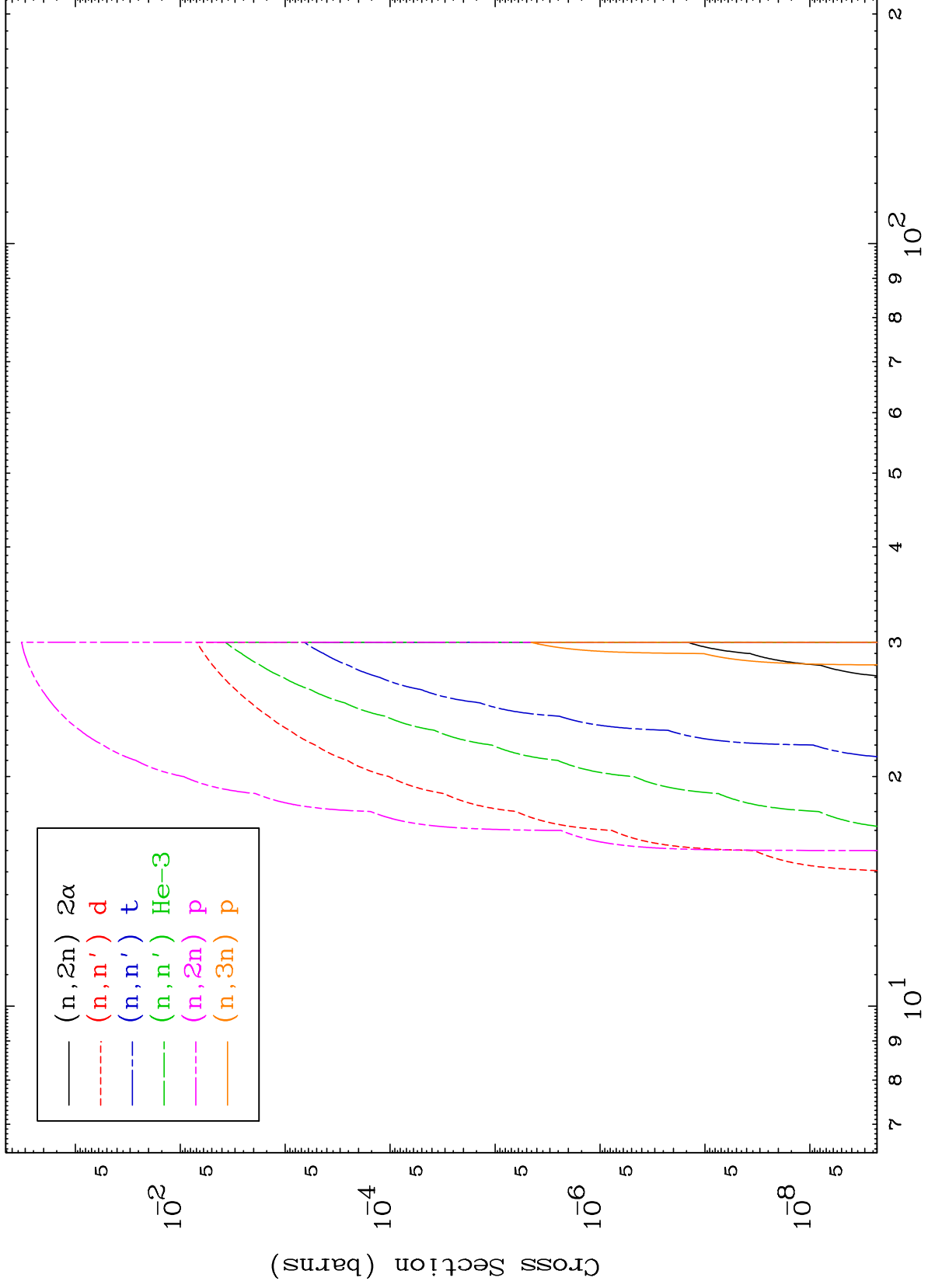
56-Ba-123



MAT 5604

Neutron Production
293 Kelvin Cross Sections

56-Ba-123



3

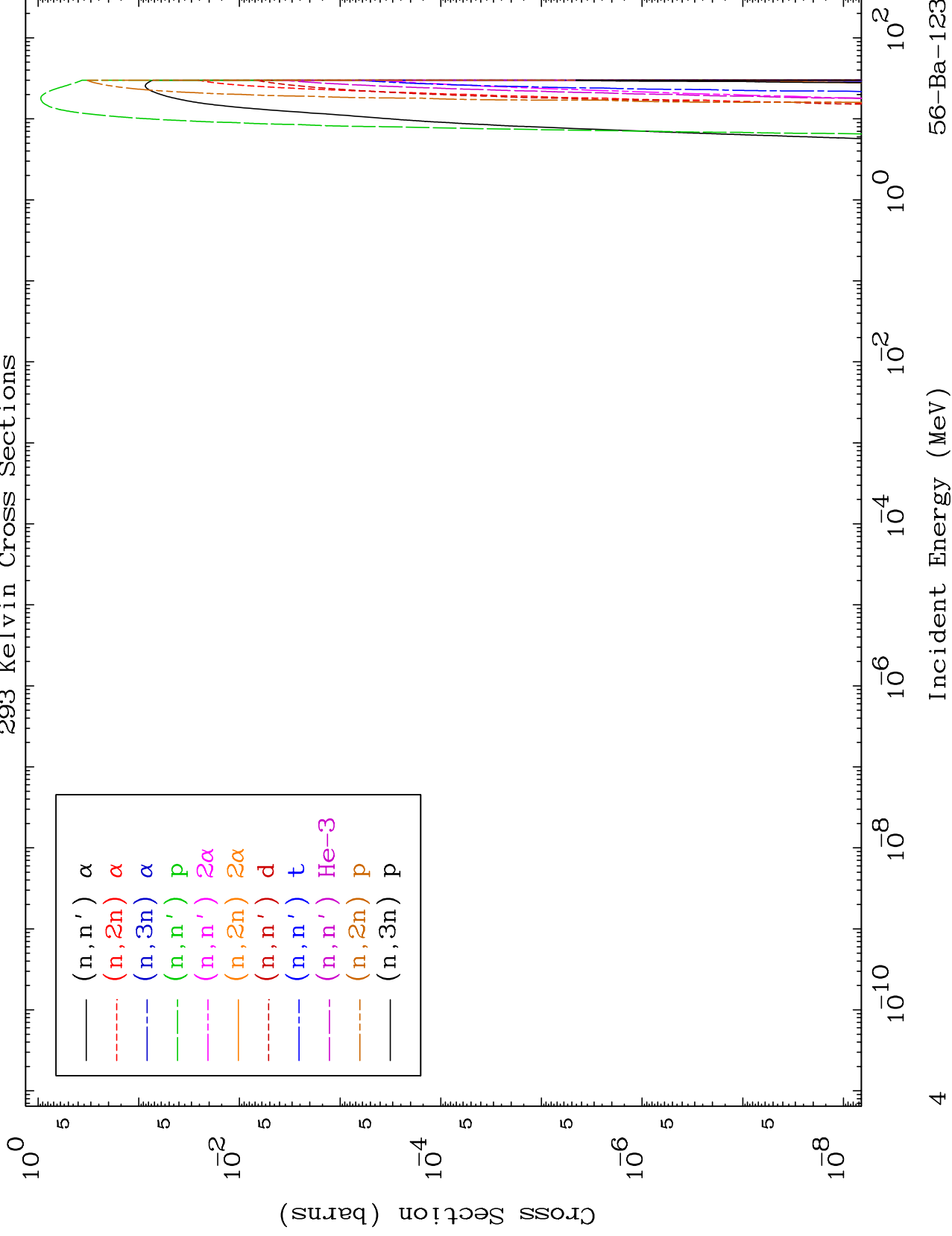
Incident Energy (MeV)

56-Ba-123

MAT 5604

Charged Particle
293 Kelvin Cross Sections

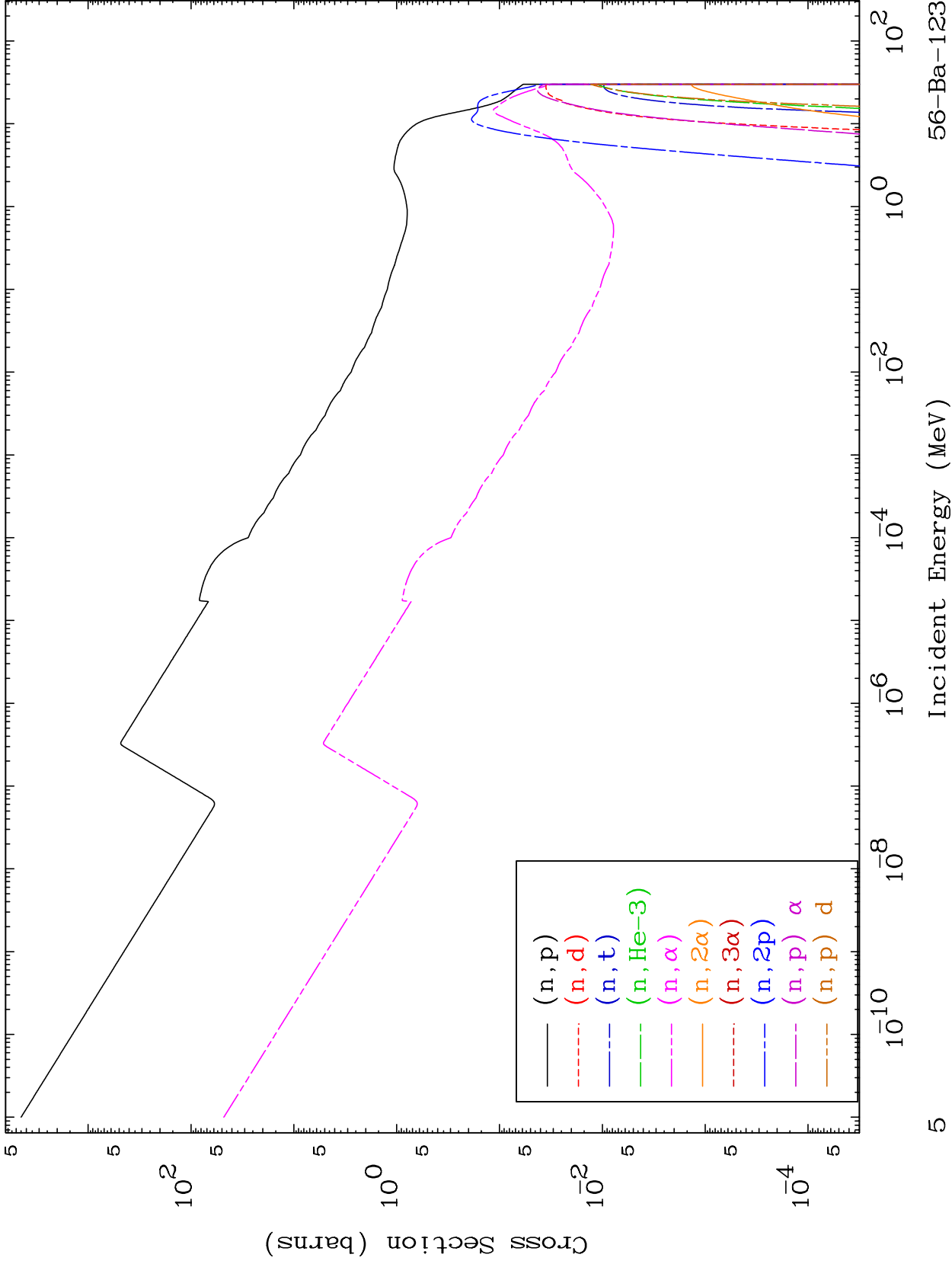
56-Ba-123



MAT 5604

Charged Particle
293 Kelvin Cross Sections

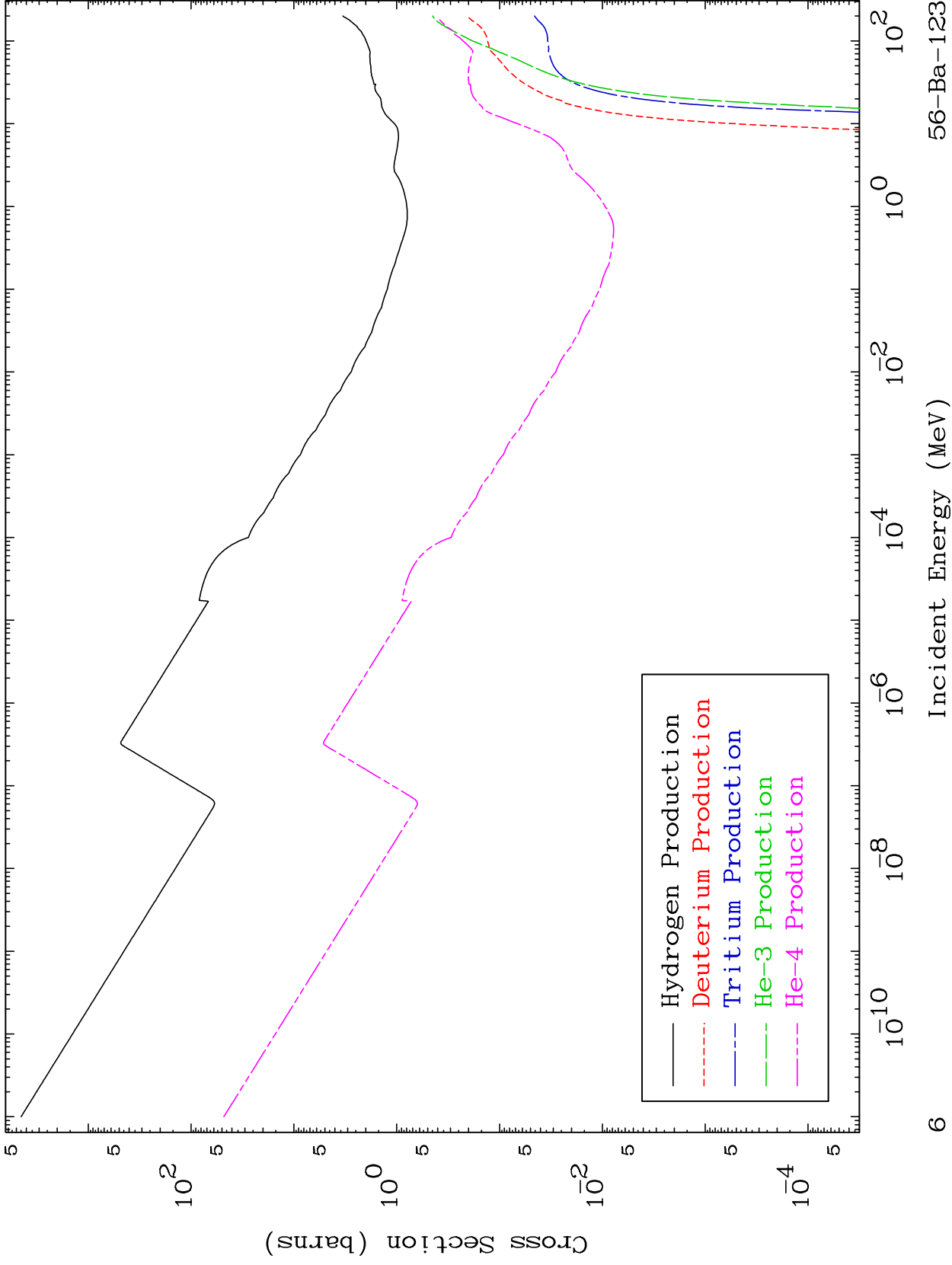
56-Ba-123



MAT 5604

Particle Production
293 Kelvin Cross Sections

56-Ba-123

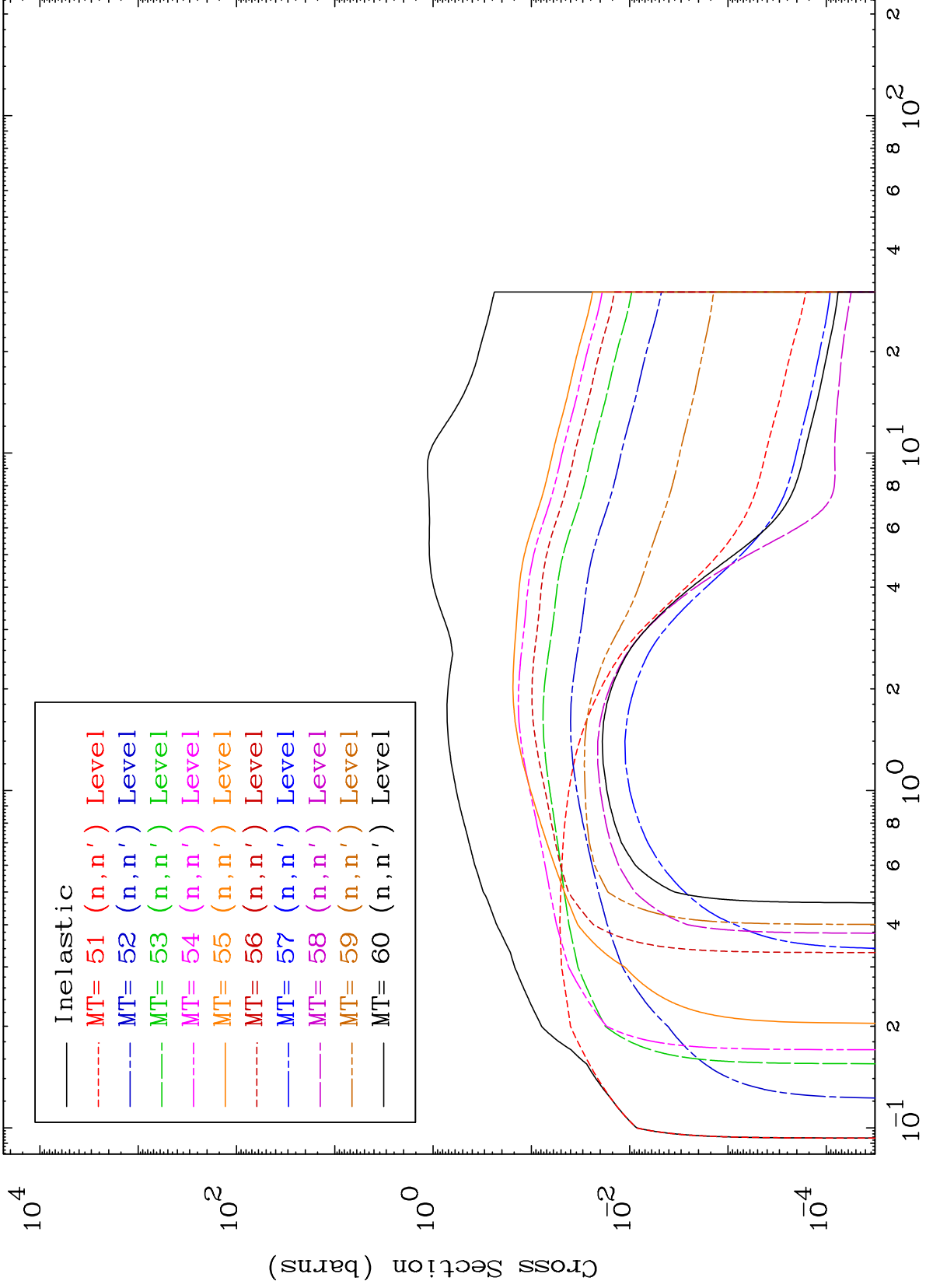


MAT 5604

(n,n') Level

56-Ba-123

293 Kelvin Cross Sections

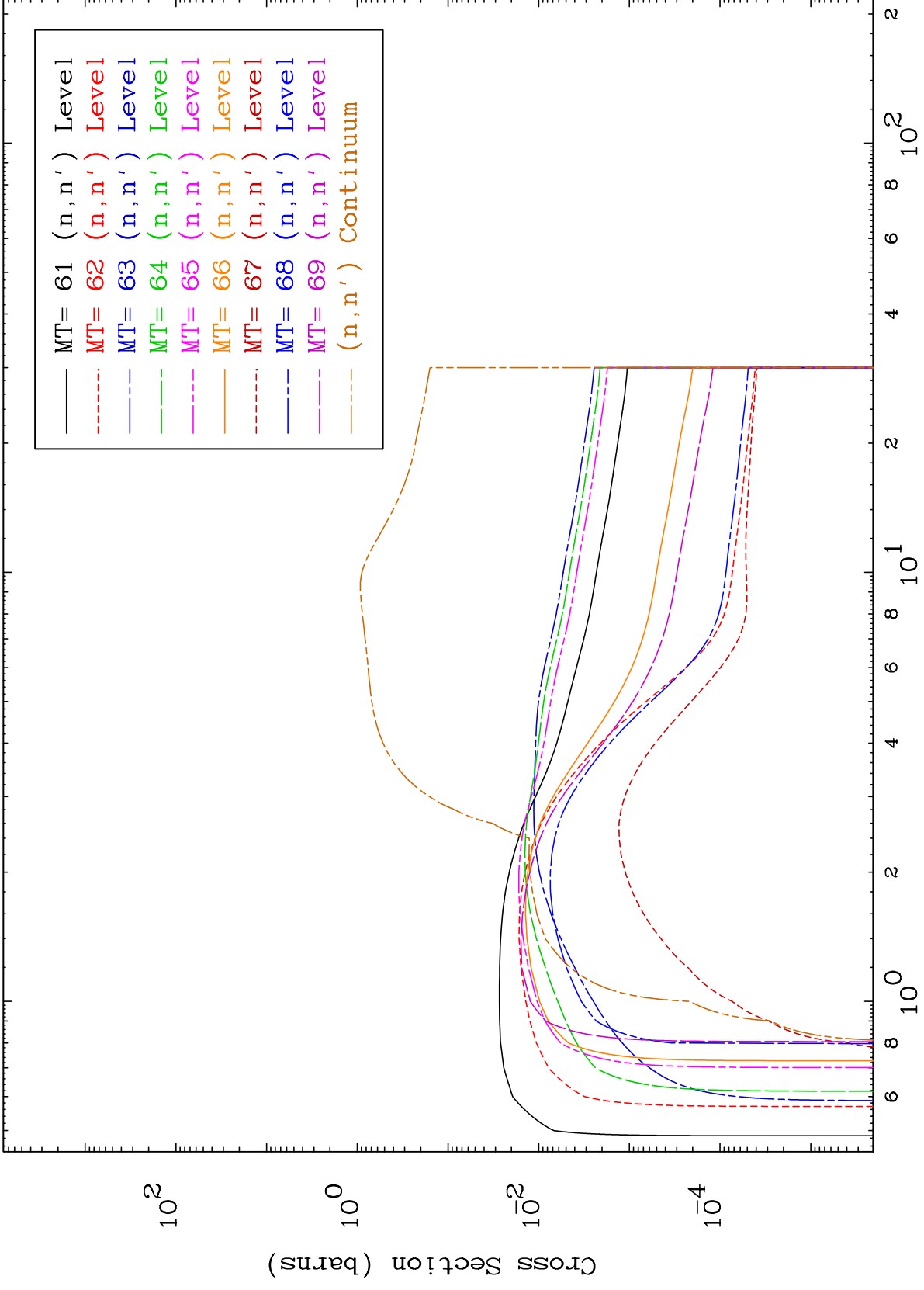


MAT 5604

(n,n') Level

56-Ba-123

293 Kelvin Cross Sections



8

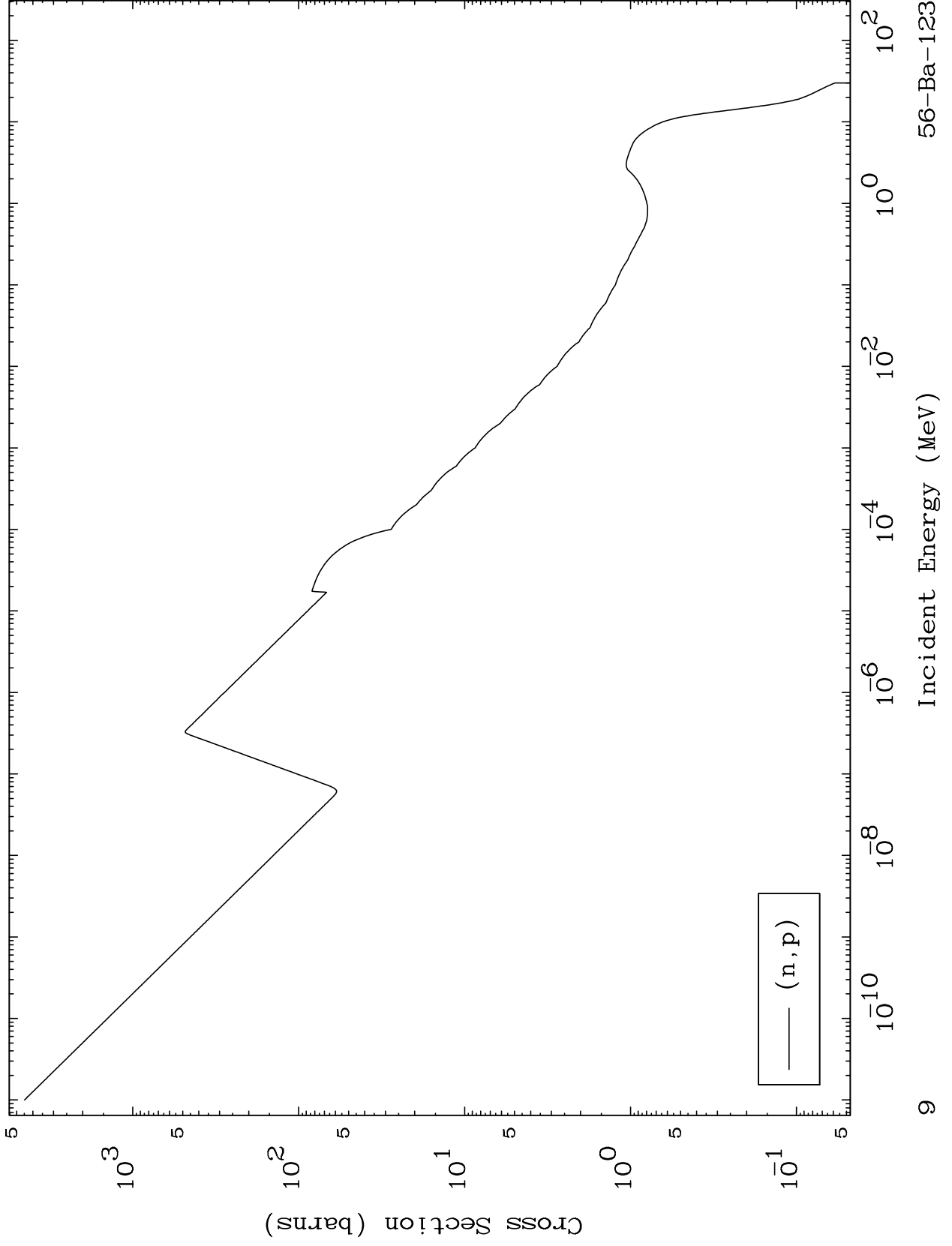
Incident Energy (MeV)

56-Ba-123

MAT 5604

(n,p) Levels
293 Kelvin Cross Sections

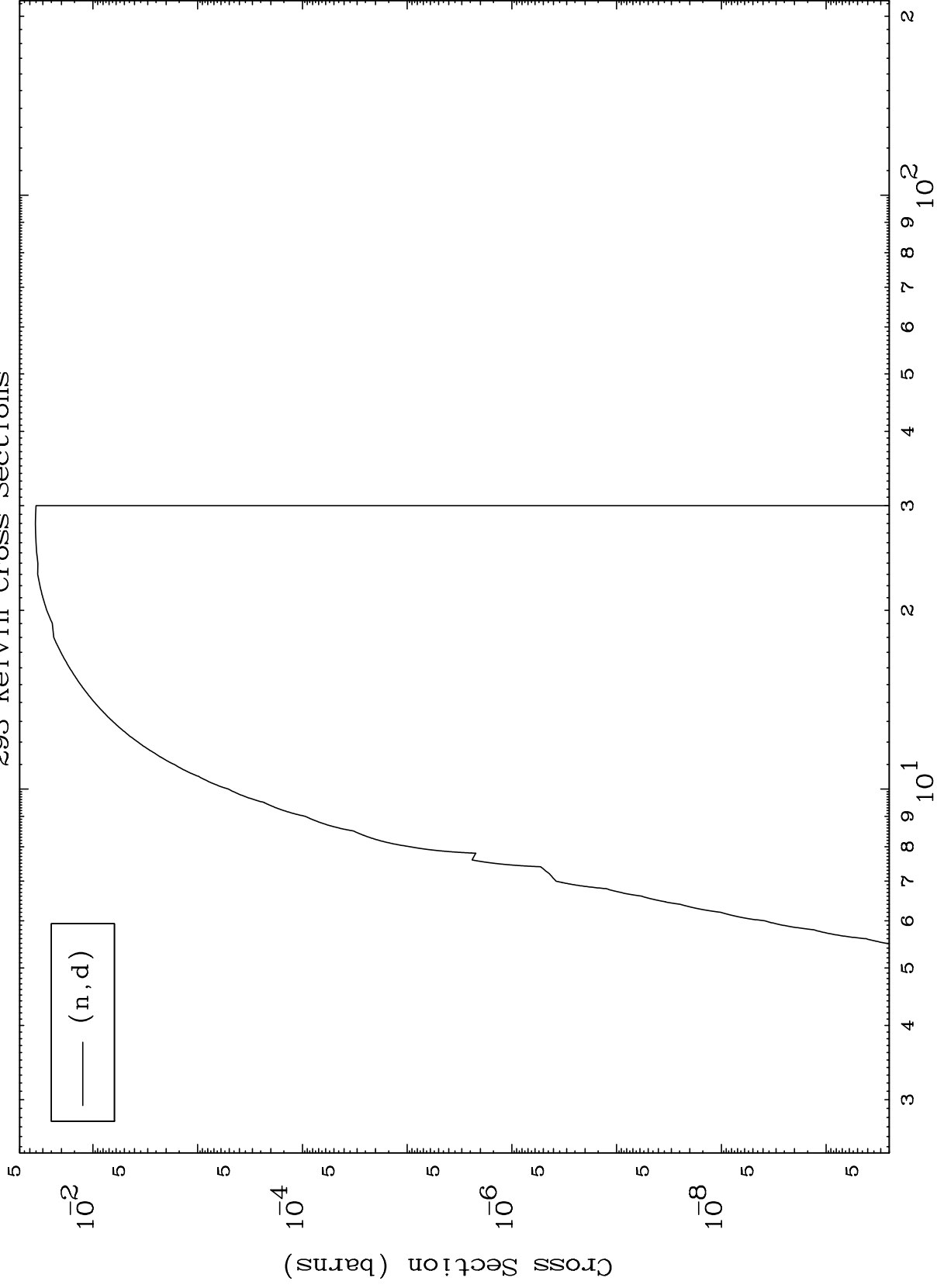
56-Ba-123



MAT 5604

(n,d) Levels
293 Kelvin Cross Sections

56-Ba-123



10

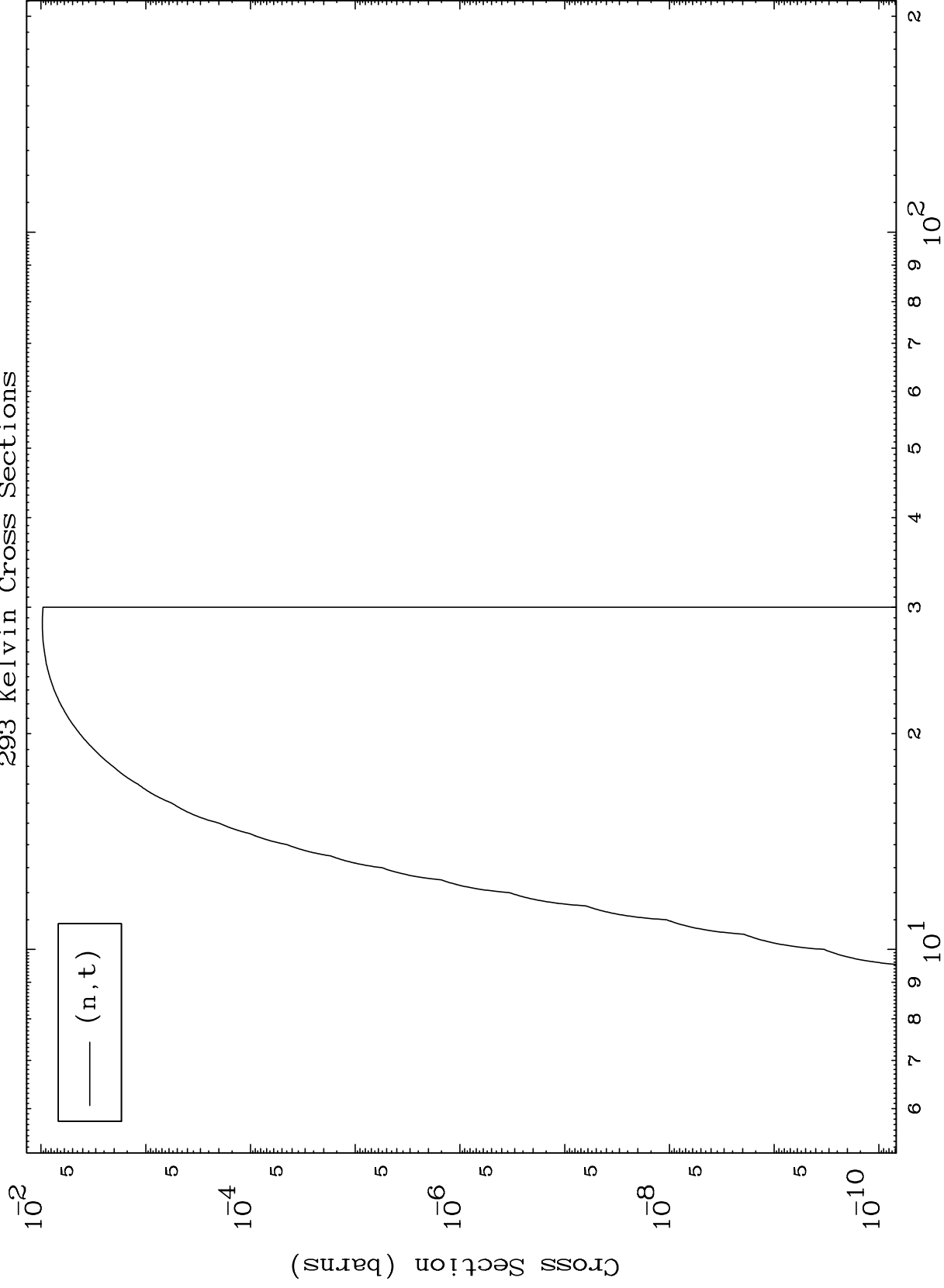
Incident Energy (MeV)

56-Ba-123

MAT 5604

(n,t) Levels
293 Kelvin Cross Sections

56-Ba-123



11

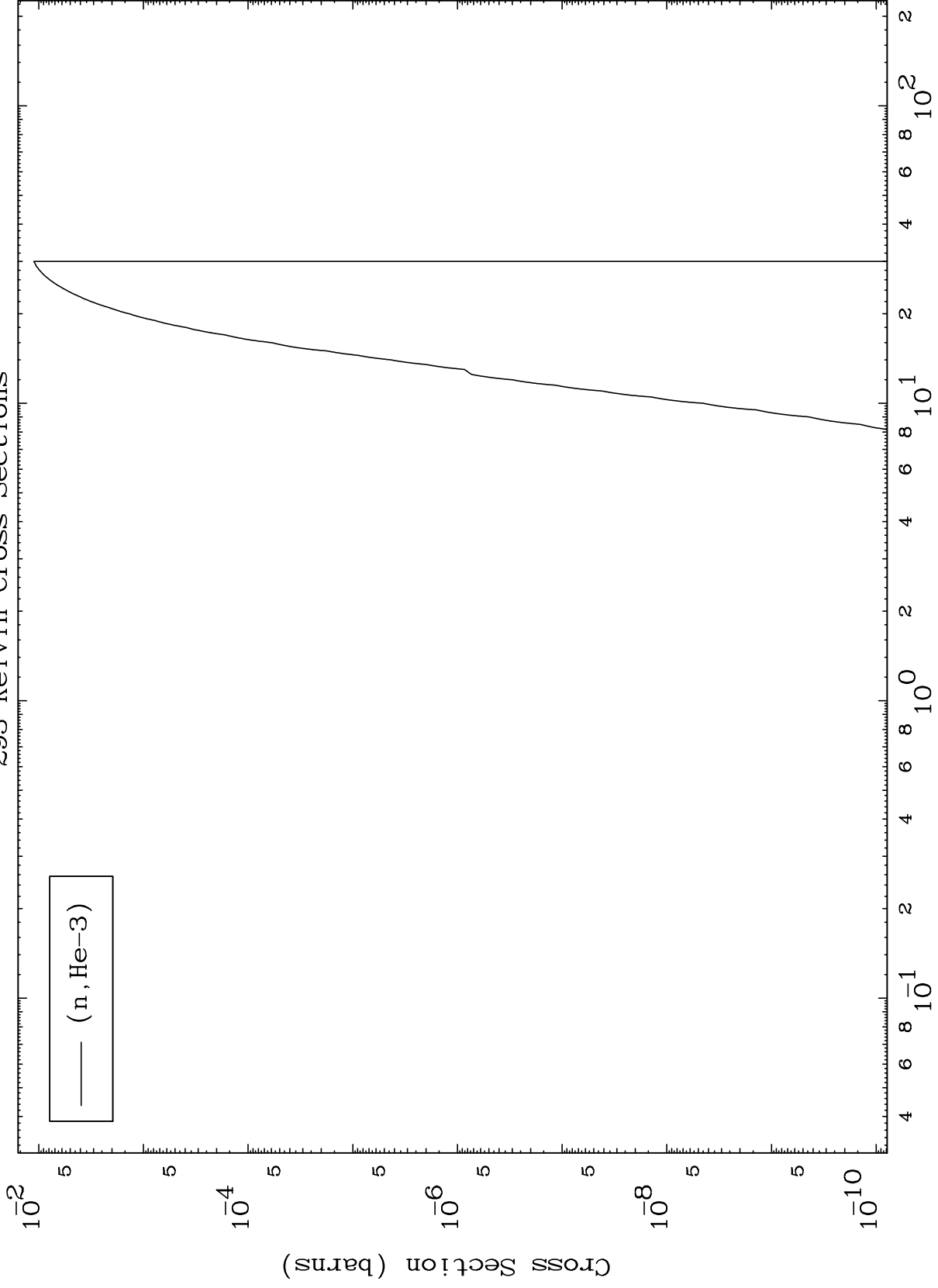
Incident Energy (MeV)

56-Ba-123

MAT 5604

(n,He3) Levels
293 Kelvin Cross Sections

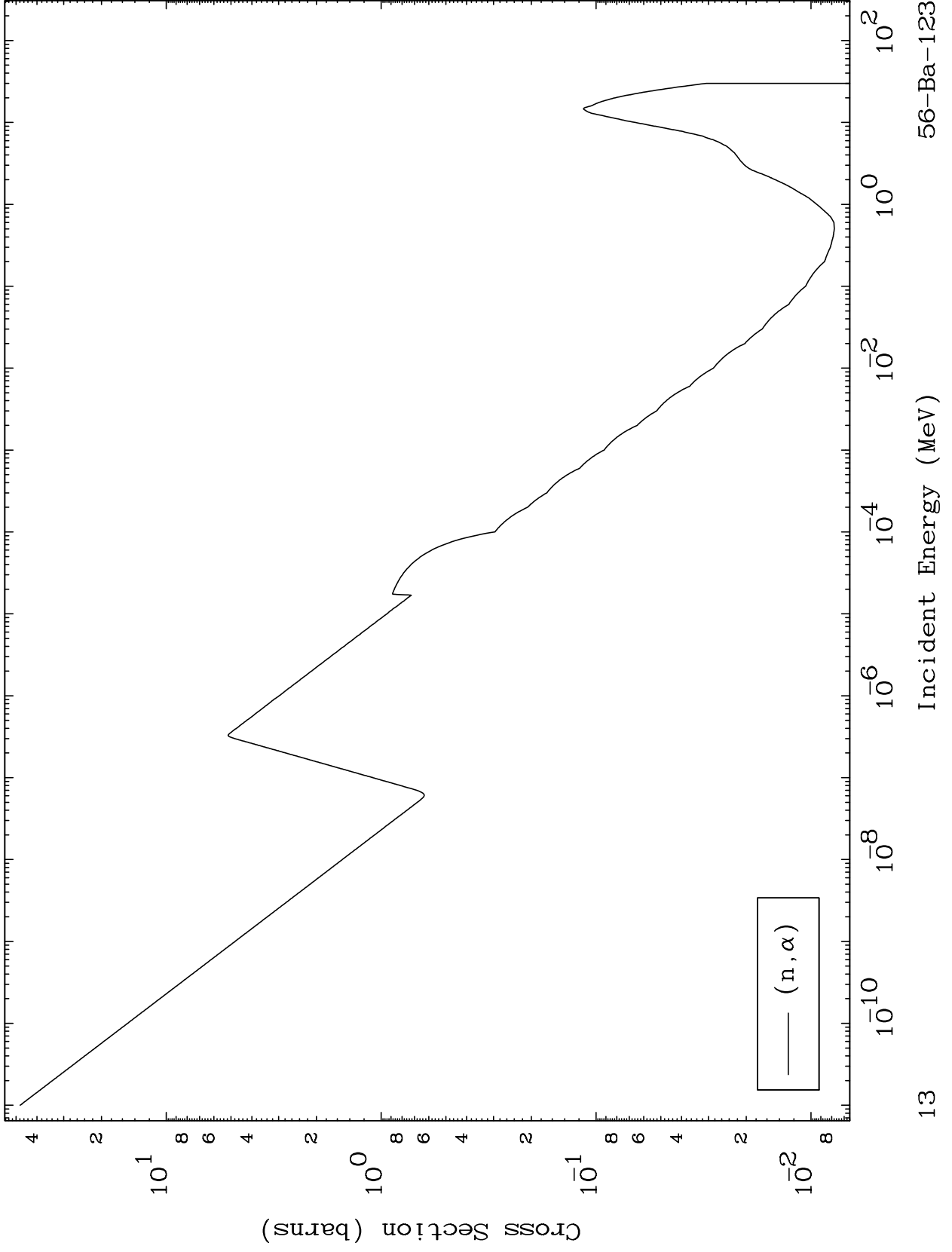
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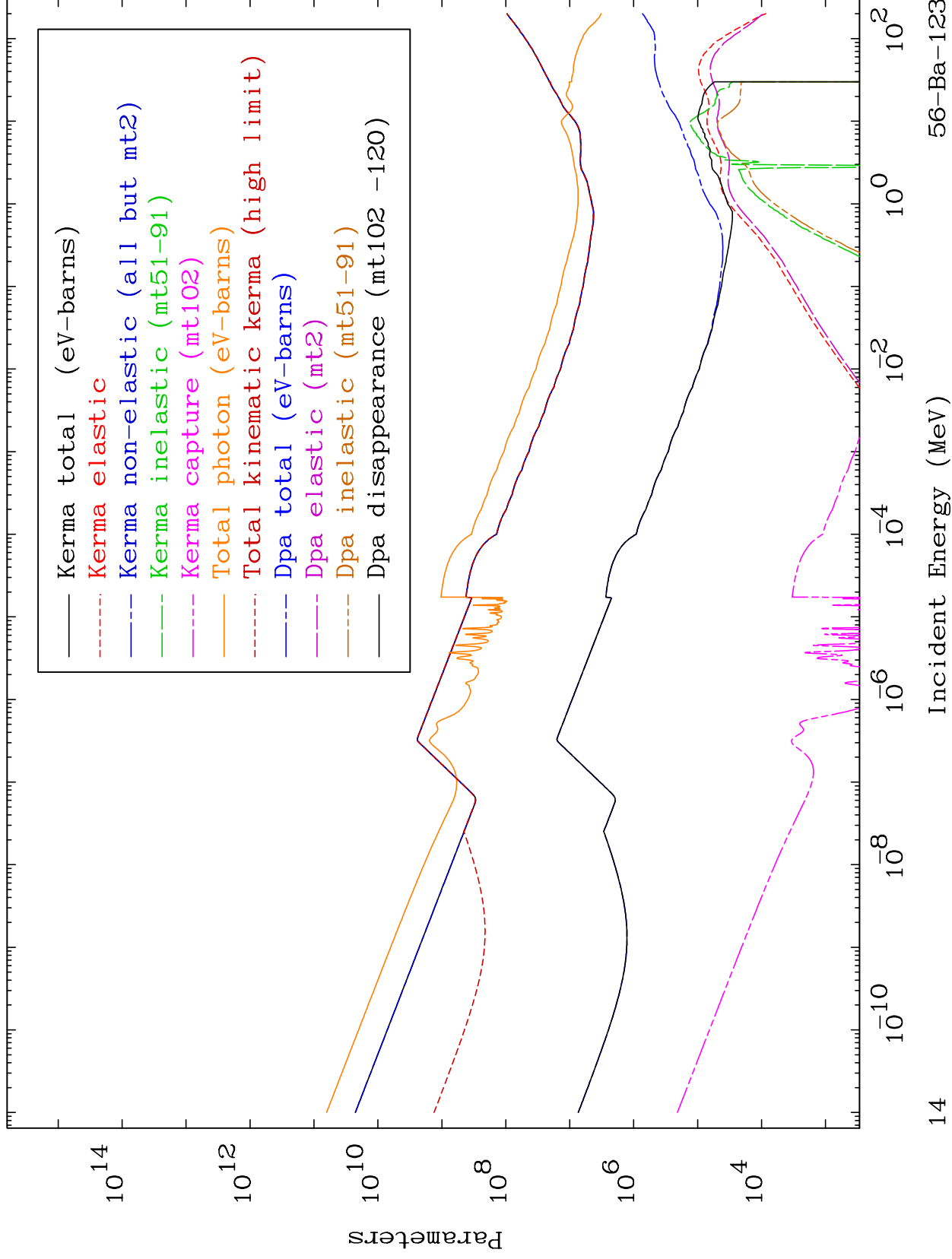


MAT 5604

(n,α) Levels
293 Kelvin Cross Sections

56-Ba-123

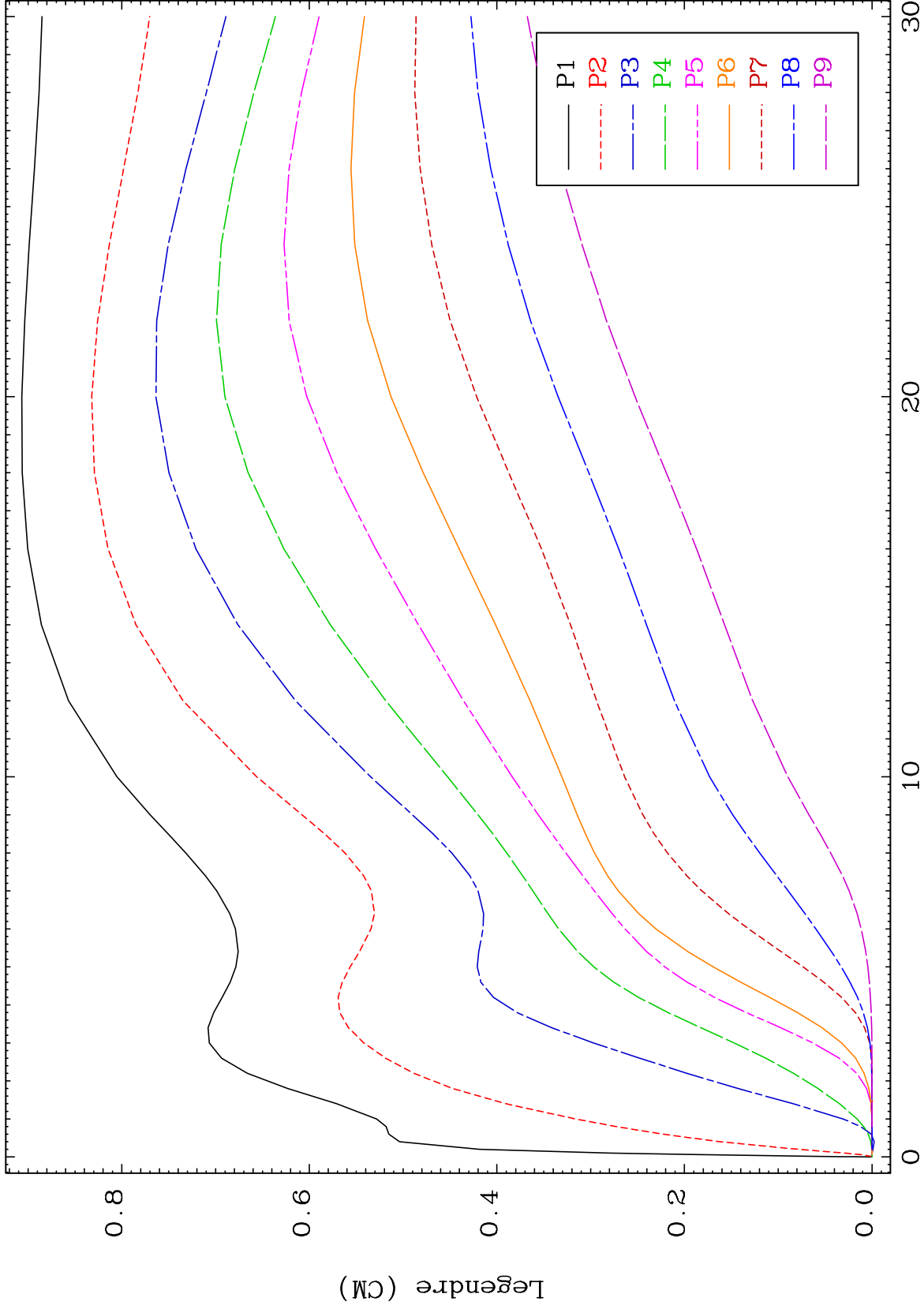




MAT 5604

Elastic Legendre Coefficients

56-Ba-123



15

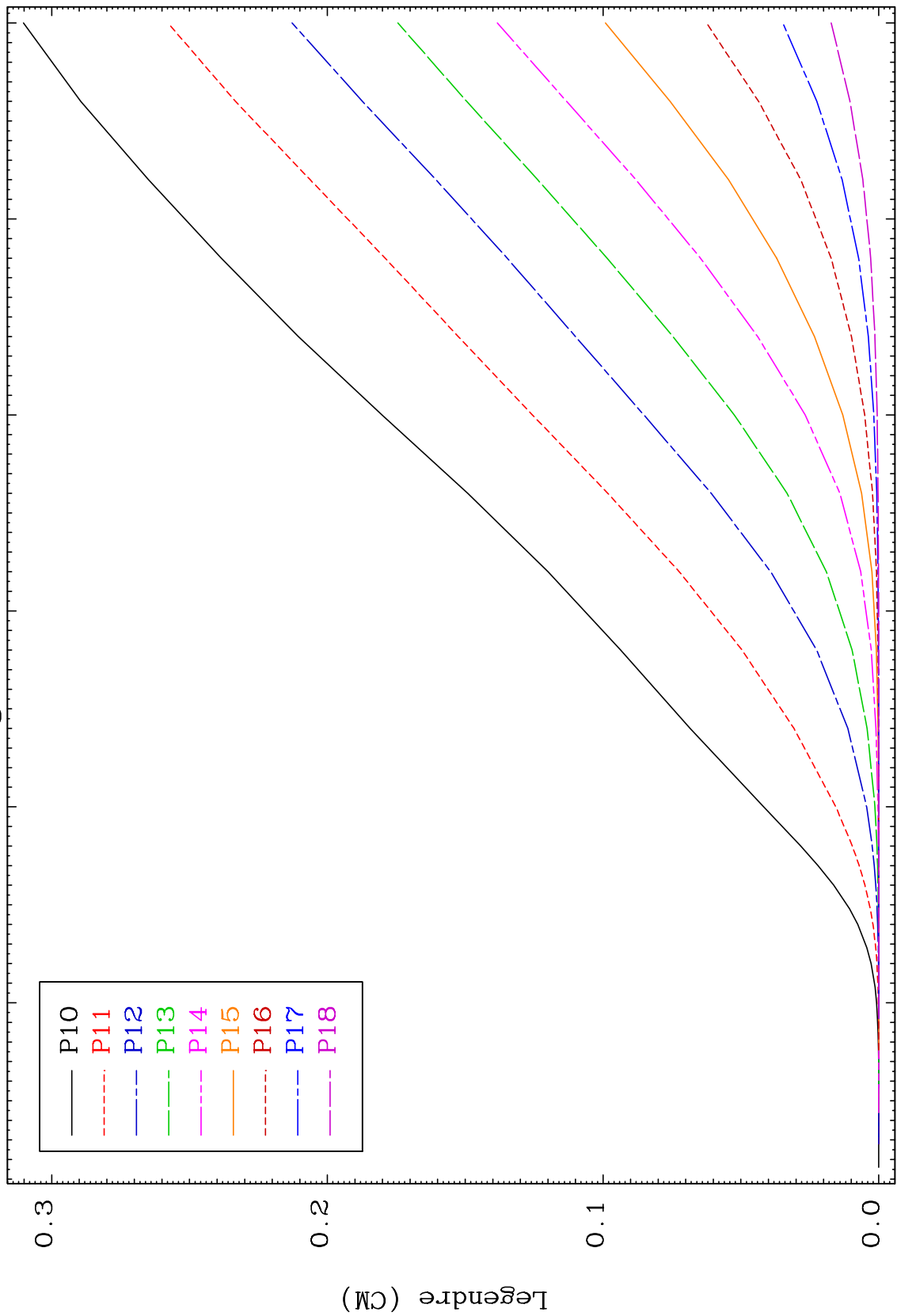
Incident Energy (MeV)

56-Ba-123

MAT 5604

Elastic Legendre Coefficients

56-Ba-123



16

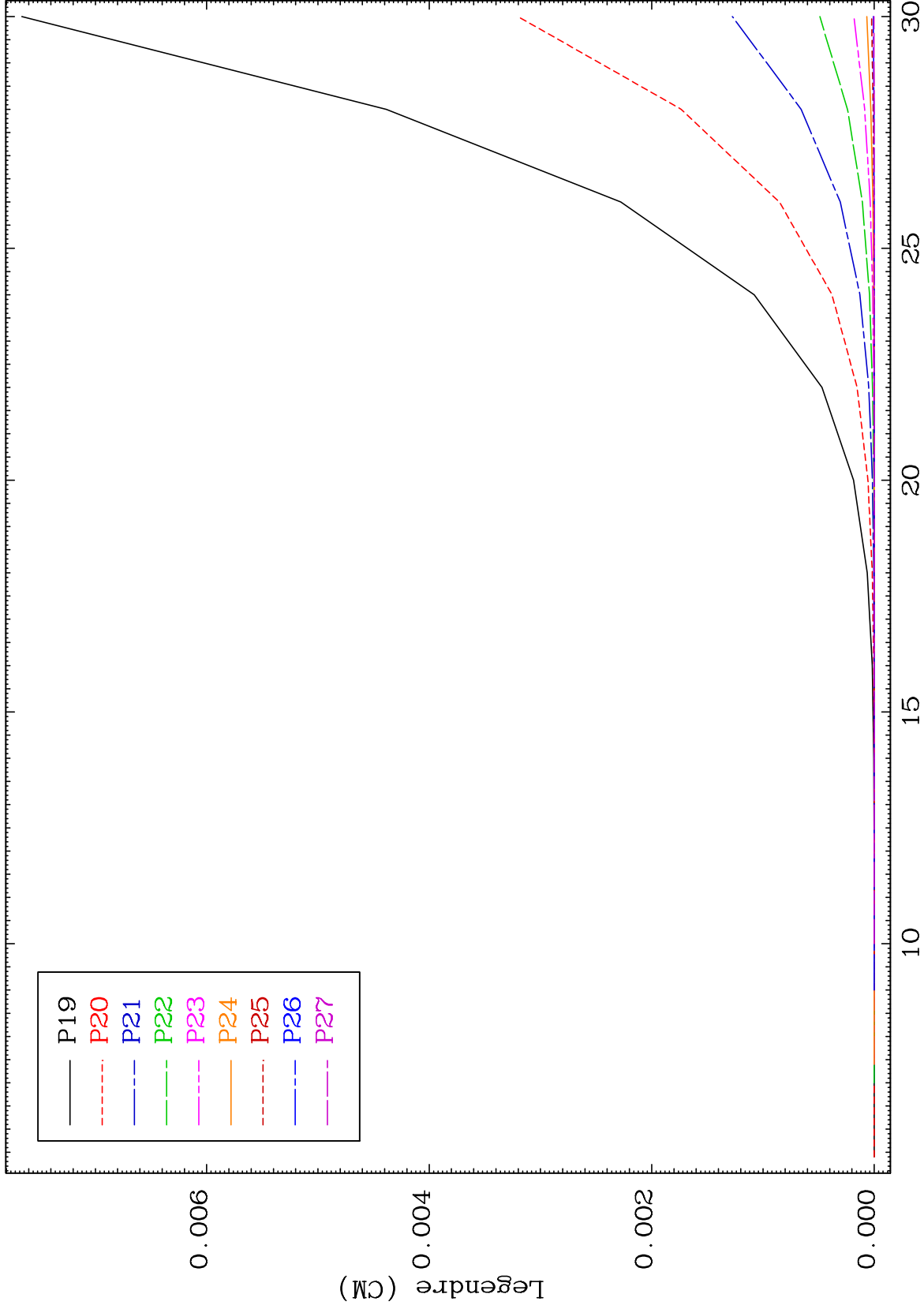
Incident Energy (MeV)

56-Ba-123

MAT 5604

Elastic Legendre Coefficients

56-Ba-123



17

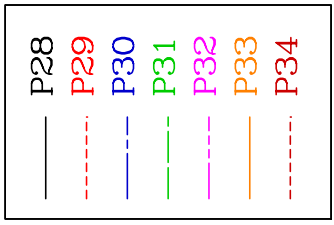
Incident Energy (MeV)

56-Ba-123

MAT 5604

Elastic Legendre Coefficients

56-Ba-123



$\times 10^{-7}$

Legendre (CM)

10

15

20

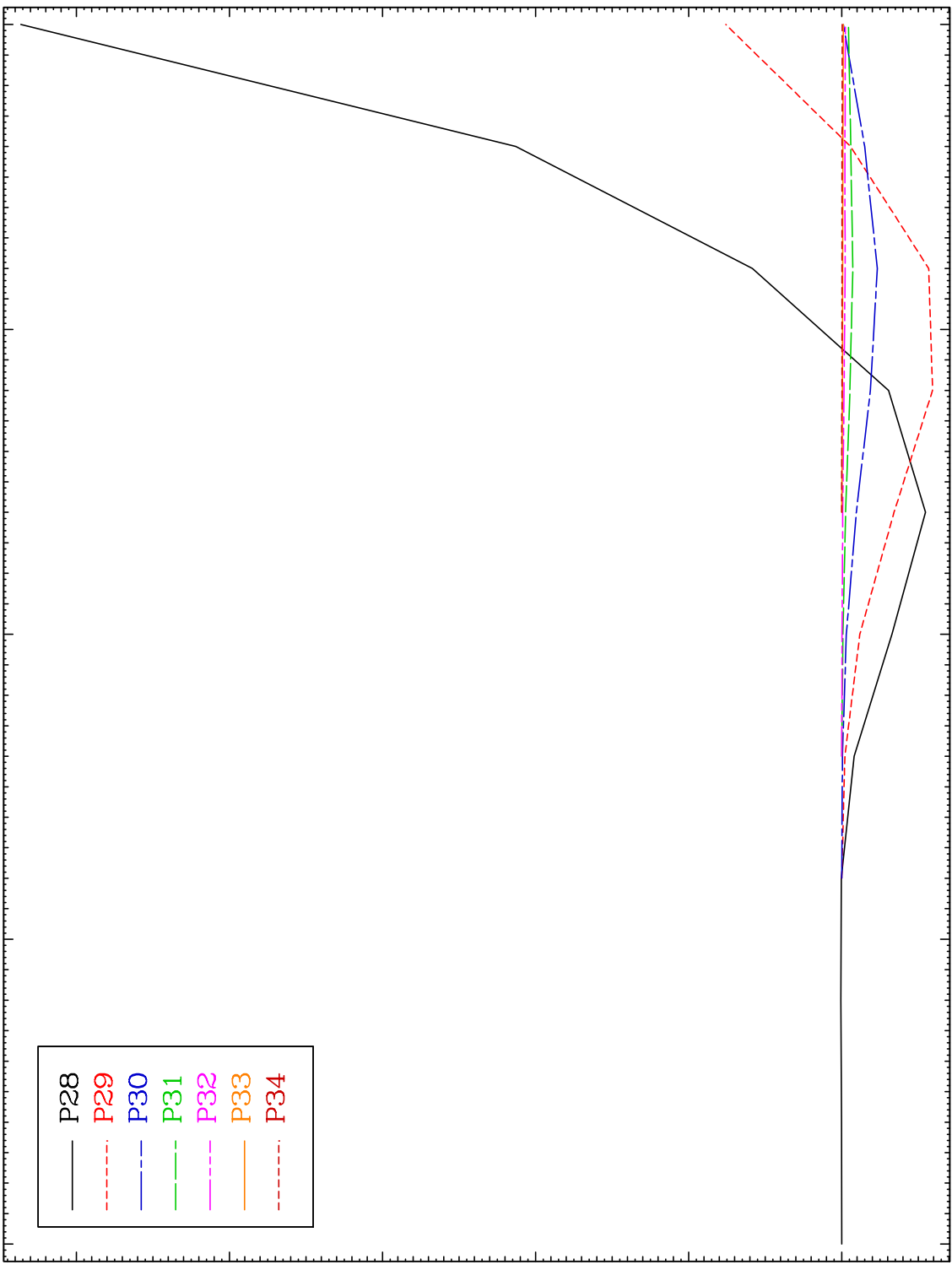
25

30

18

Incident Energy (MeV)

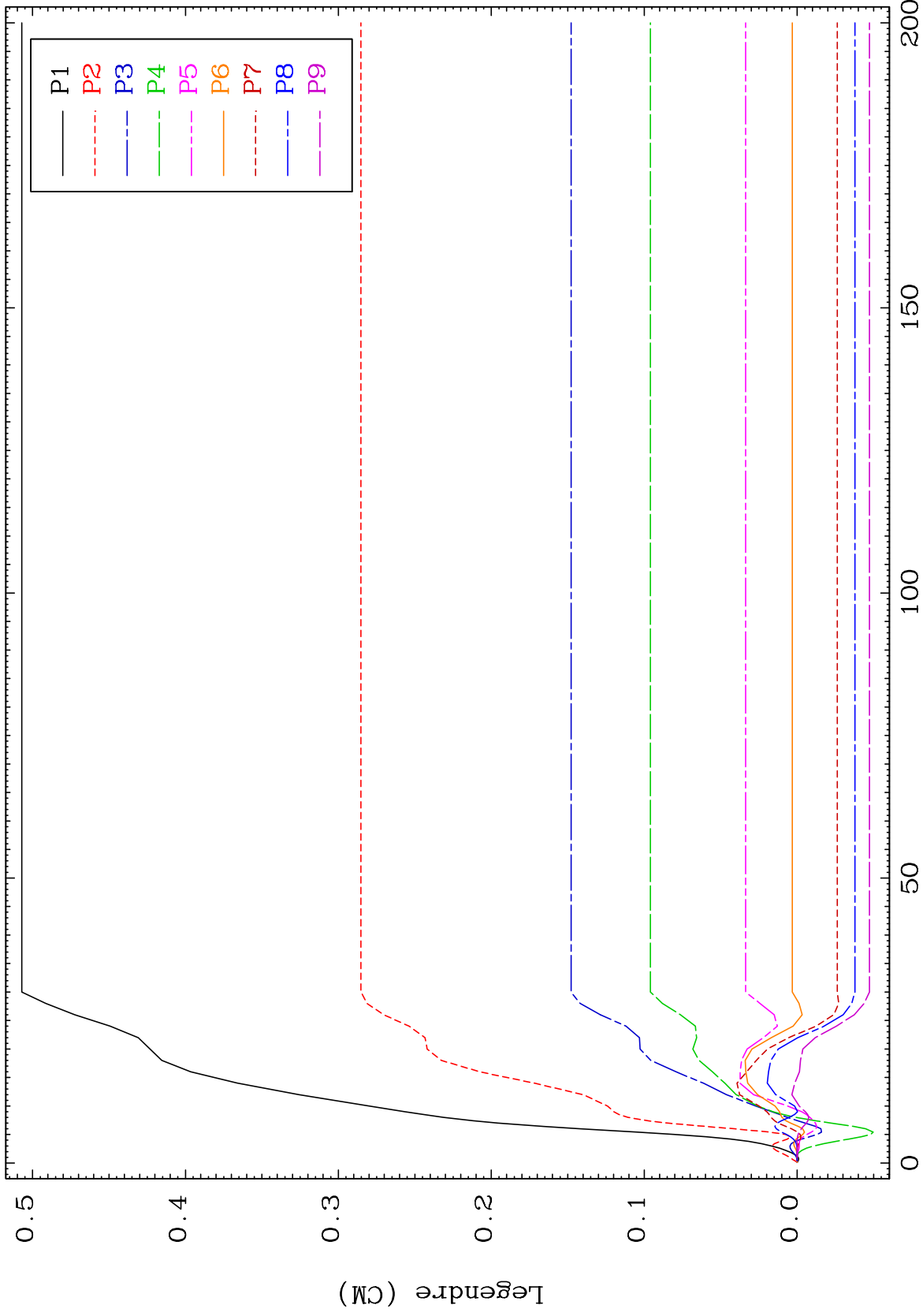
56-Ba-123



MAT 5604

MT= 51 (n,n') Level
Legendre Coefficients

56-Ba-123



19

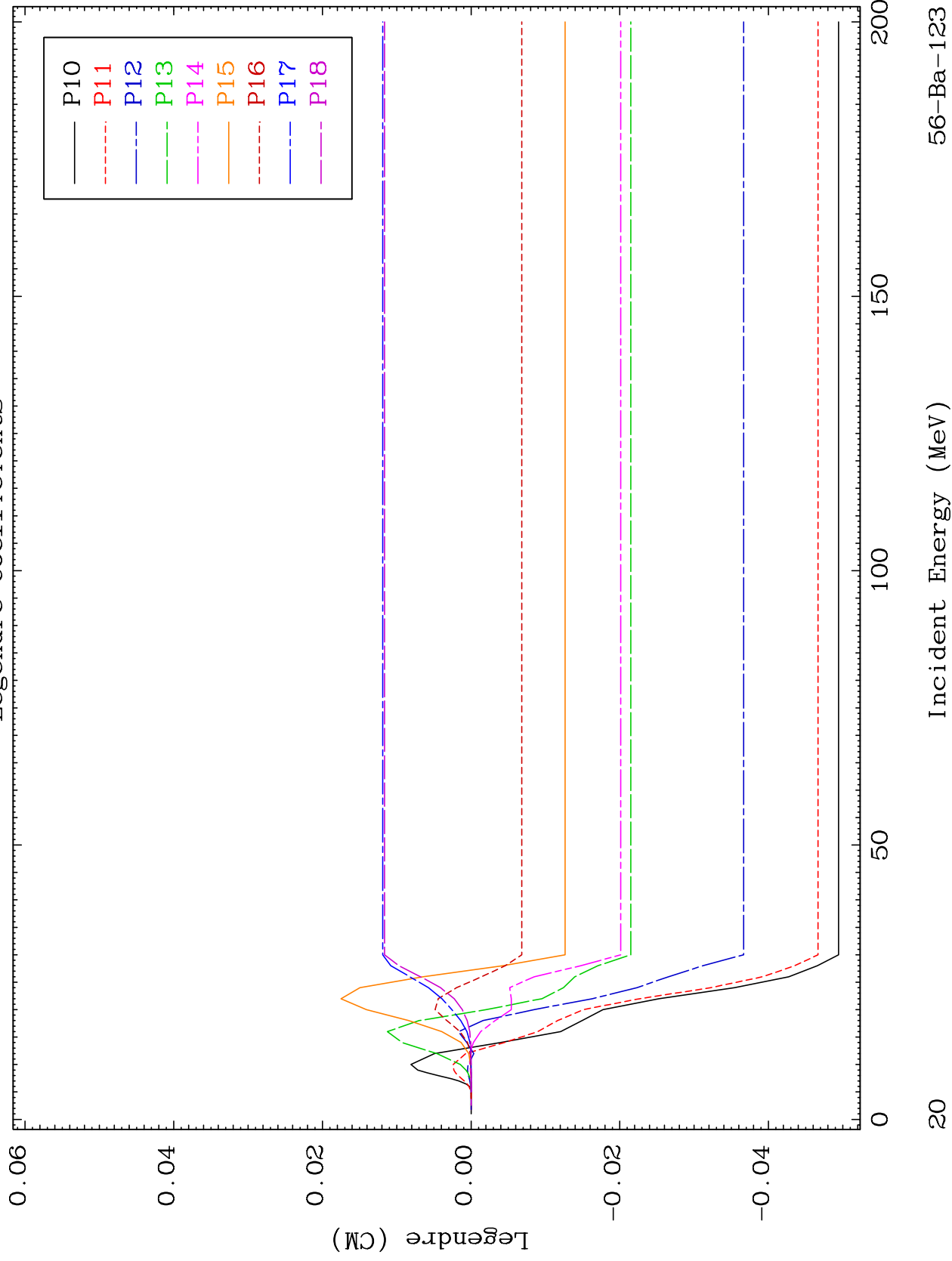
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 51 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

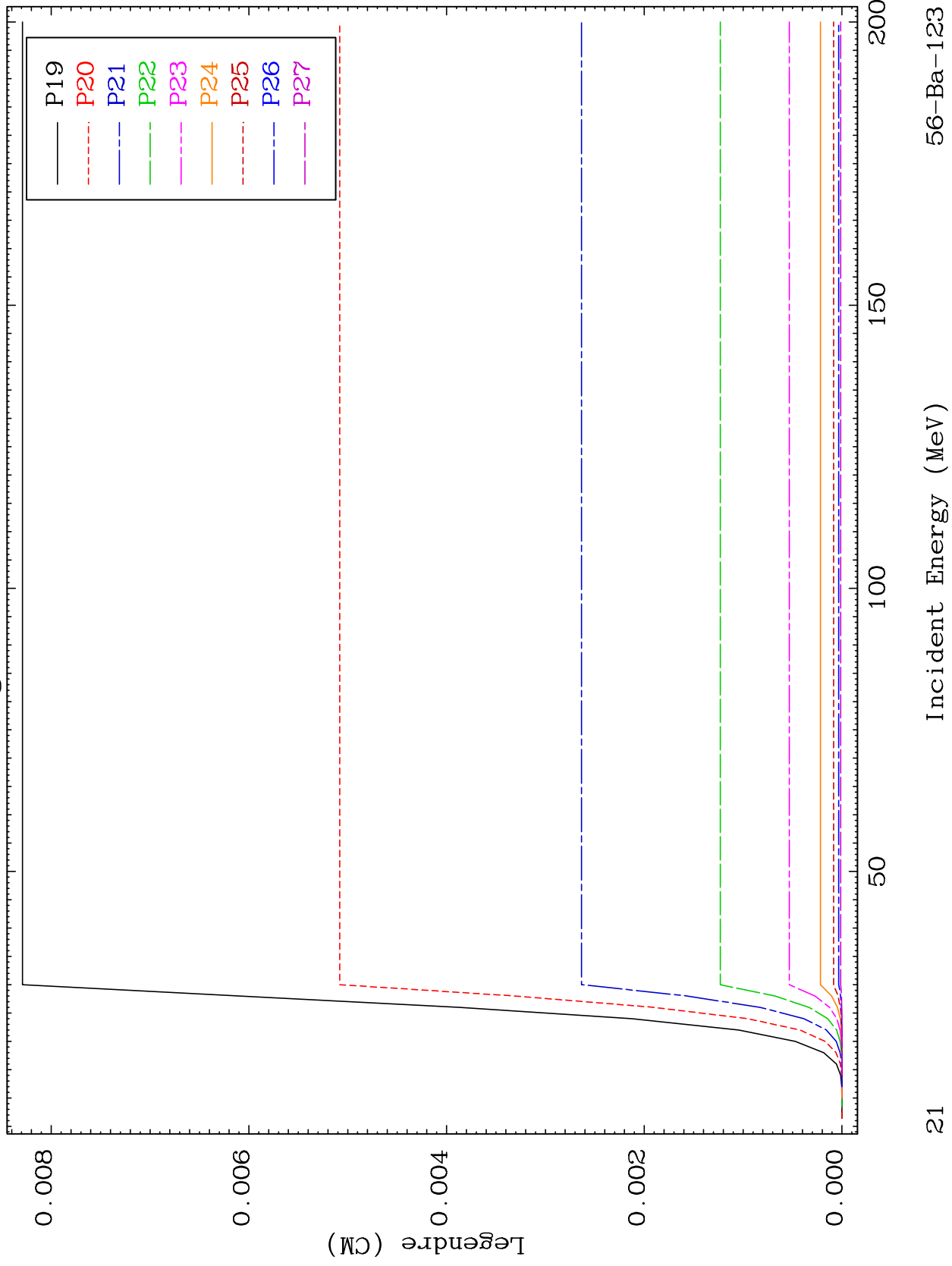
Incident Energy (MeV)

20

MAT 5604

MT= 51 (n,n') Level
Legendre Coefficients

56-Ba-123



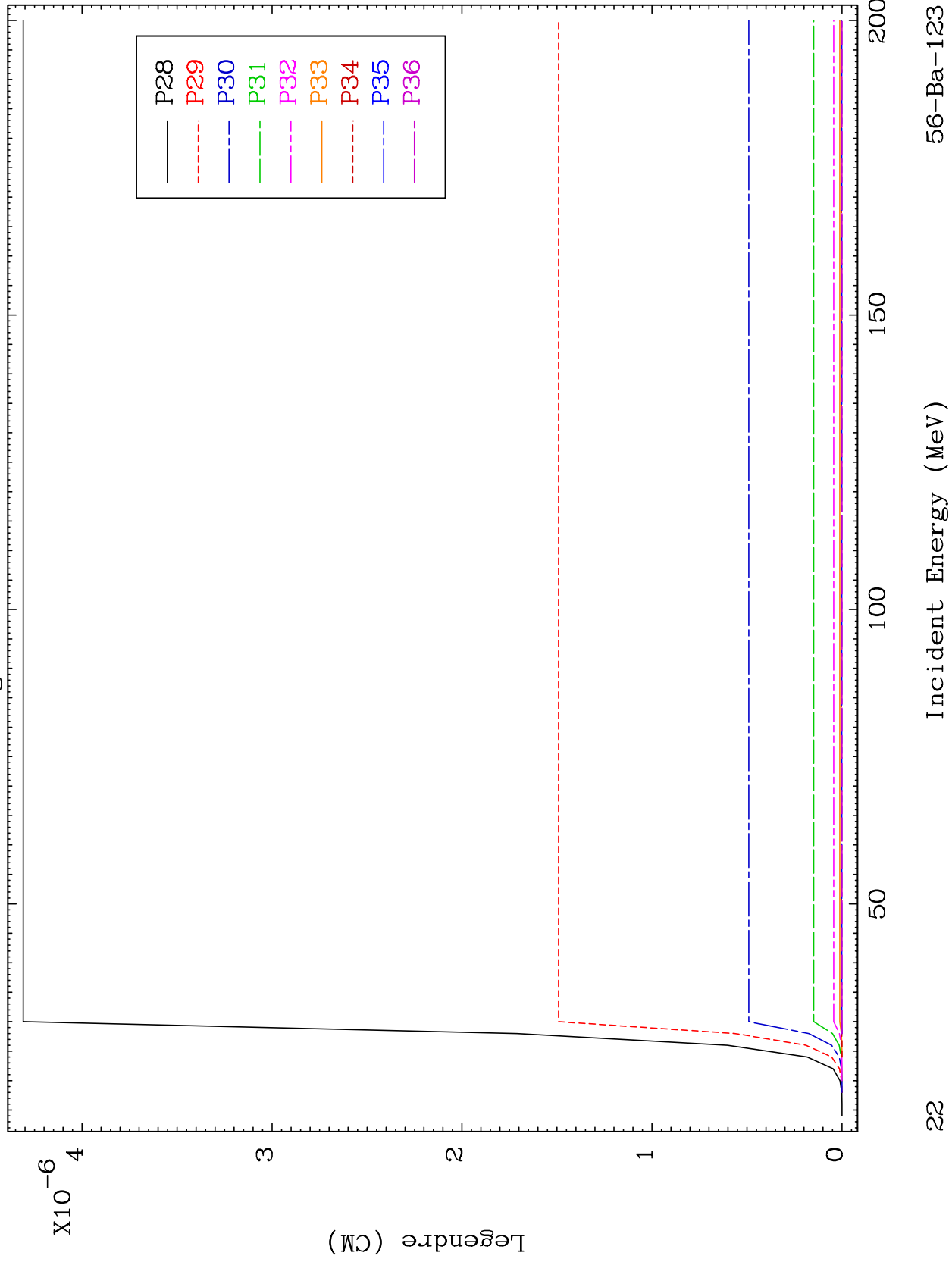
21

56-Ba-123

MAT 5604

MT= 51 (n,n') Level
Legendre Coefficients

56-Ba-123



22

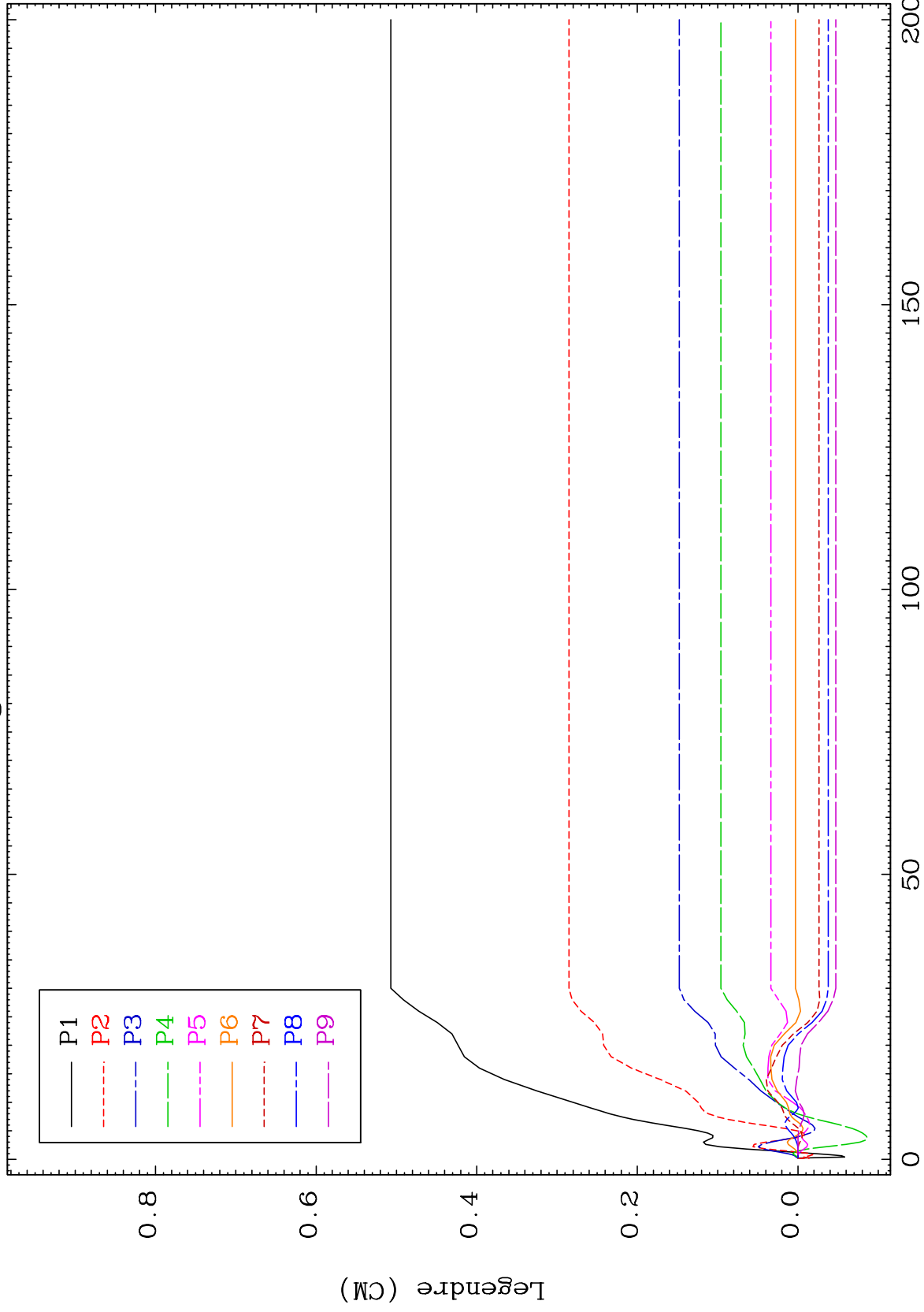
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 52 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

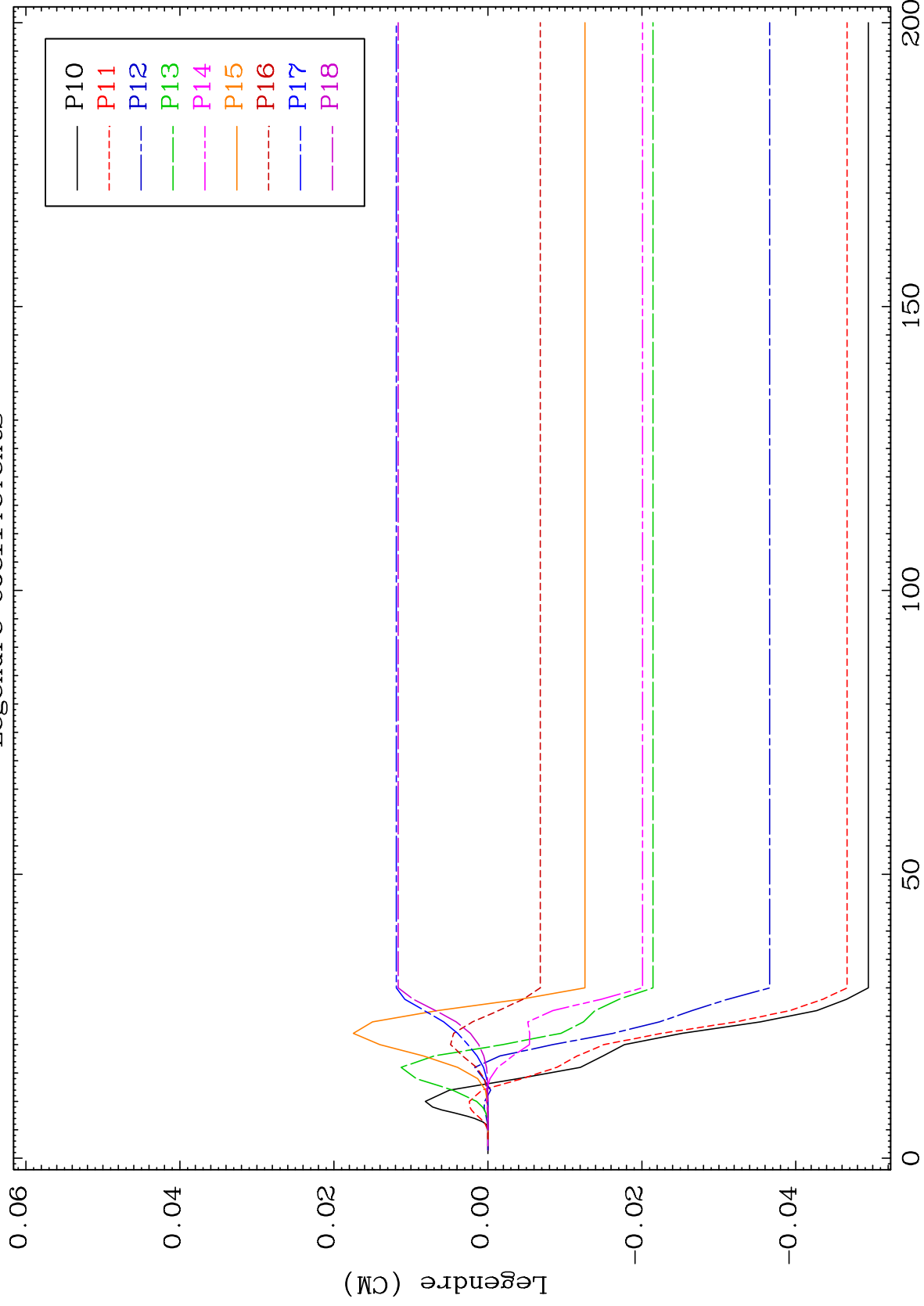
Incident Energy (MeV)

23

MAT 5604

MT= 52 (n,n') Level
Legendre Coefficients

56-Ba-123



24

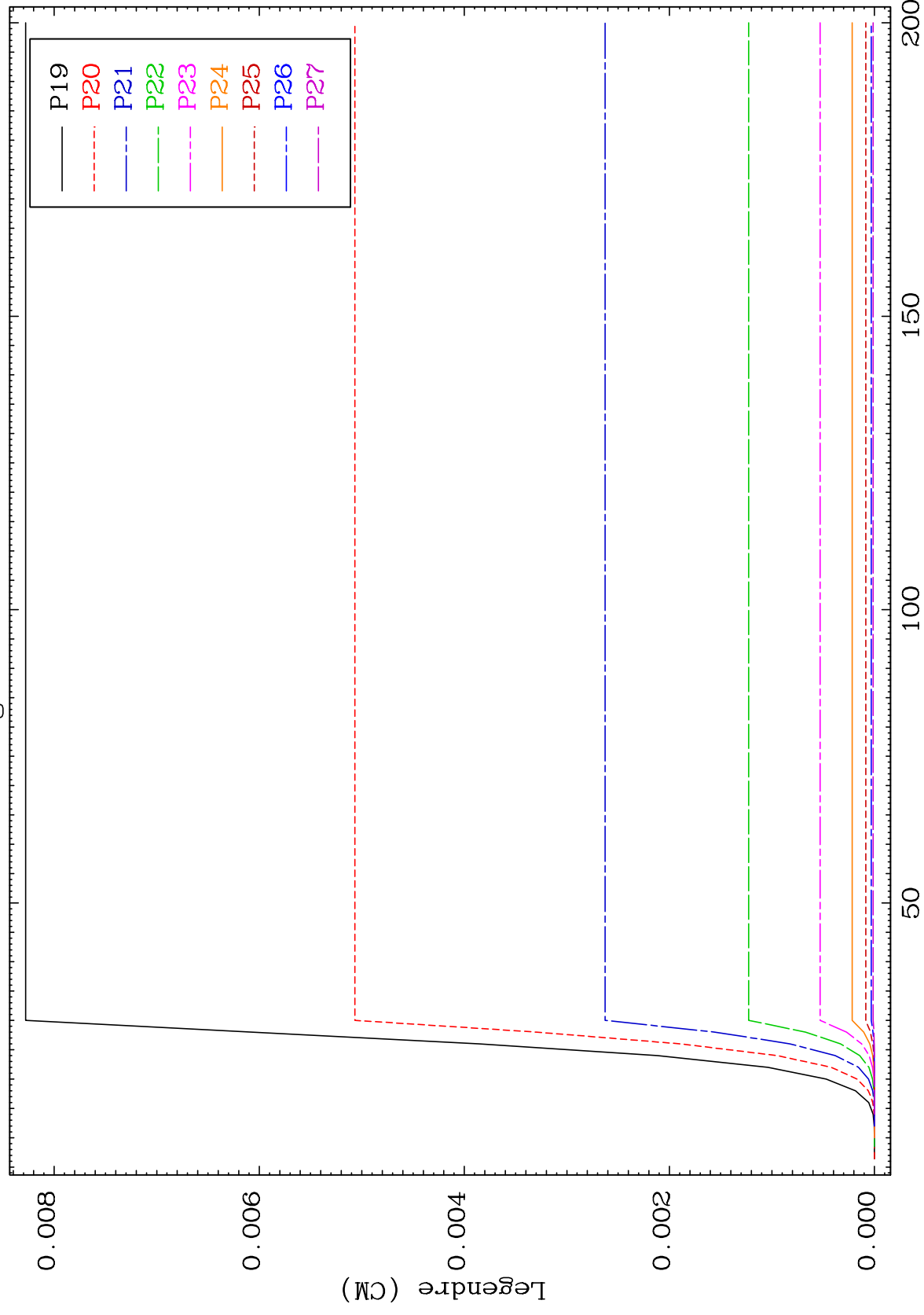
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 52 (n,n') Level
Legendre Coefficients

56-Ba-123



25

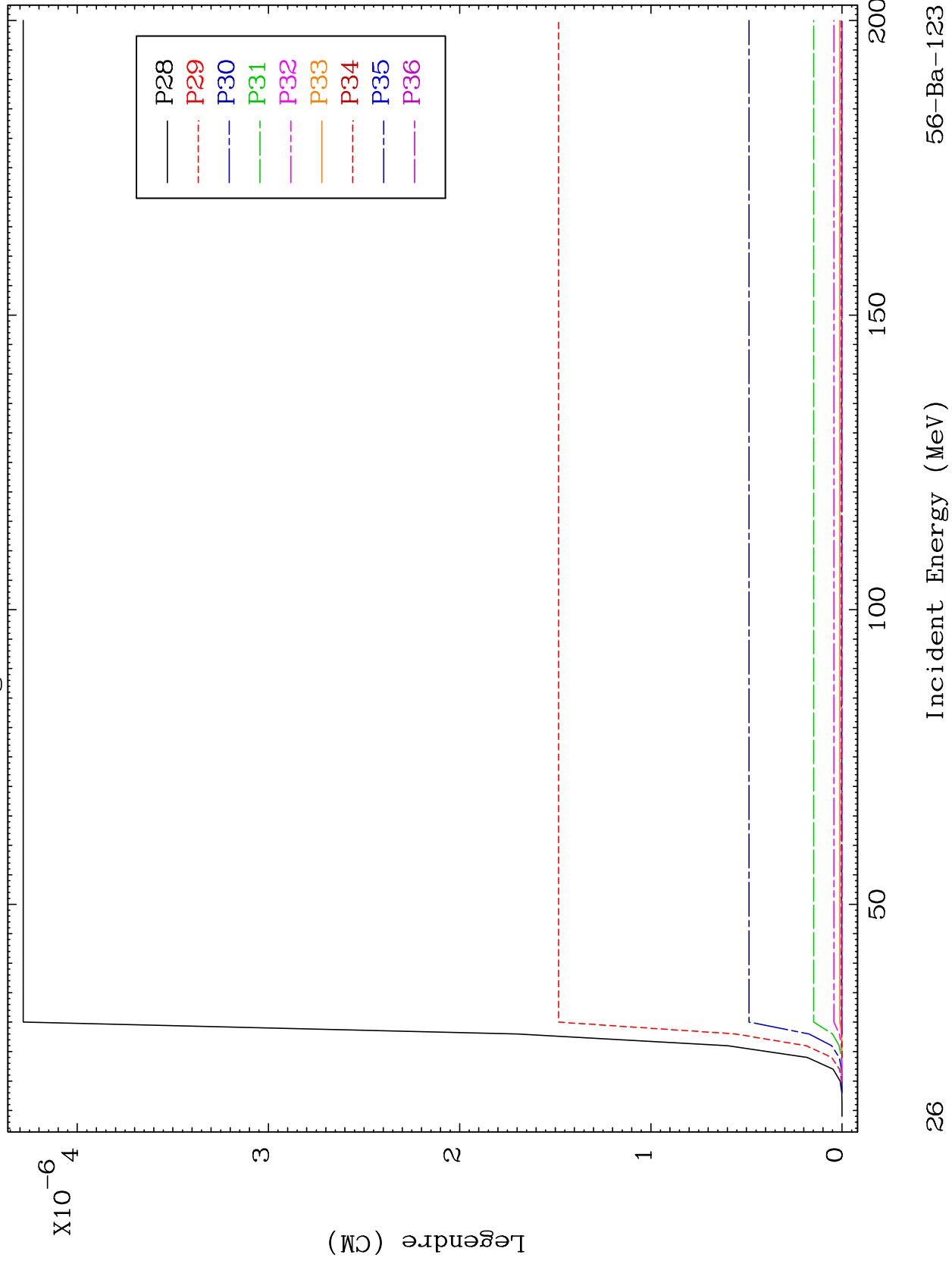
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 52 (n,n') Level
Legendre Coefficients

56-Ba-123



26

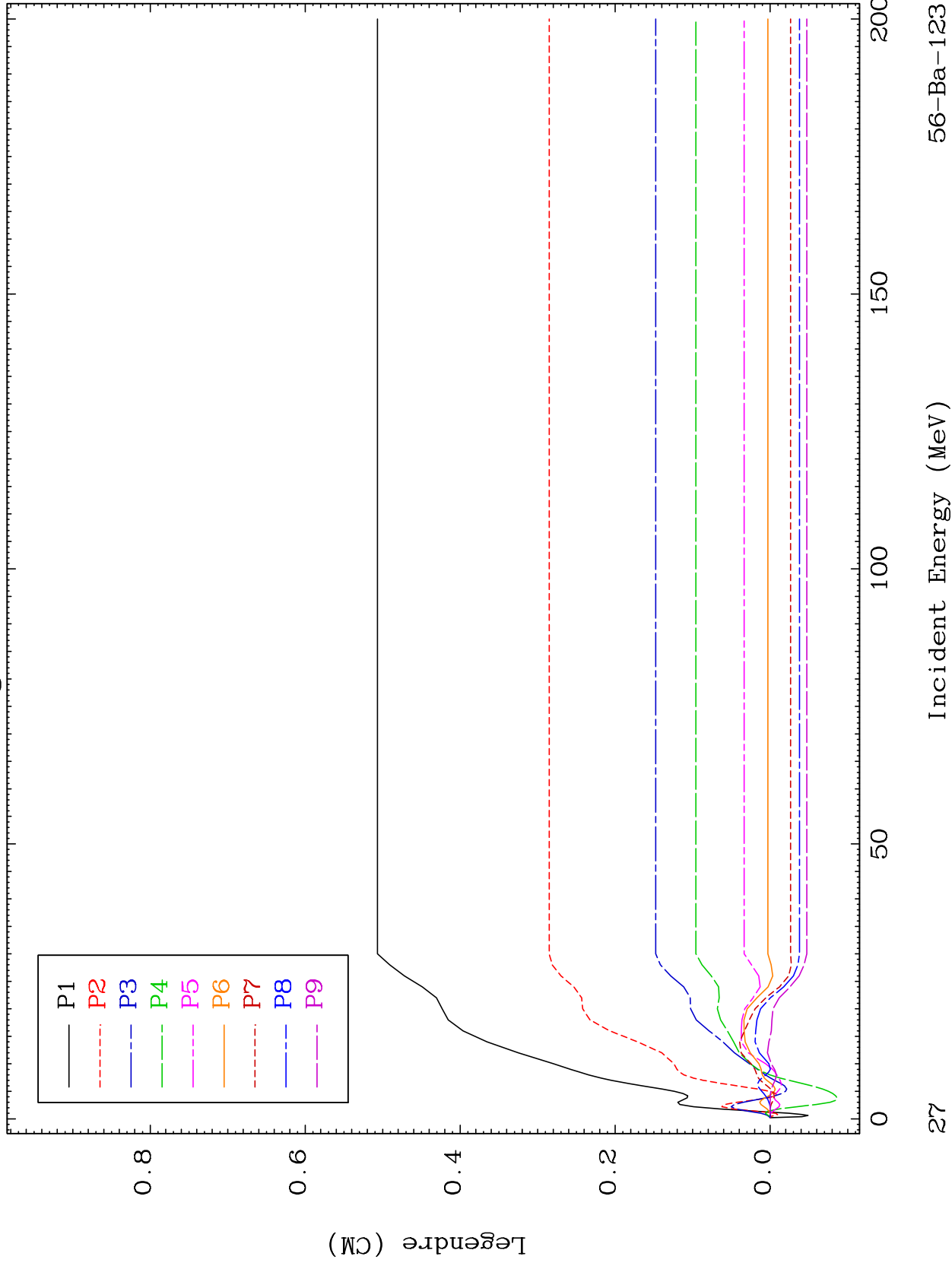
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 53 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

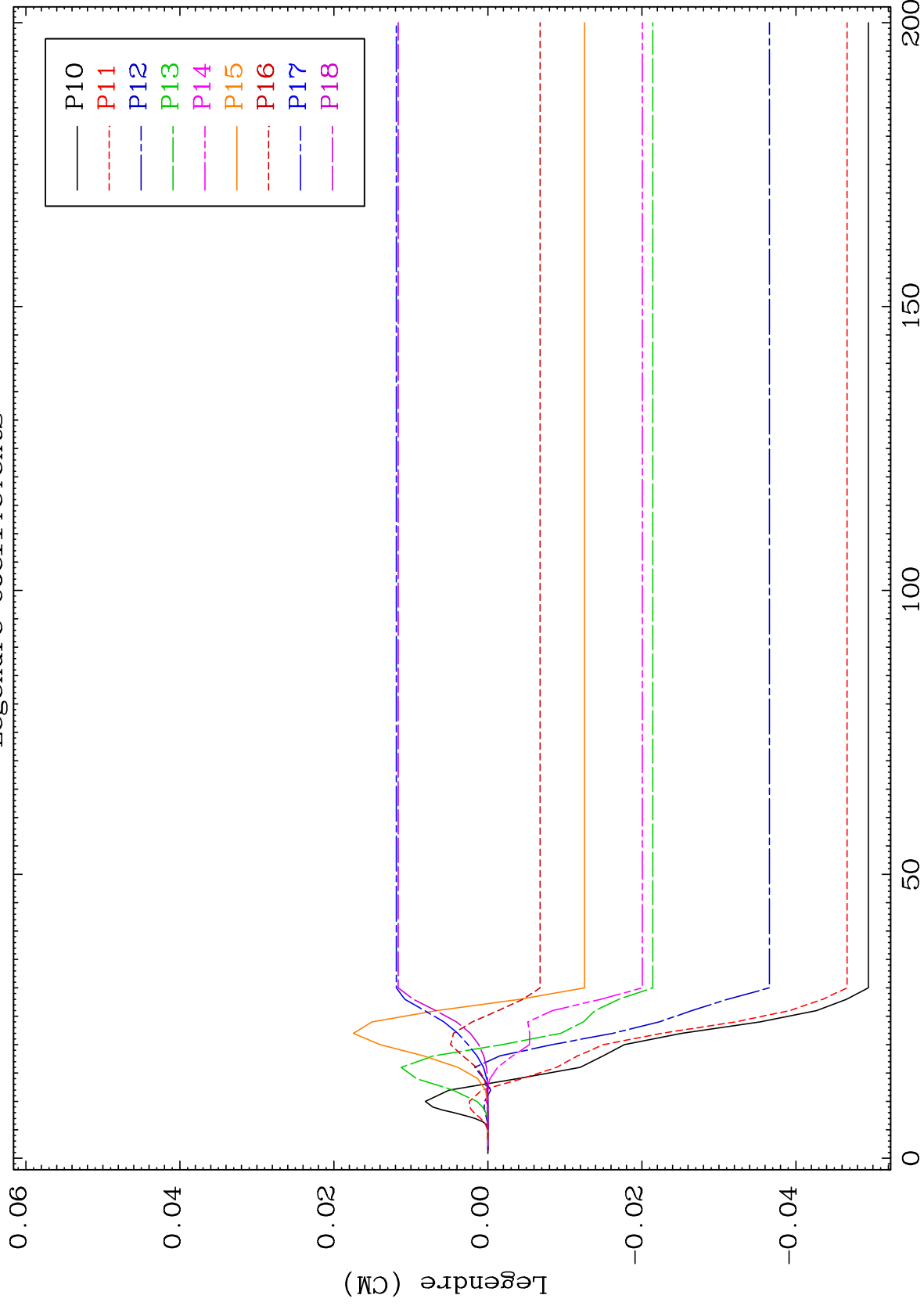
Incident Energy (MeV)

27

MAT 5604

MT= 53 (n,n') Level
Legendre Coefficients

56-Ba-123



28

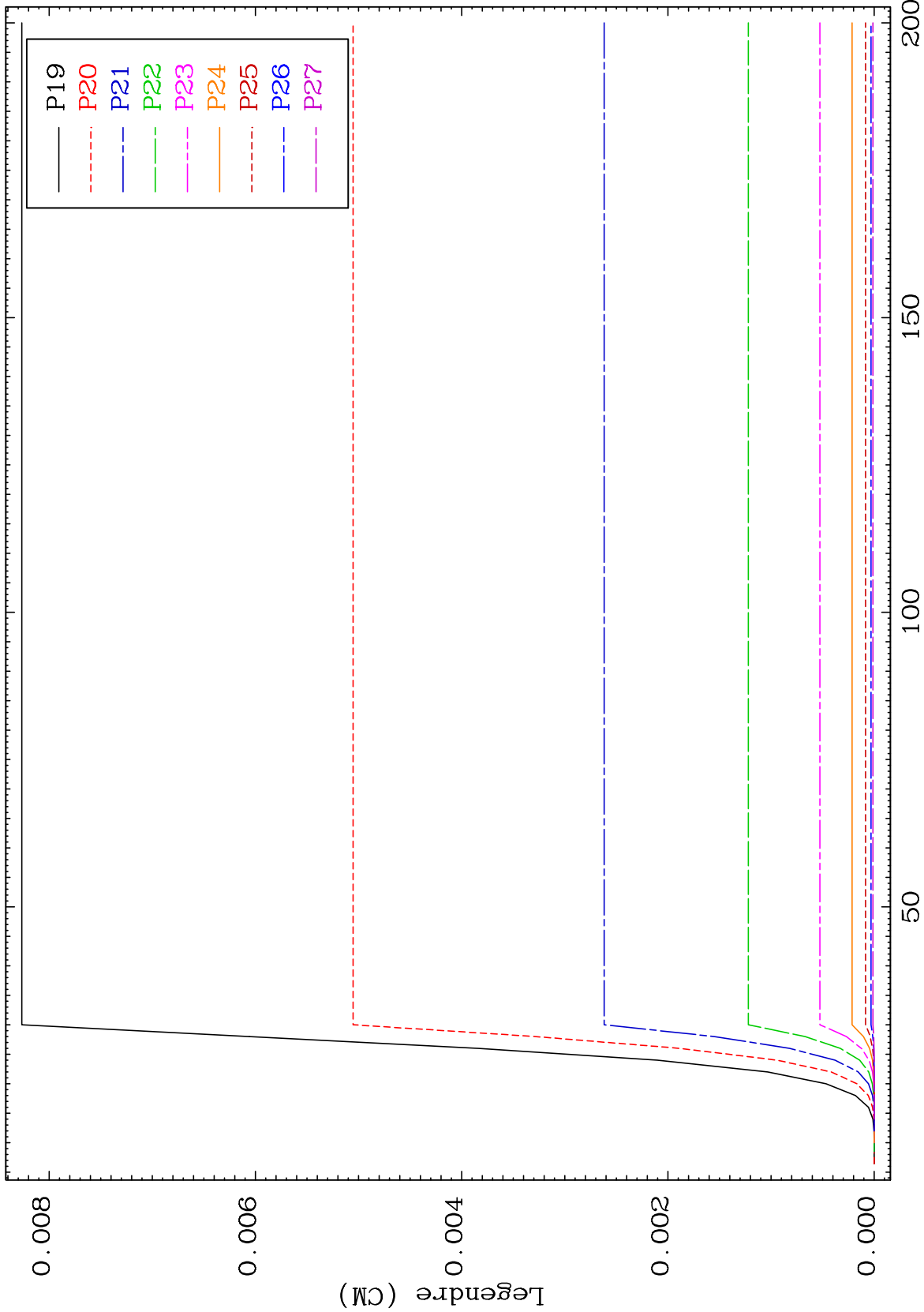
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 53 (n,n') Level
Legendre Coefficients

56-Ba-123



29

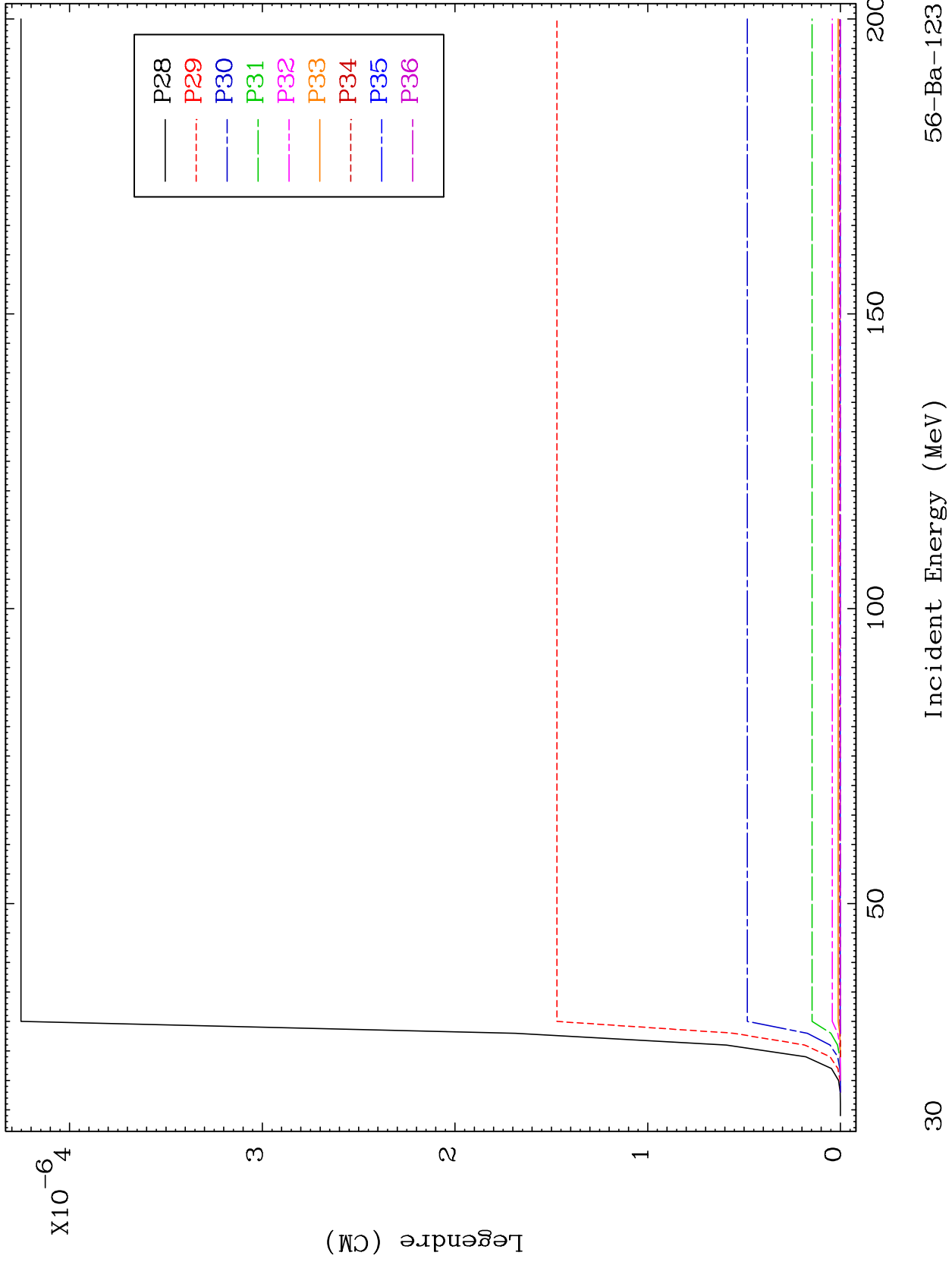
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 53 (n,n') Level
Legendre Coefficients

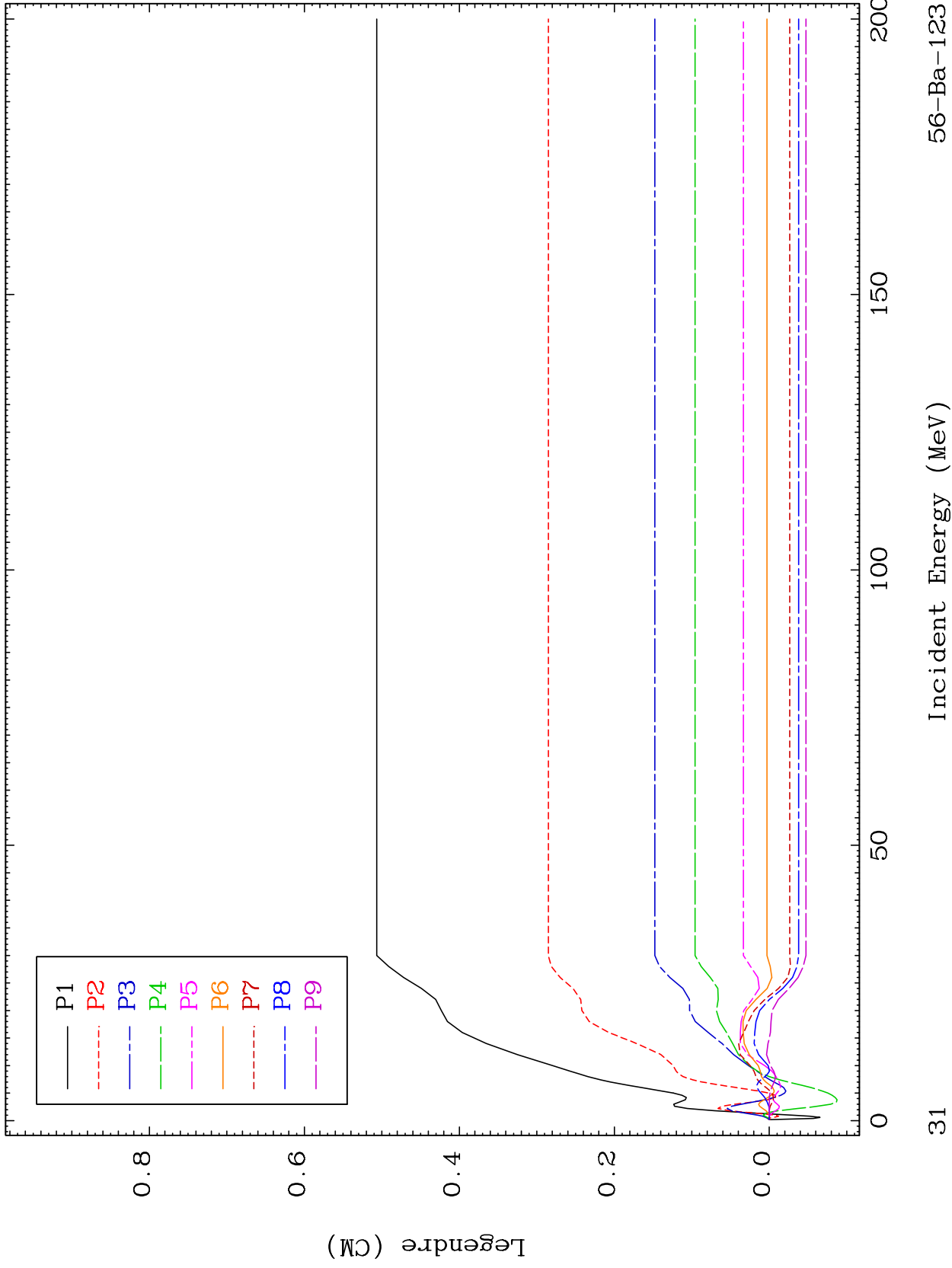
56-Ba-123



MAT 5604

MT= 54 (n,n') Level
Legendre Coefficients

56-Ba-123



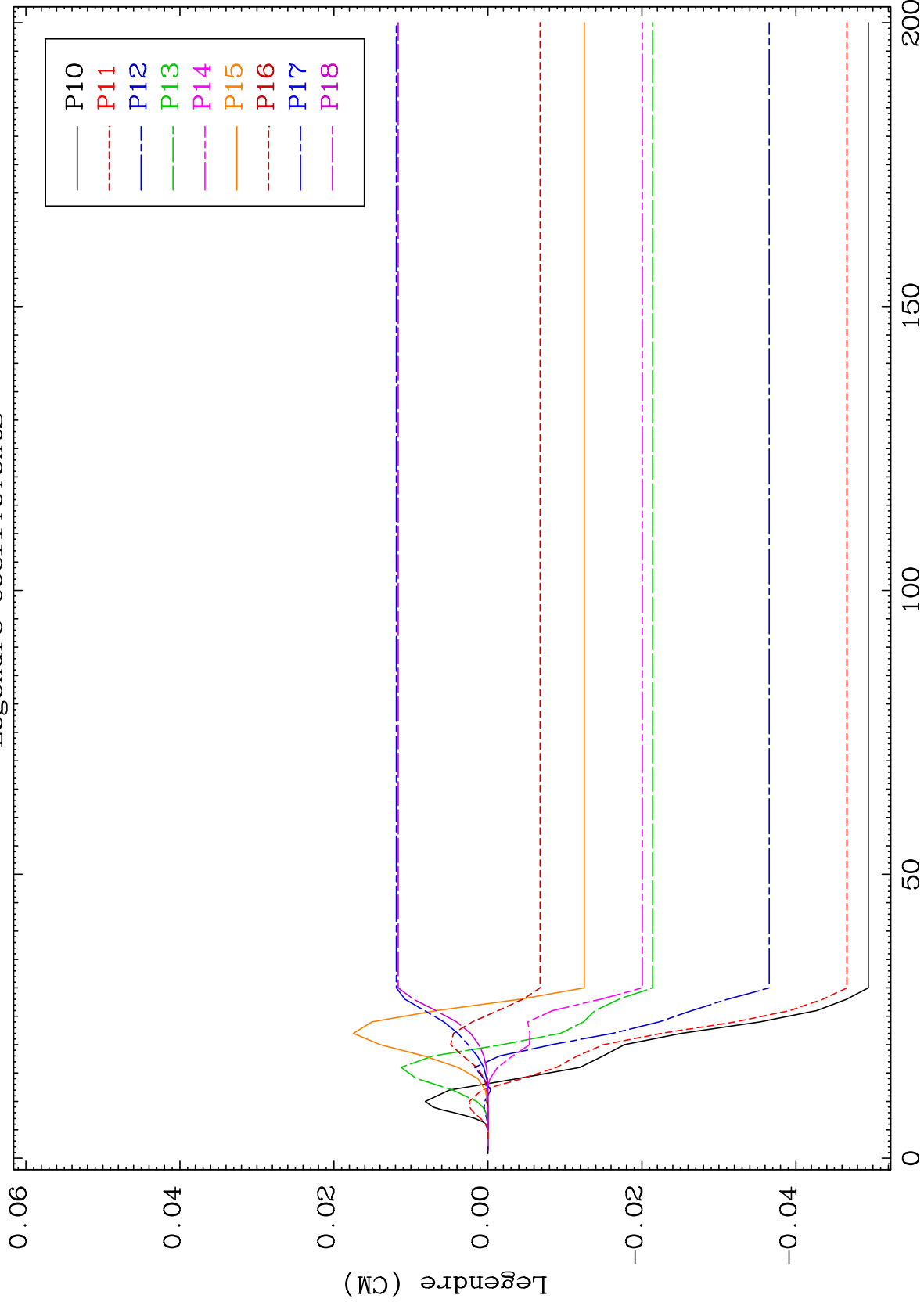
31

56-Ba-123

MAT 5604

MT= 54 (n,n') Level
Legendre Coefficients

56-Ba-123



32

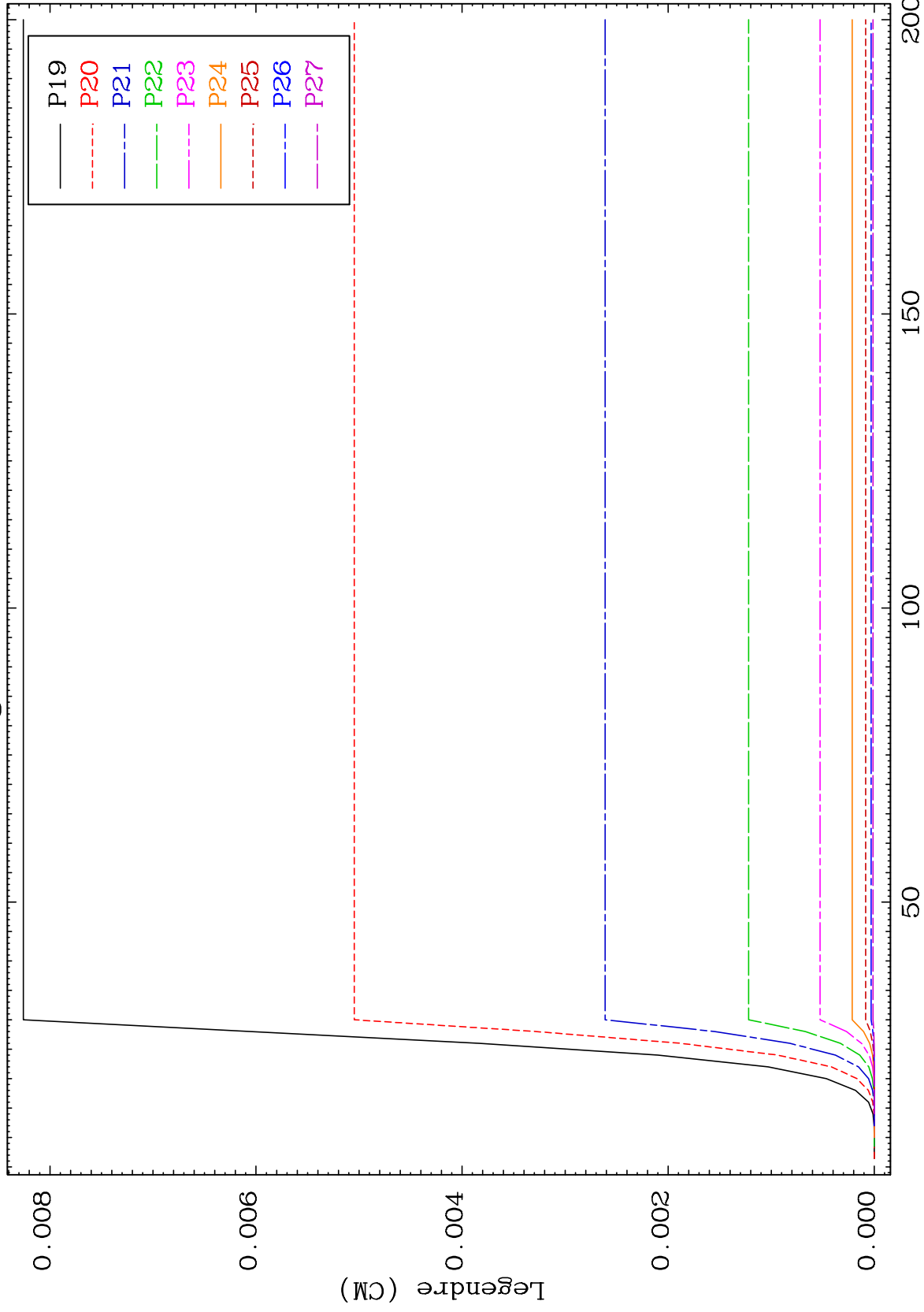
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 54 (n,n') Level
Legendre Coefficients

56-Ba-123



33

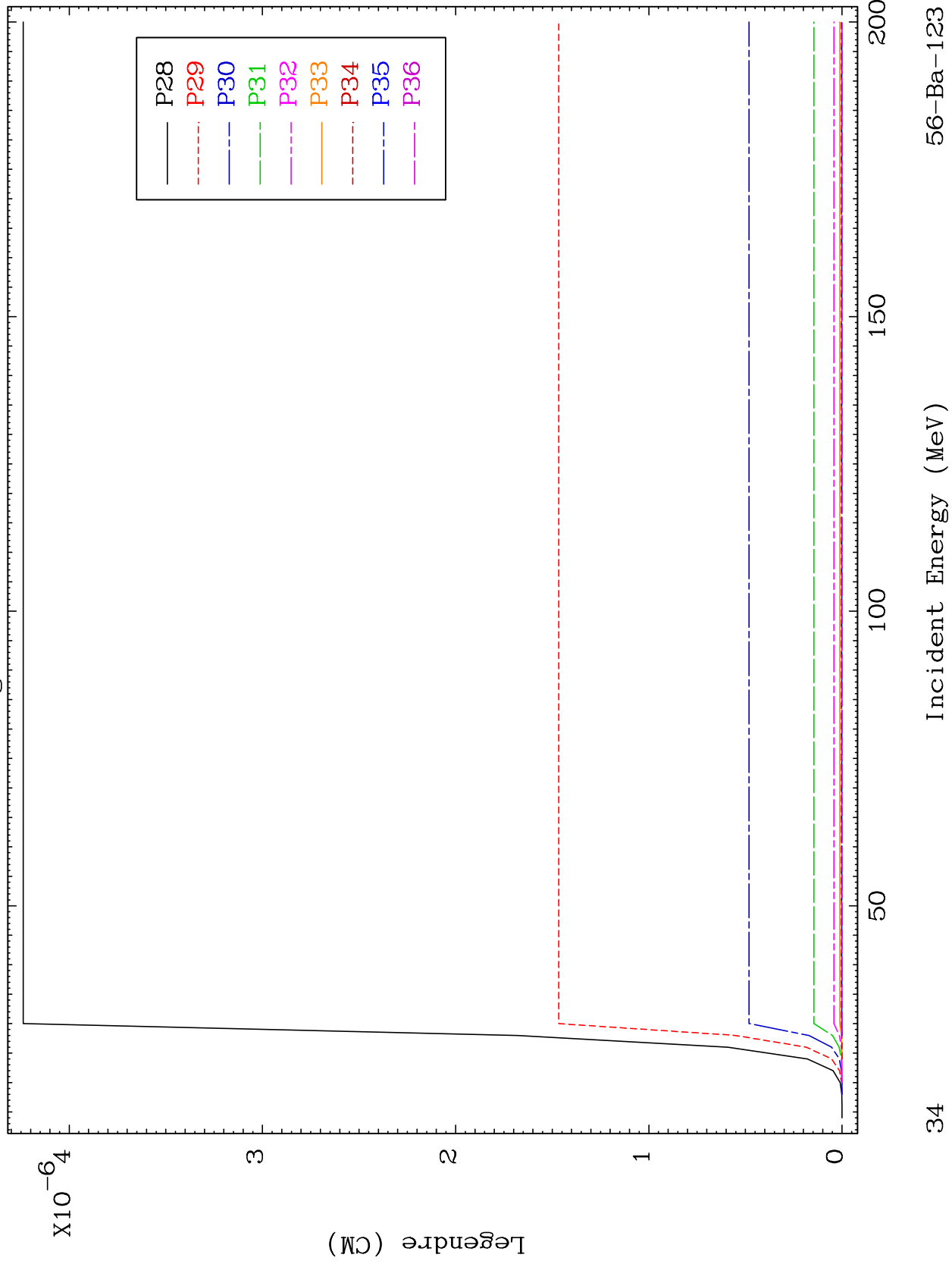
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 54 (n,n') Level
Legendre Coefficients

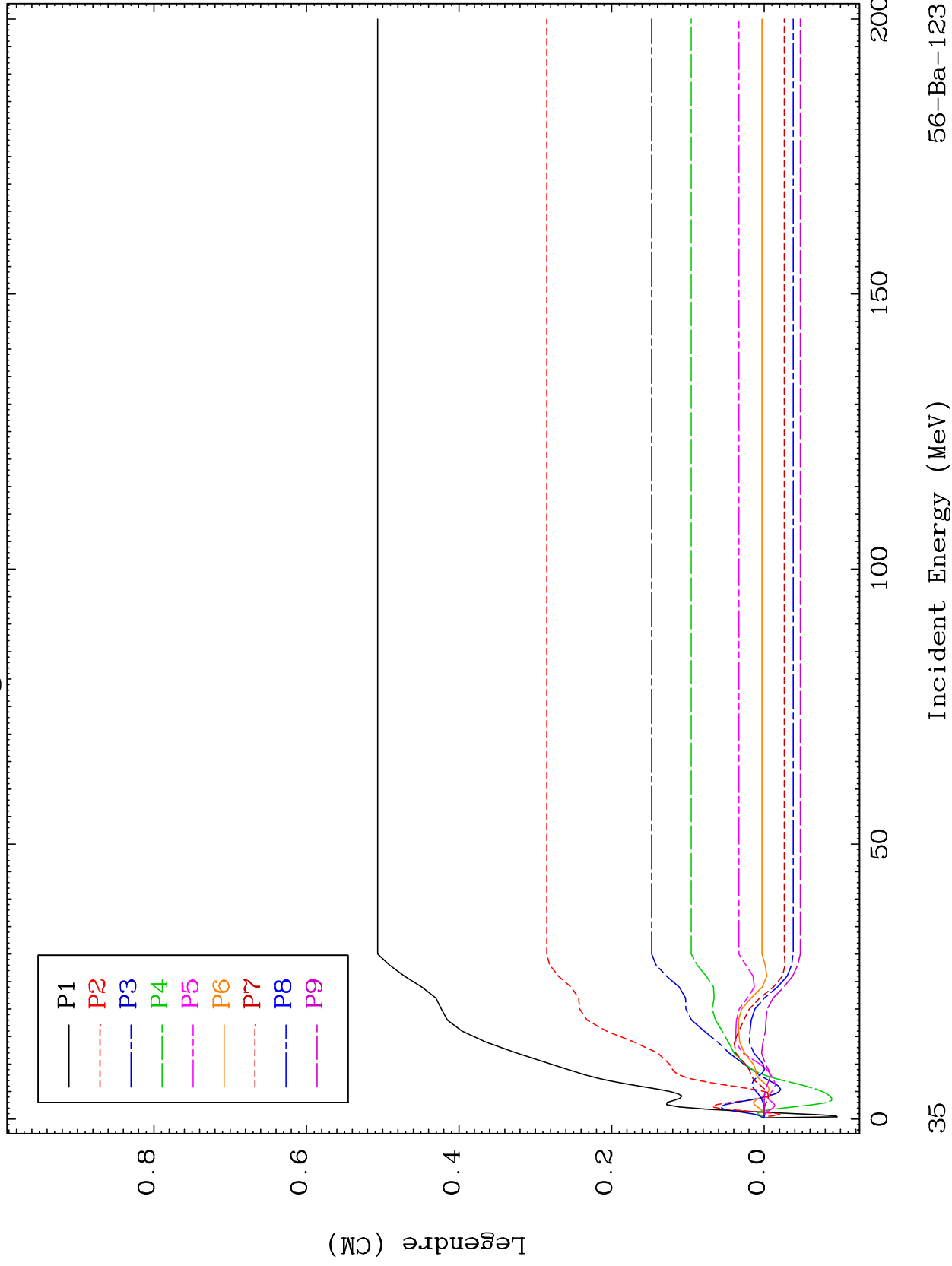
56-Ba-123



MAT 5604

MT= 55 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

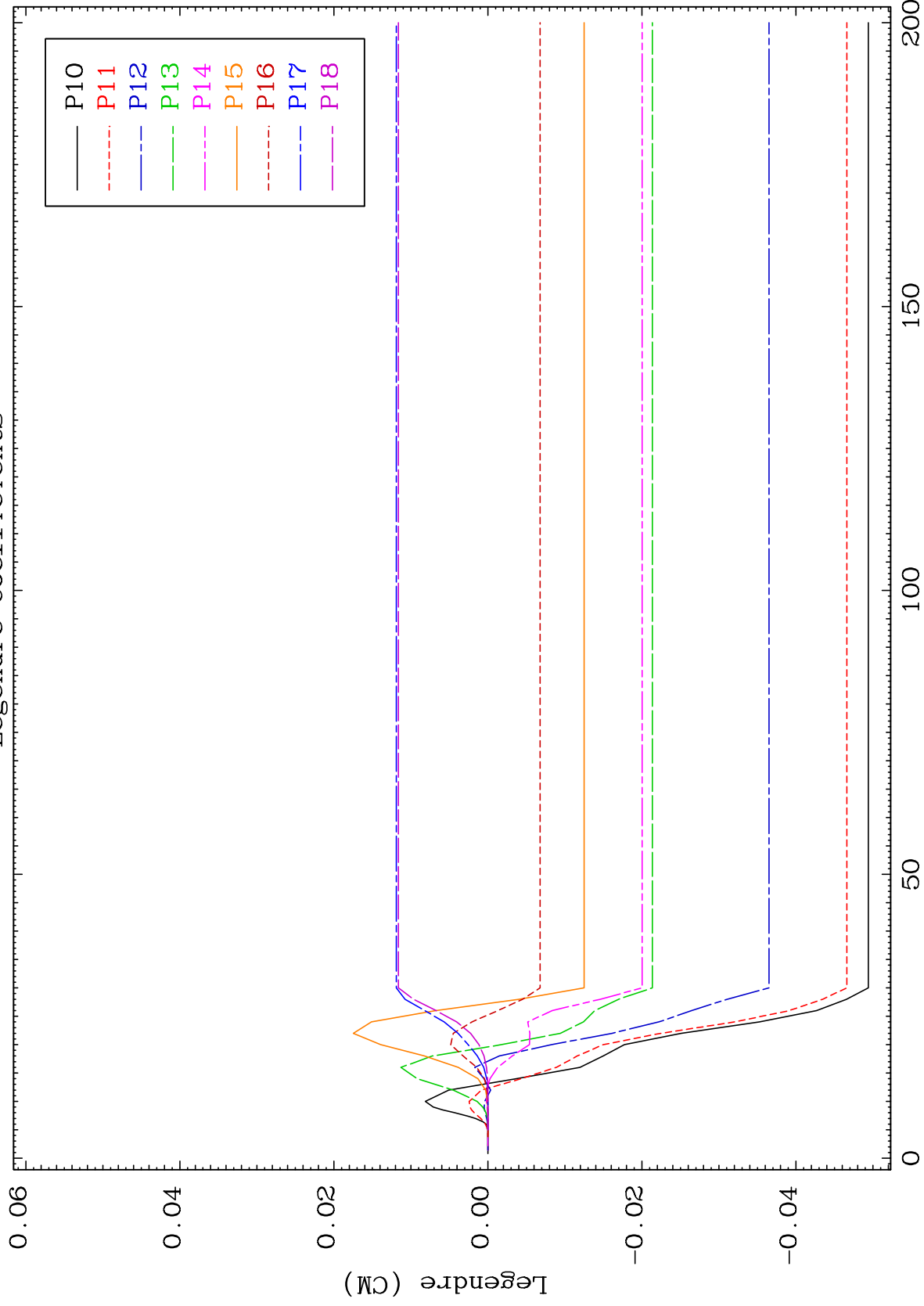
Incident Energy (MeV)

35

MAT 5604

MT= 55 (n,n') Level
Legendre Coefficients

56-Ba-123



36

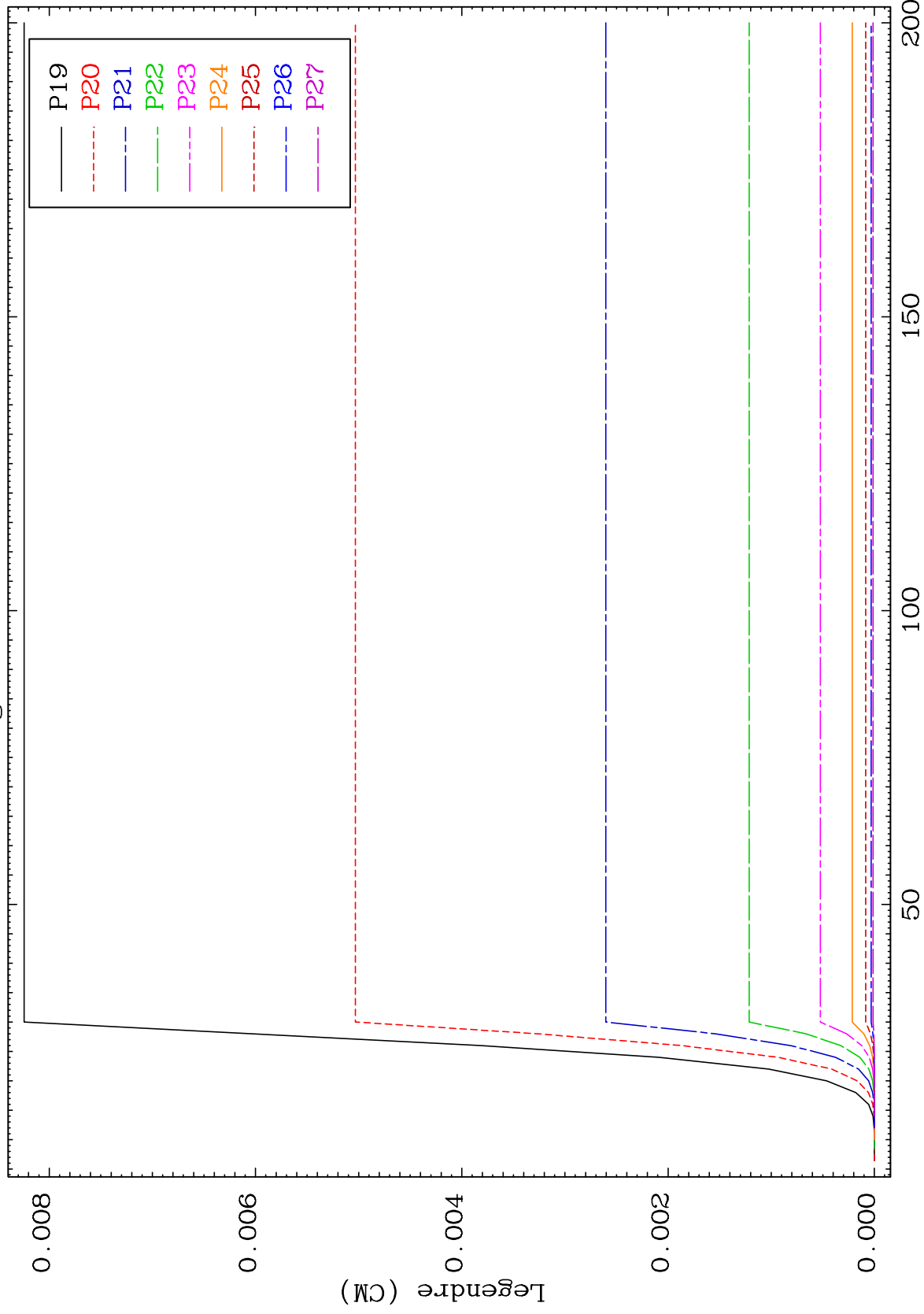
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 55 (n,n') Level
Legendre Coefficients

56-Ba-123



37

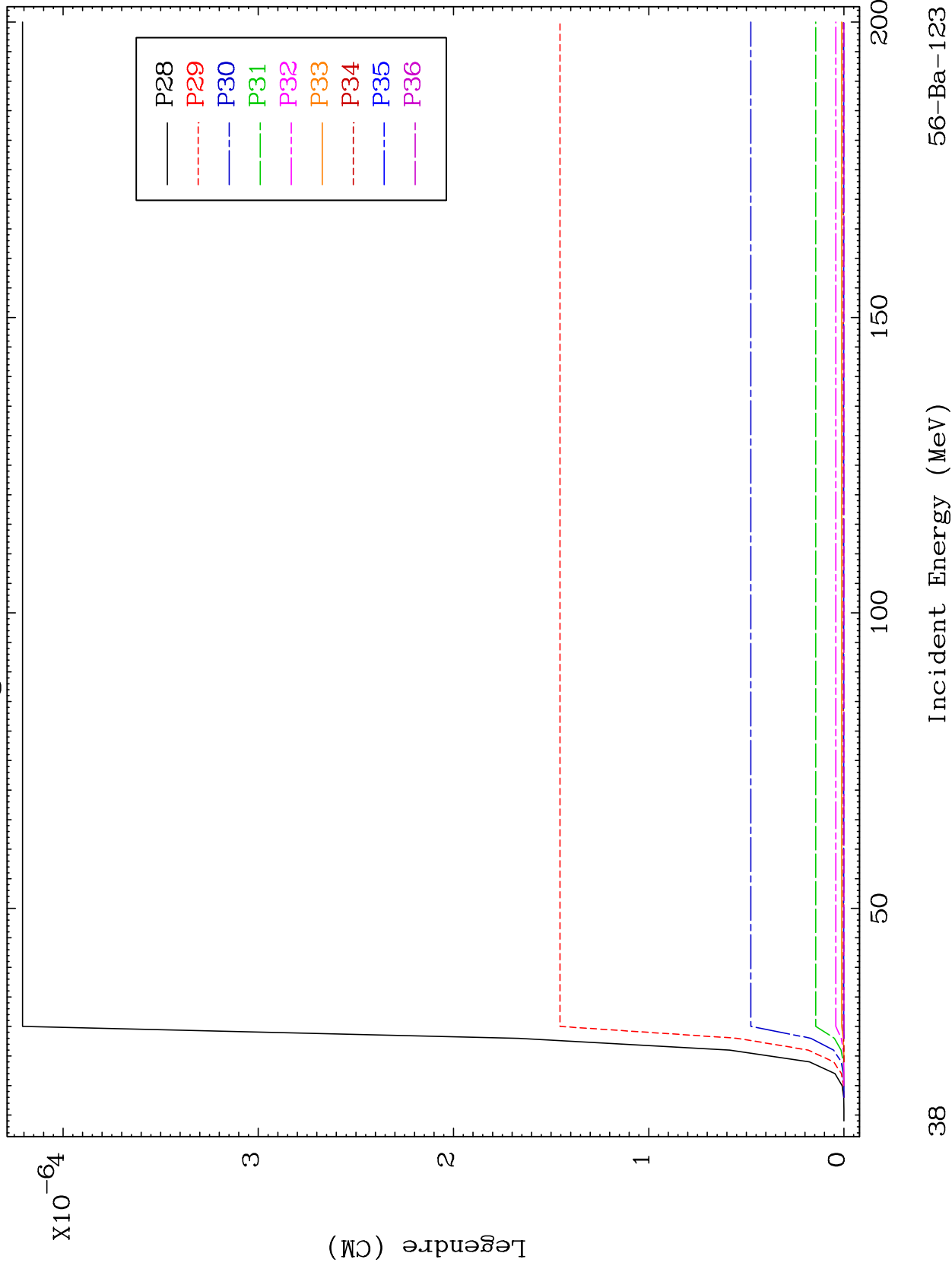
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 55 (n,n') Level
Legendre Coefficients

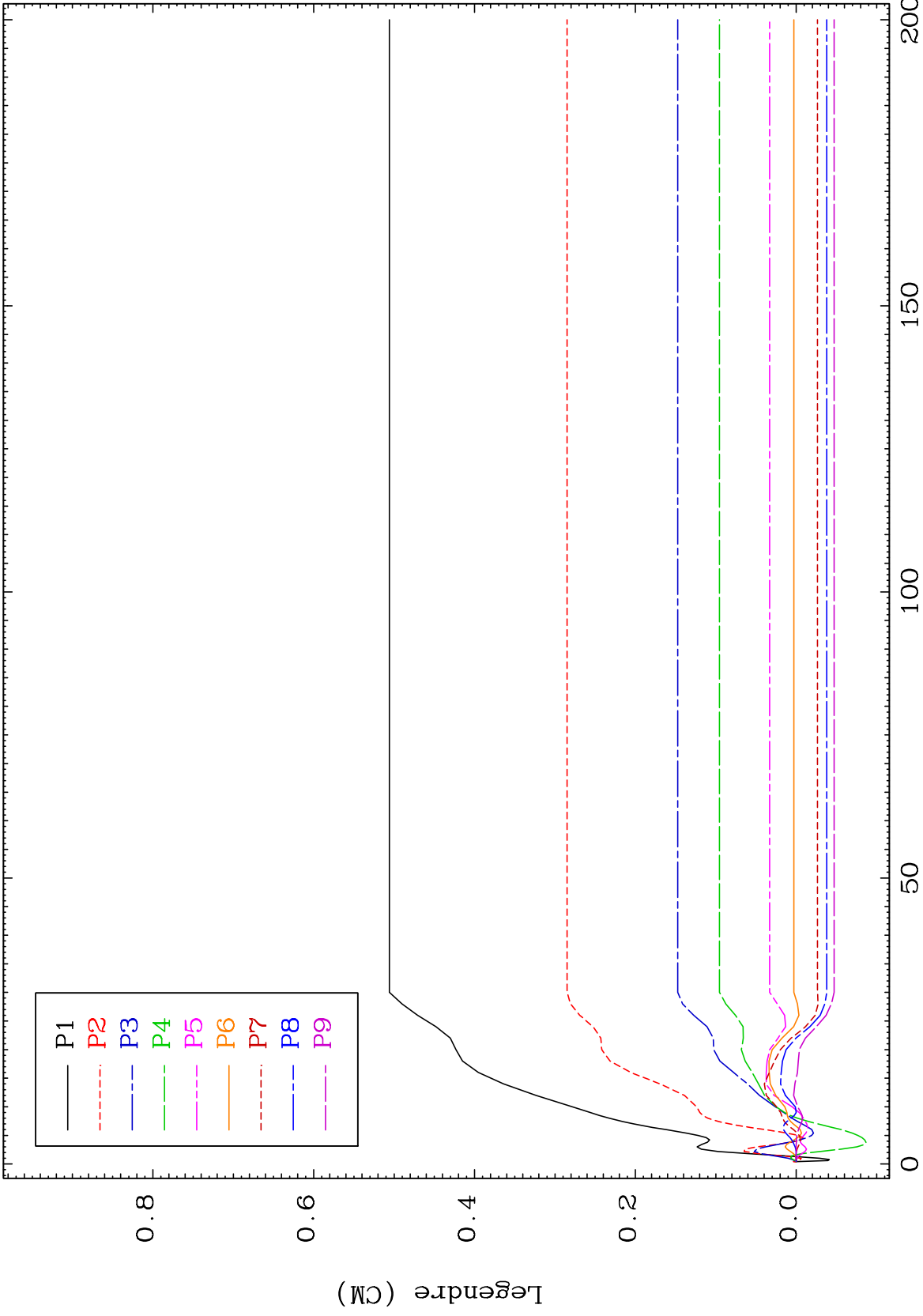
56-Ba-123



MAT 5604

MT= 56 (n,n') Level
Legendre Coefficients

56-Ba-123



39

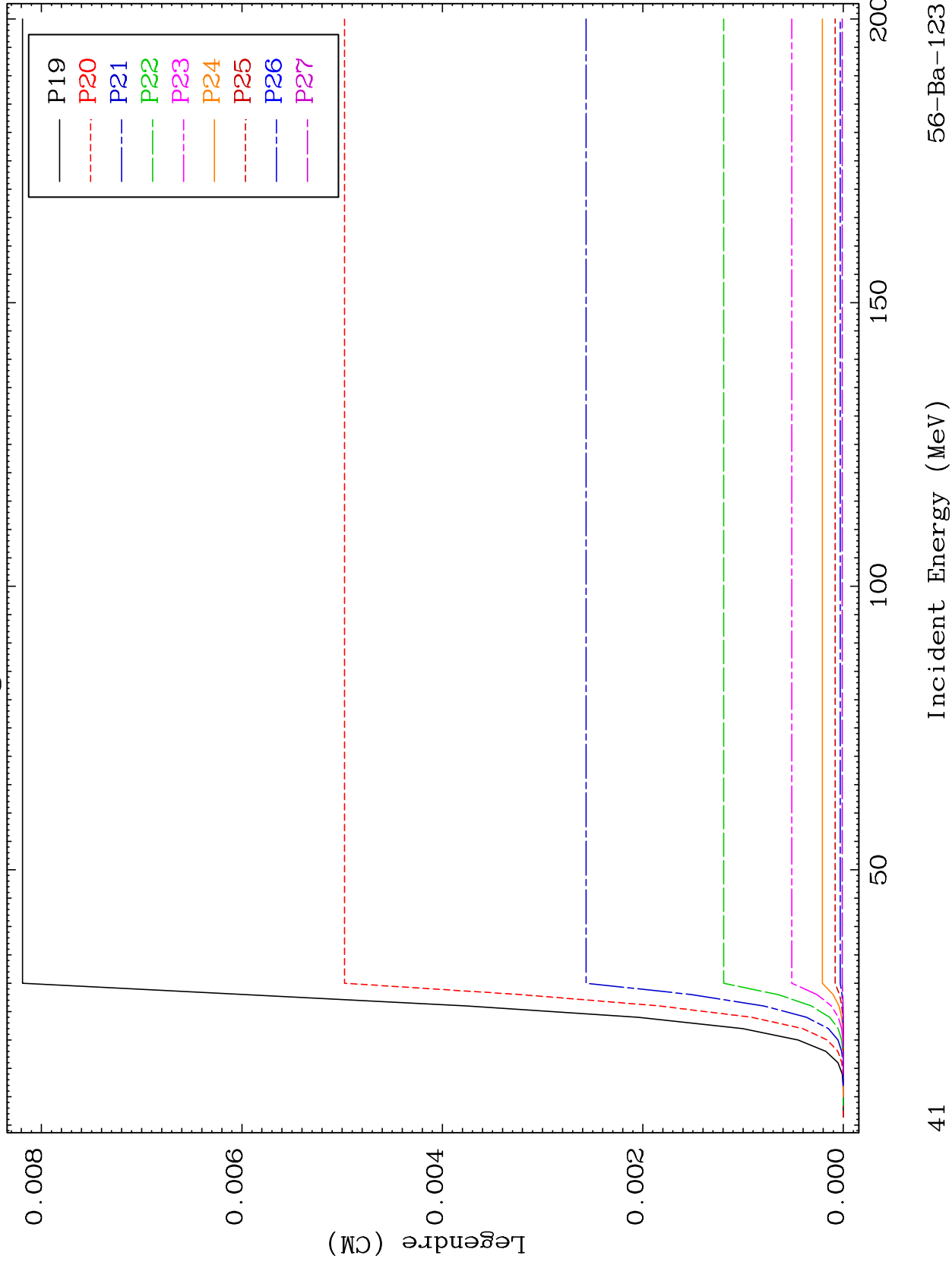
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 56 (n,n') Level
Legendre Coefficients

56-Ba-123



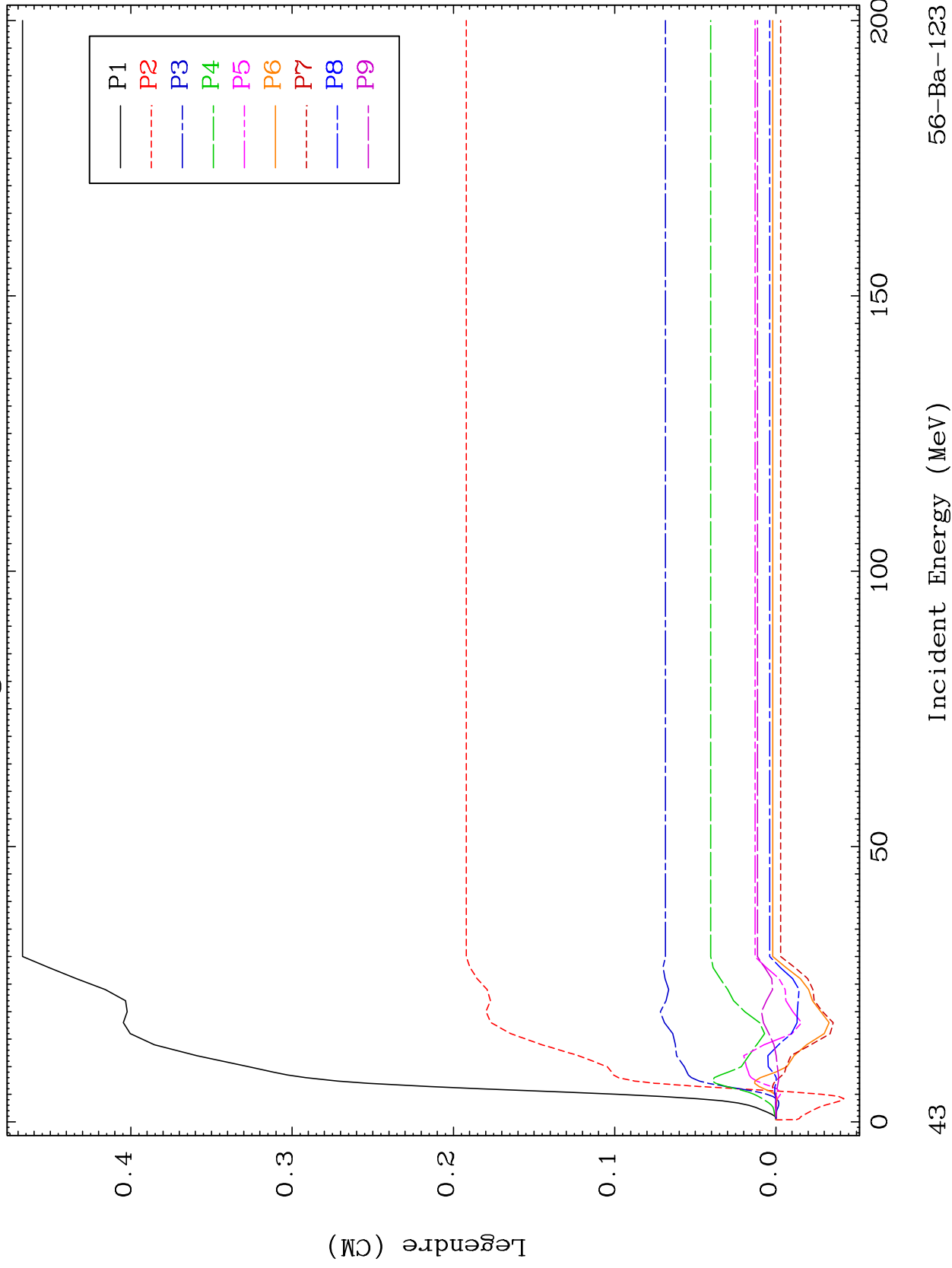
41

56-Ba-123

MAT 5604

MT= 57 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

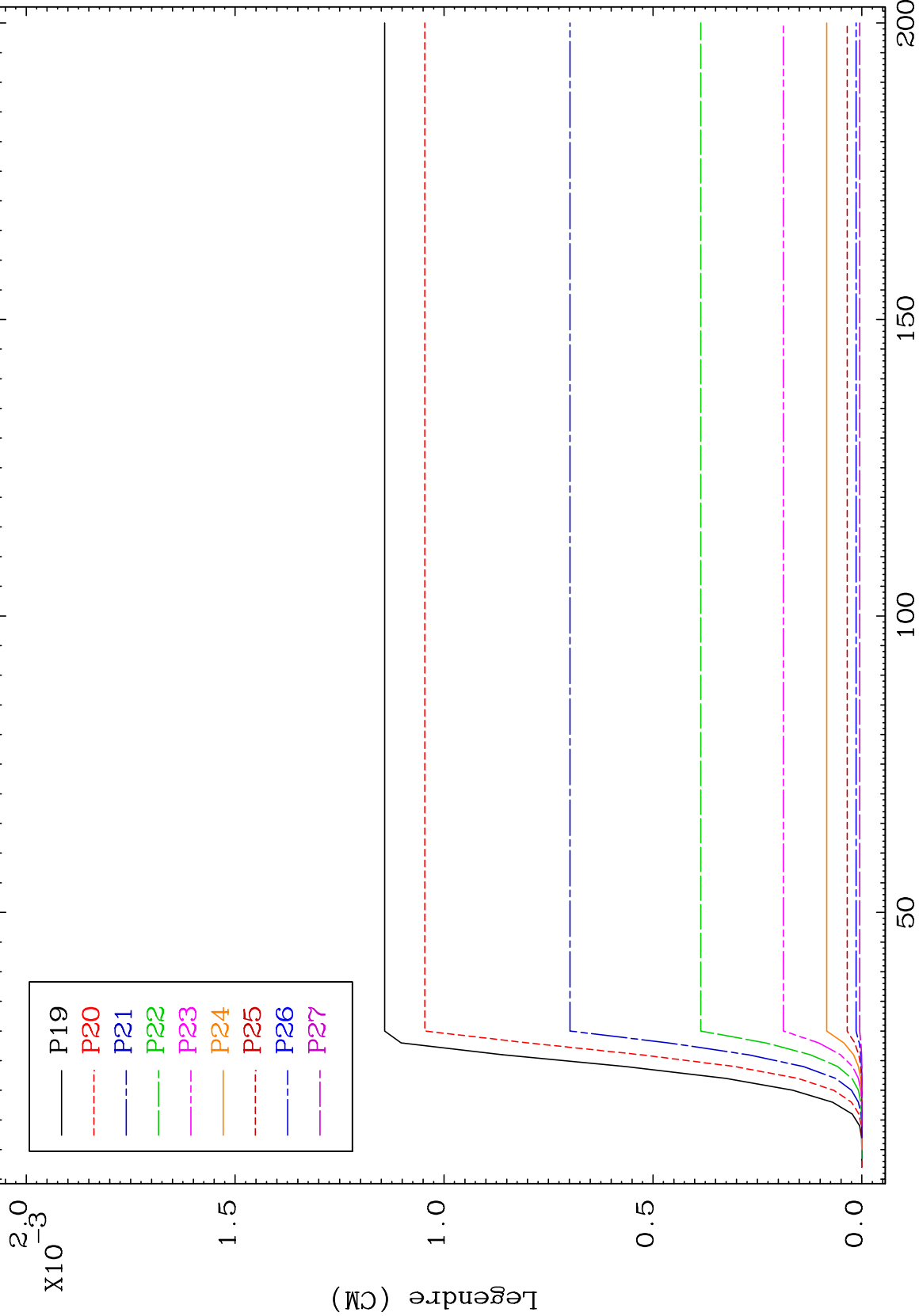
Incident Energy (MeV)

43

MAT 5604

MT= 57 (n,n') Level
Legendre Coefficients

56-Ba-123



45

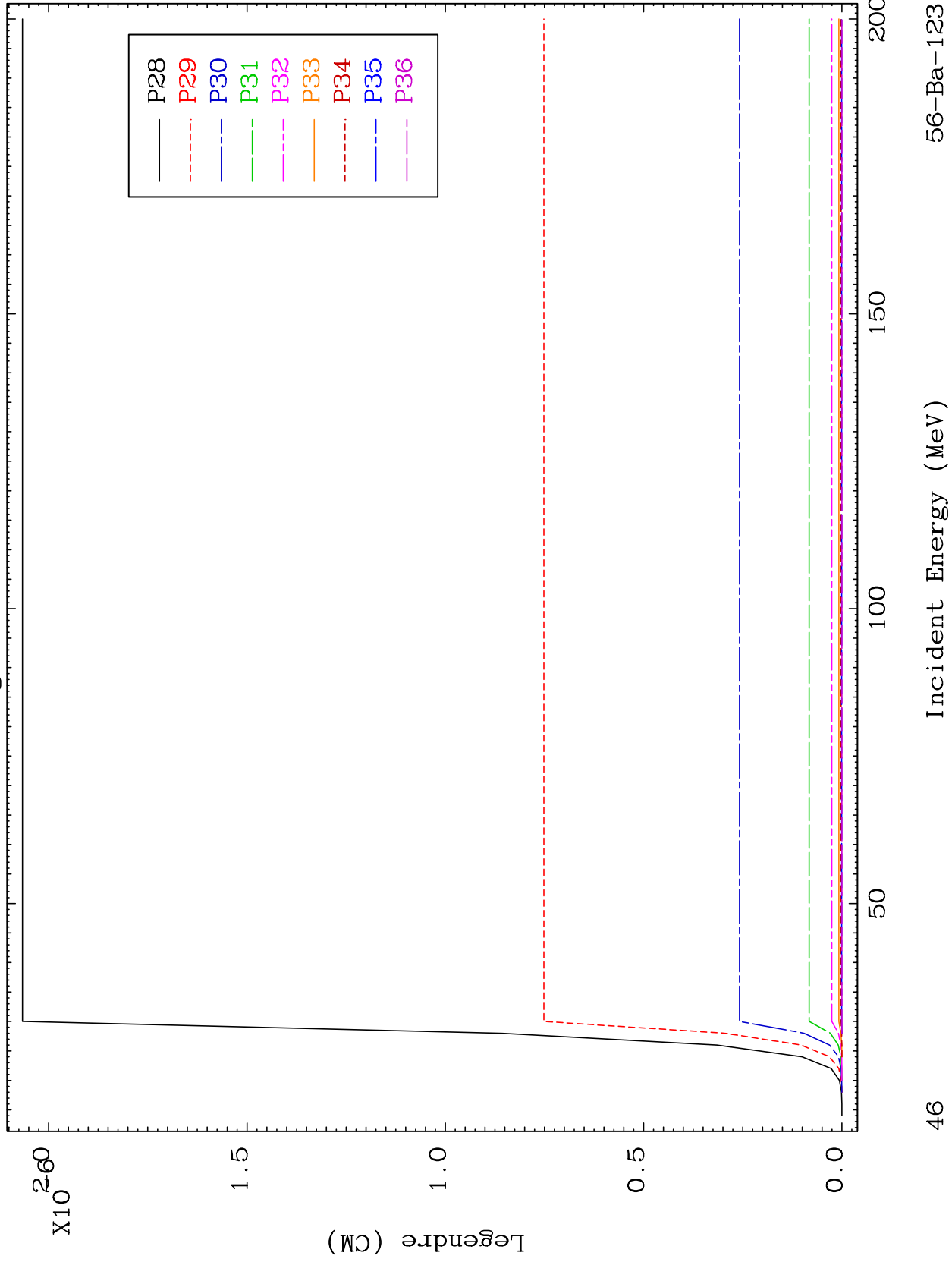
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 57 (n,n') Level
Legendre Coefficients

56-Ba-123



46

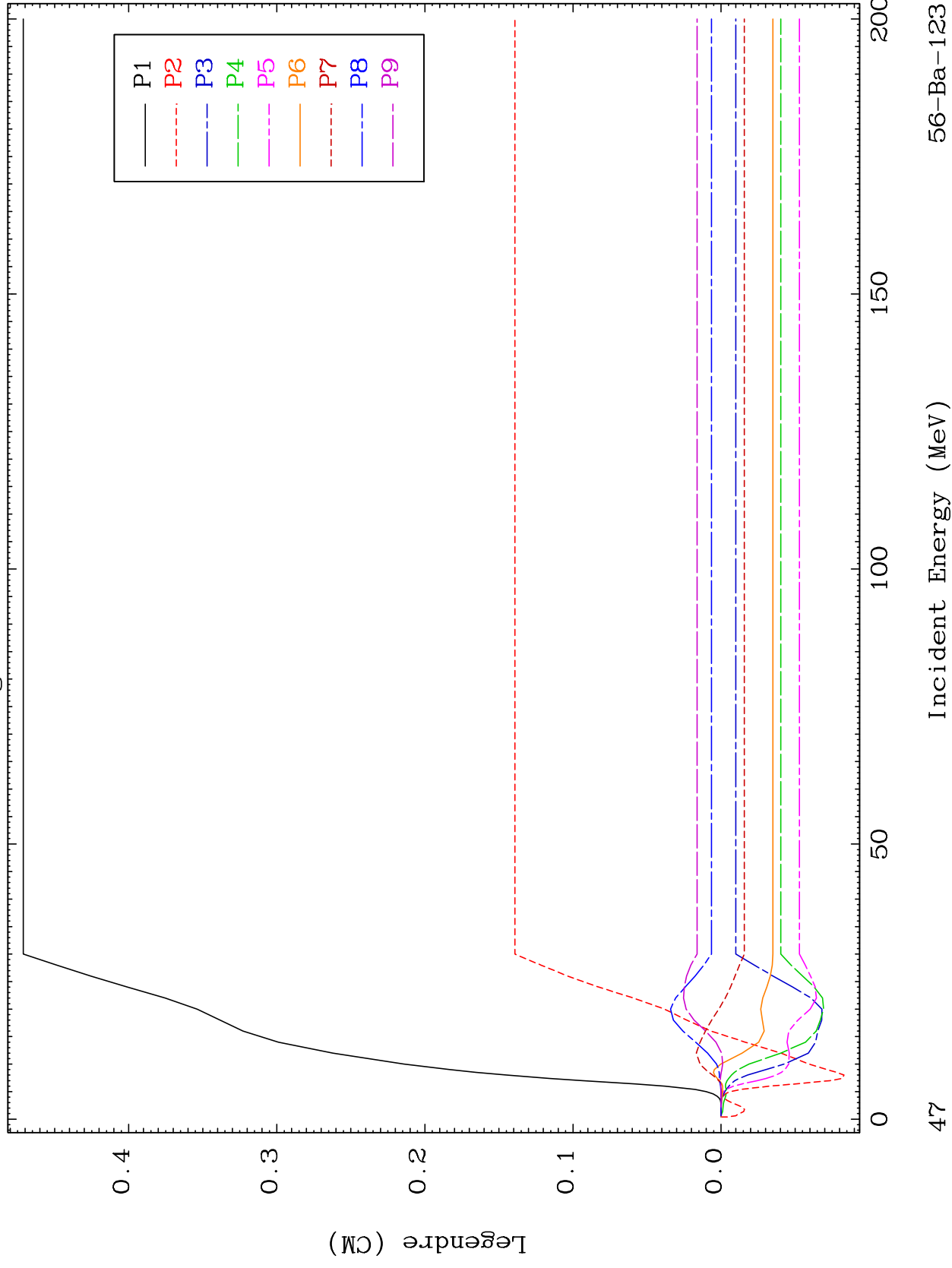
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 58 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

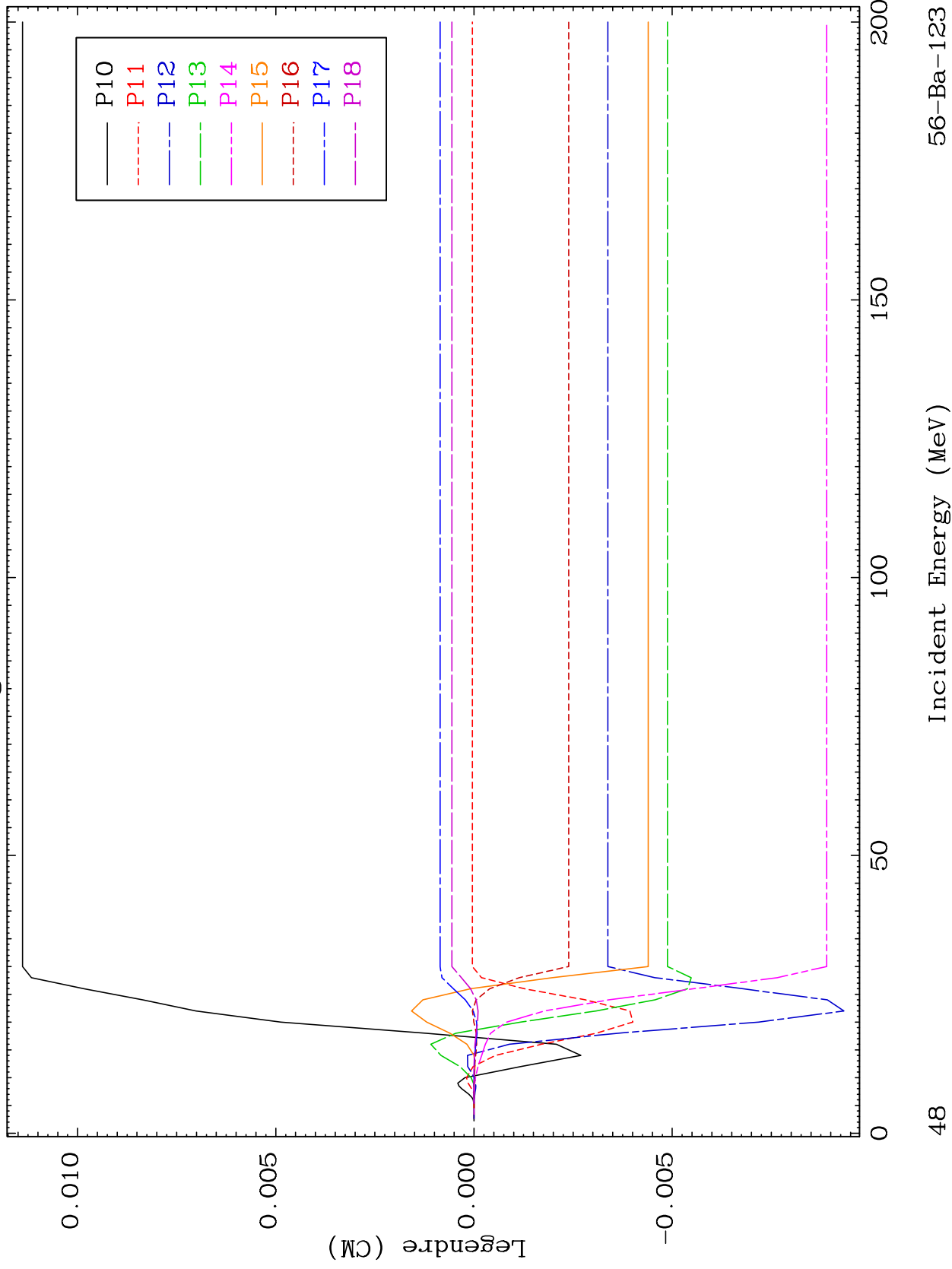
Incident Energy (MeV)

47

MAT 5604

MT= 58 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

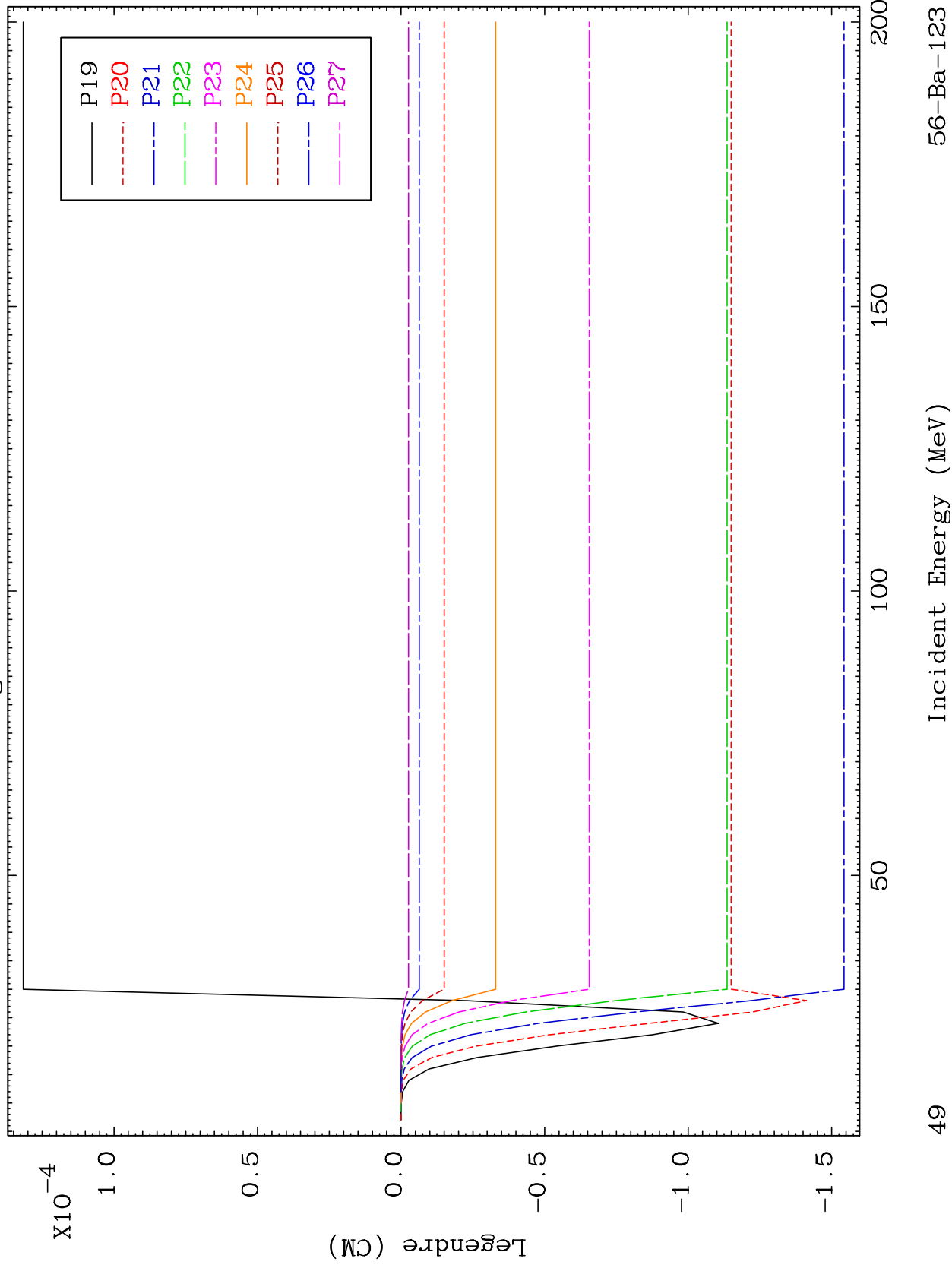
Incident Energy (MeV)

48

MAT 5604

MT= 58 (n,n') Level
Legendre Coefficients

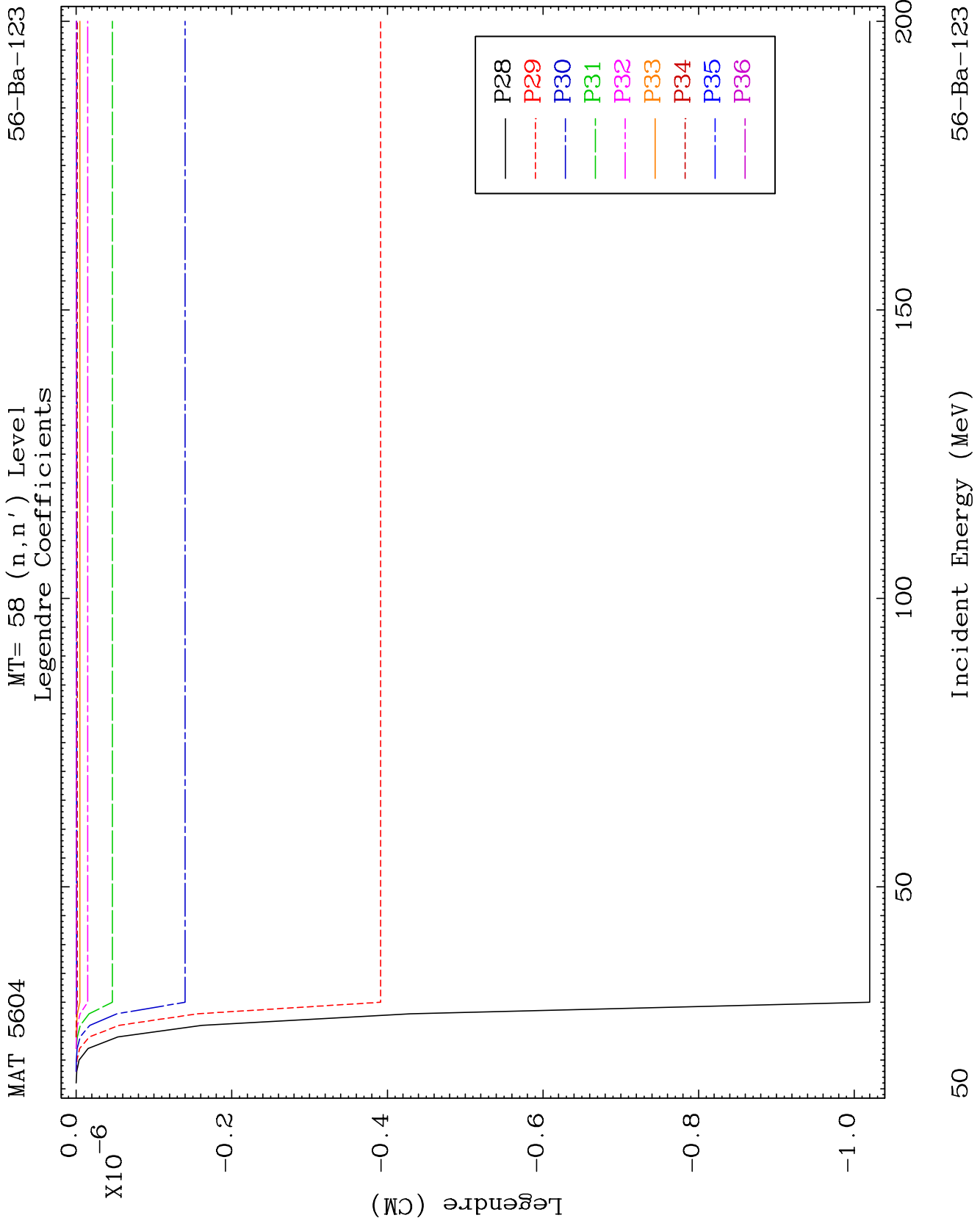
56-Ba-123



49

Incident Energy (MeV)

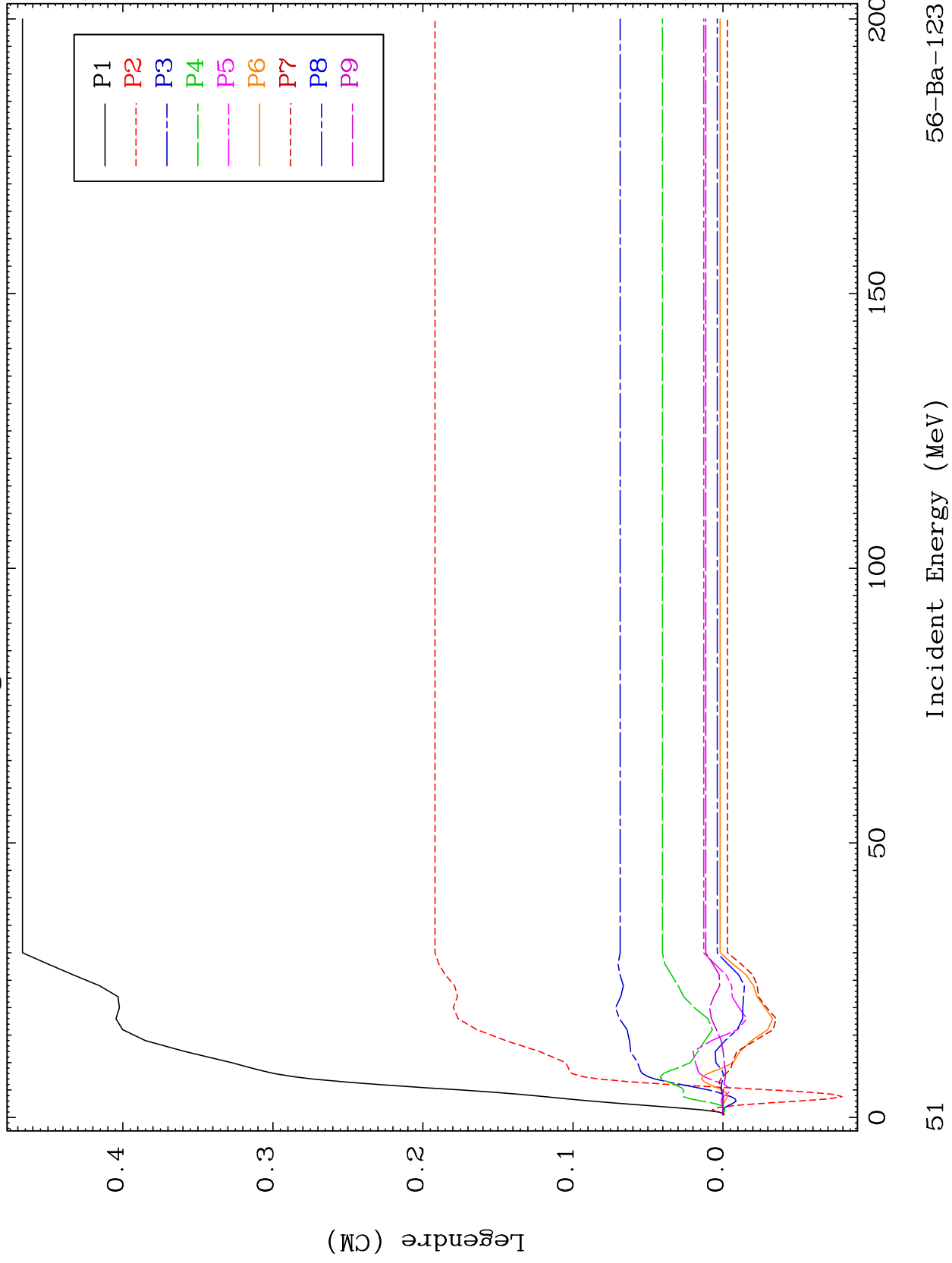
56-Ba-123



MAT 5604

MT= 59 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

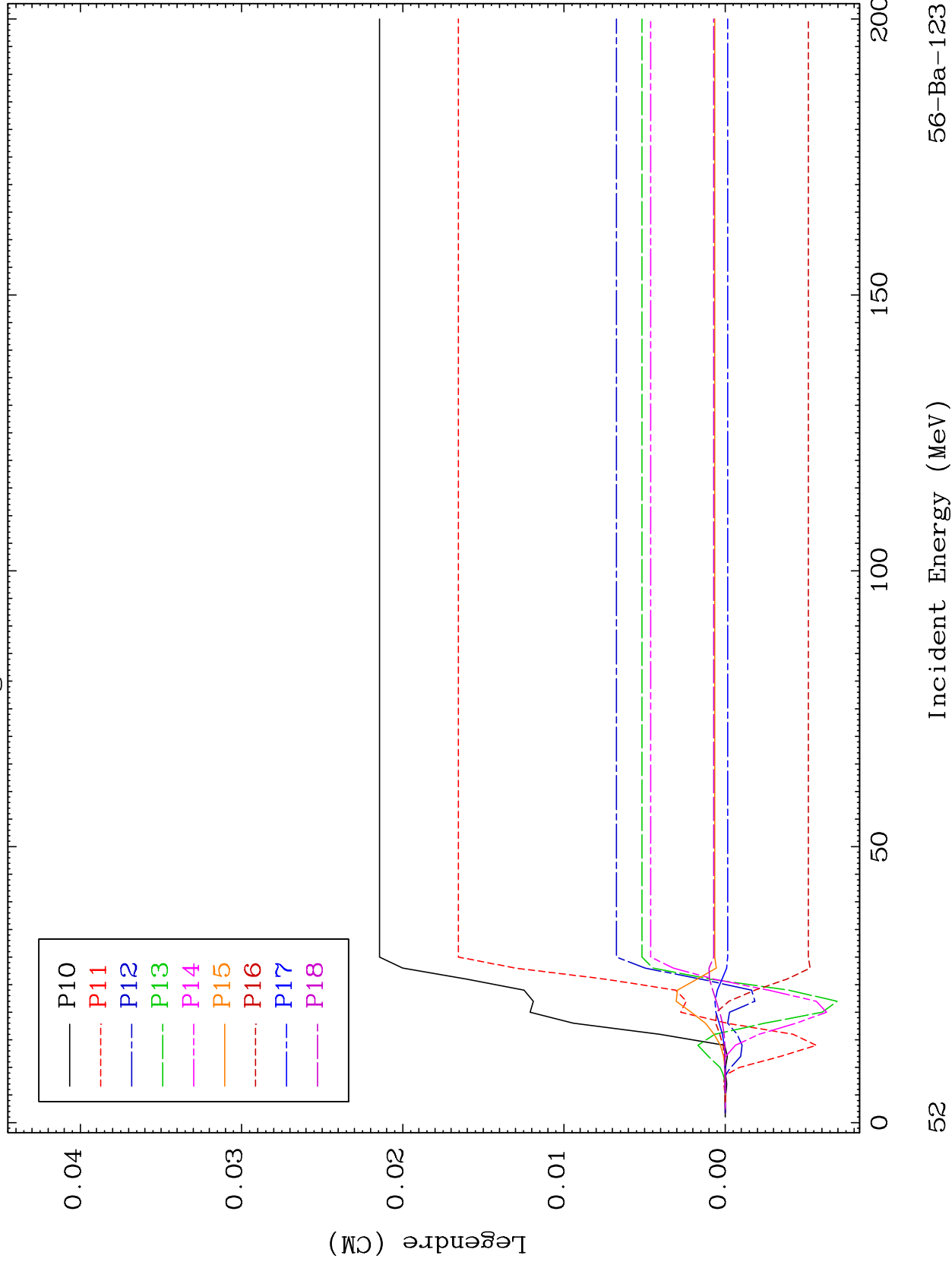
Incident Energy (MeV)

51

MAT 5604

MT= 59 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

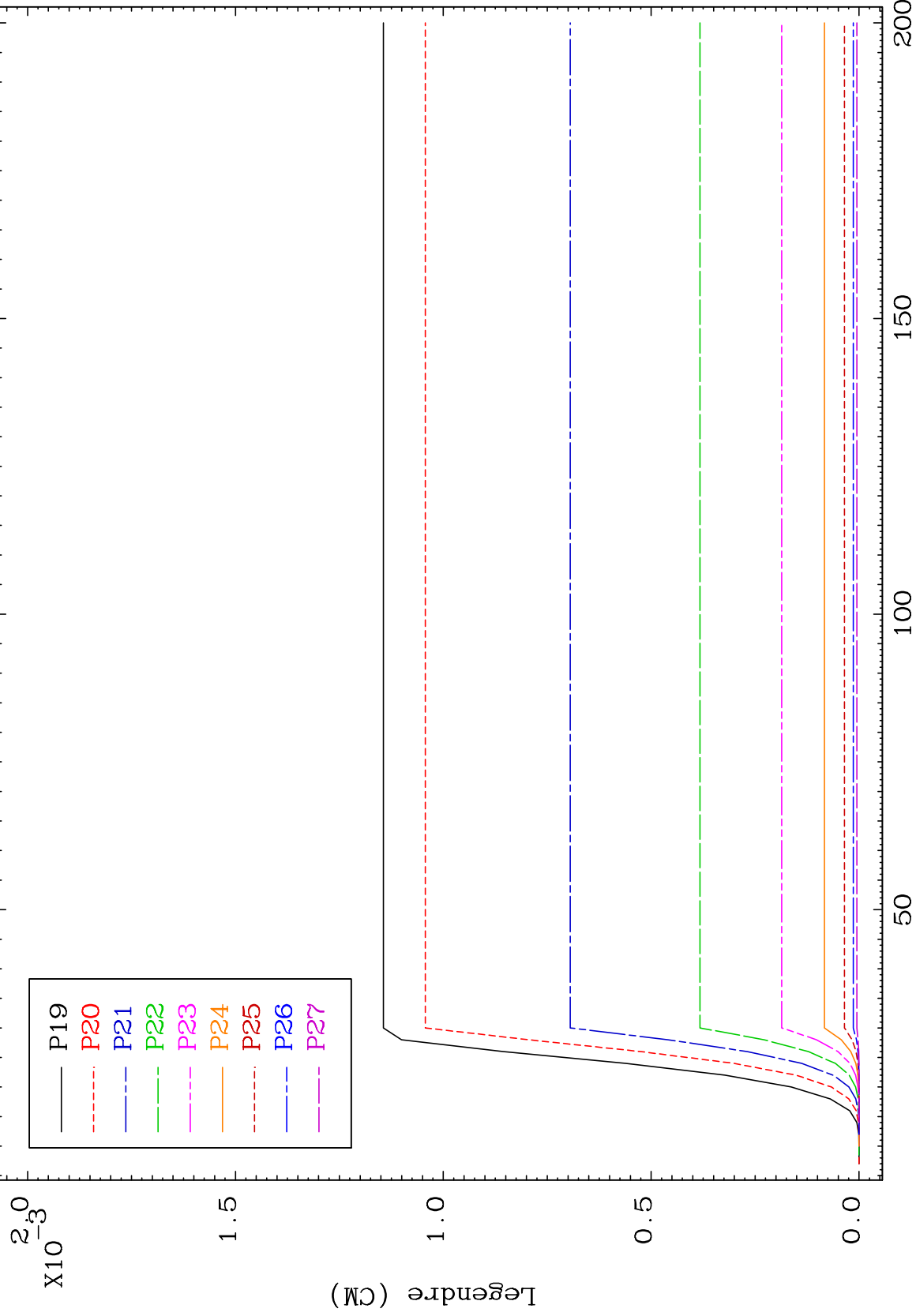
Incident Energy (MeV)

52

MAT 5604

MT= 59 (n,n') Level
Legendre Coefficients

56-Ba-123



53

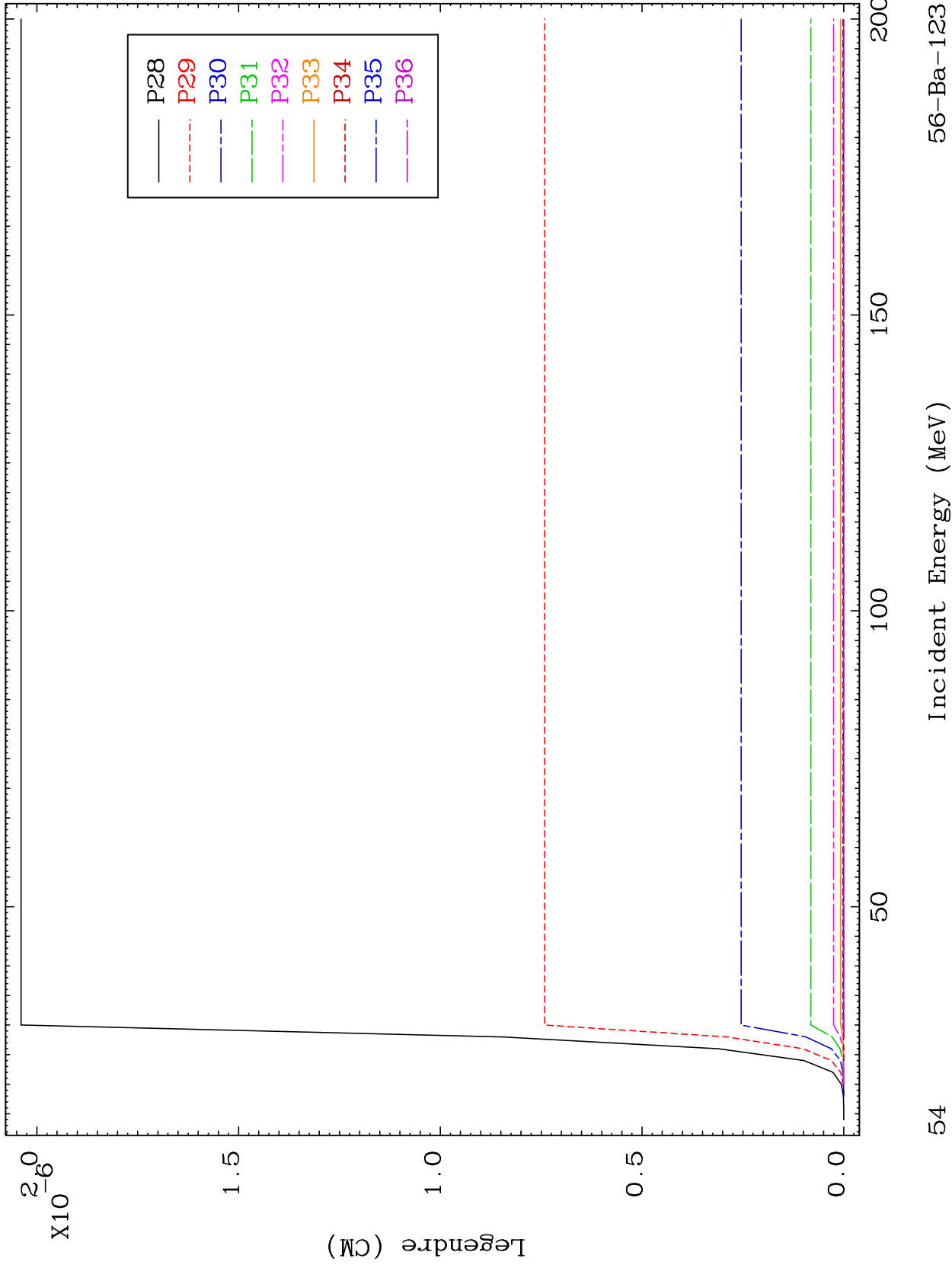
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 59 (n,n') Level
Legendre Coefficients

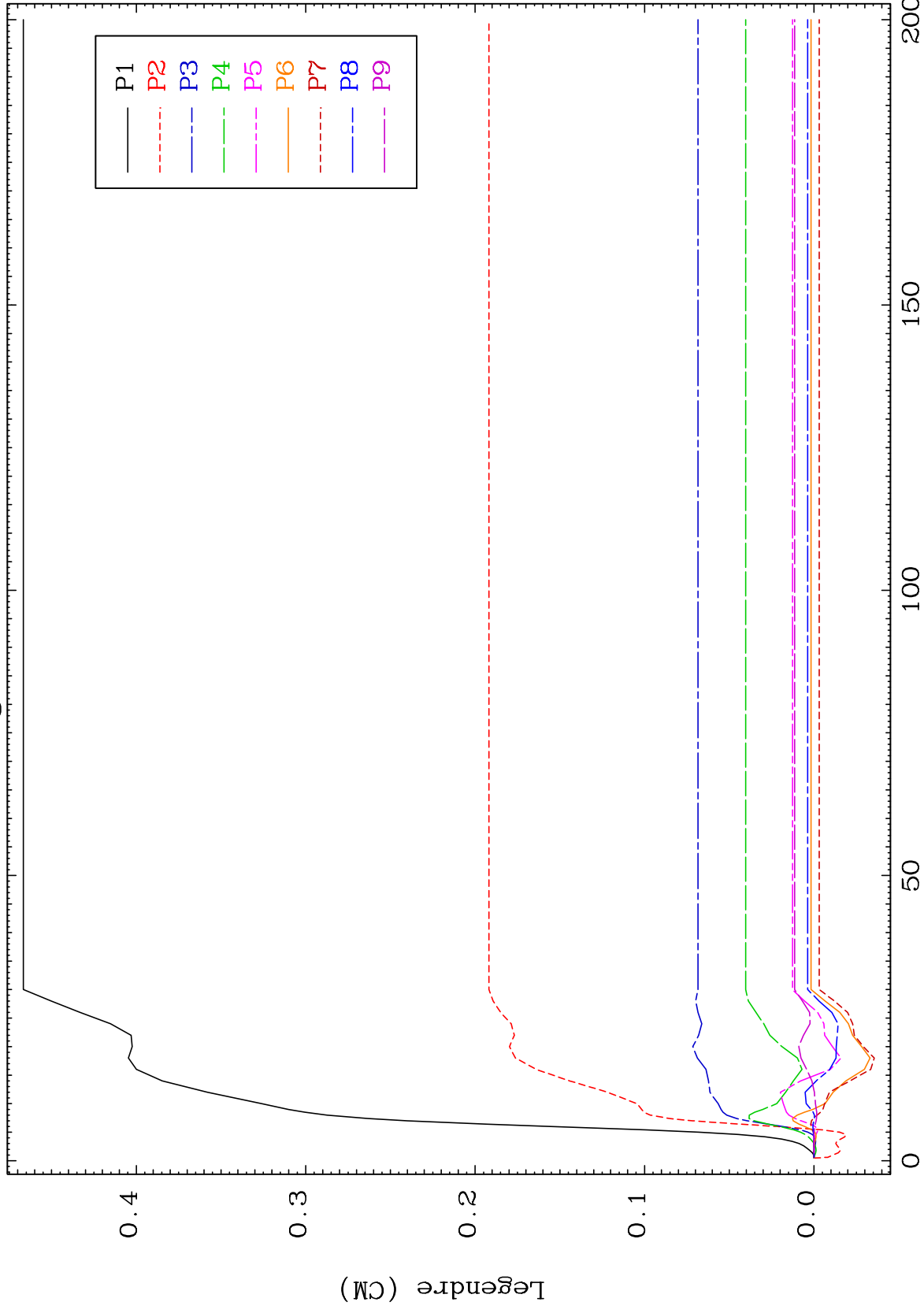
56-Ba-123



MAT 5604

MT= 60 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

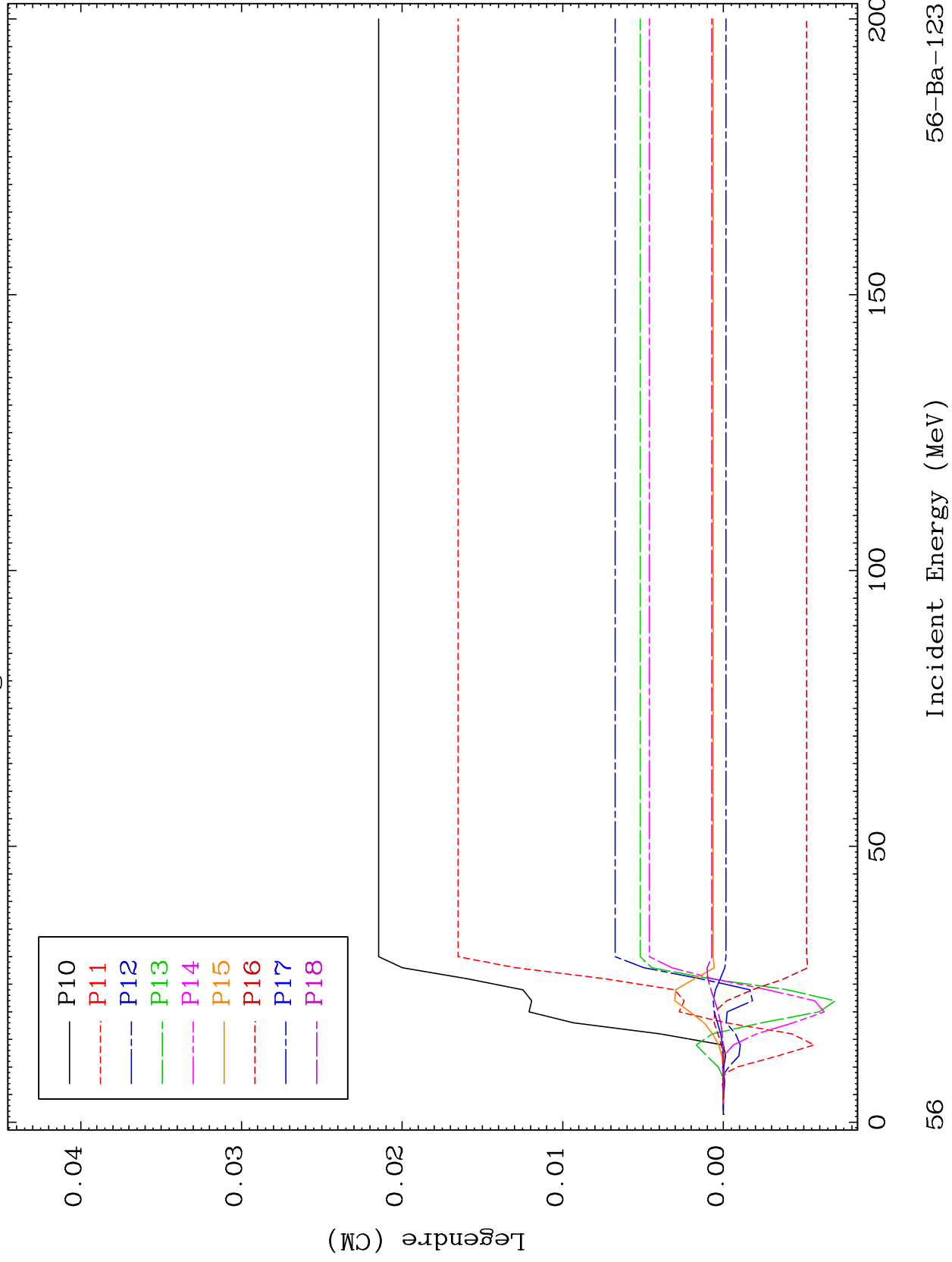
Incident Energy (MeV)

55

MAT 5604

MT= 60 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

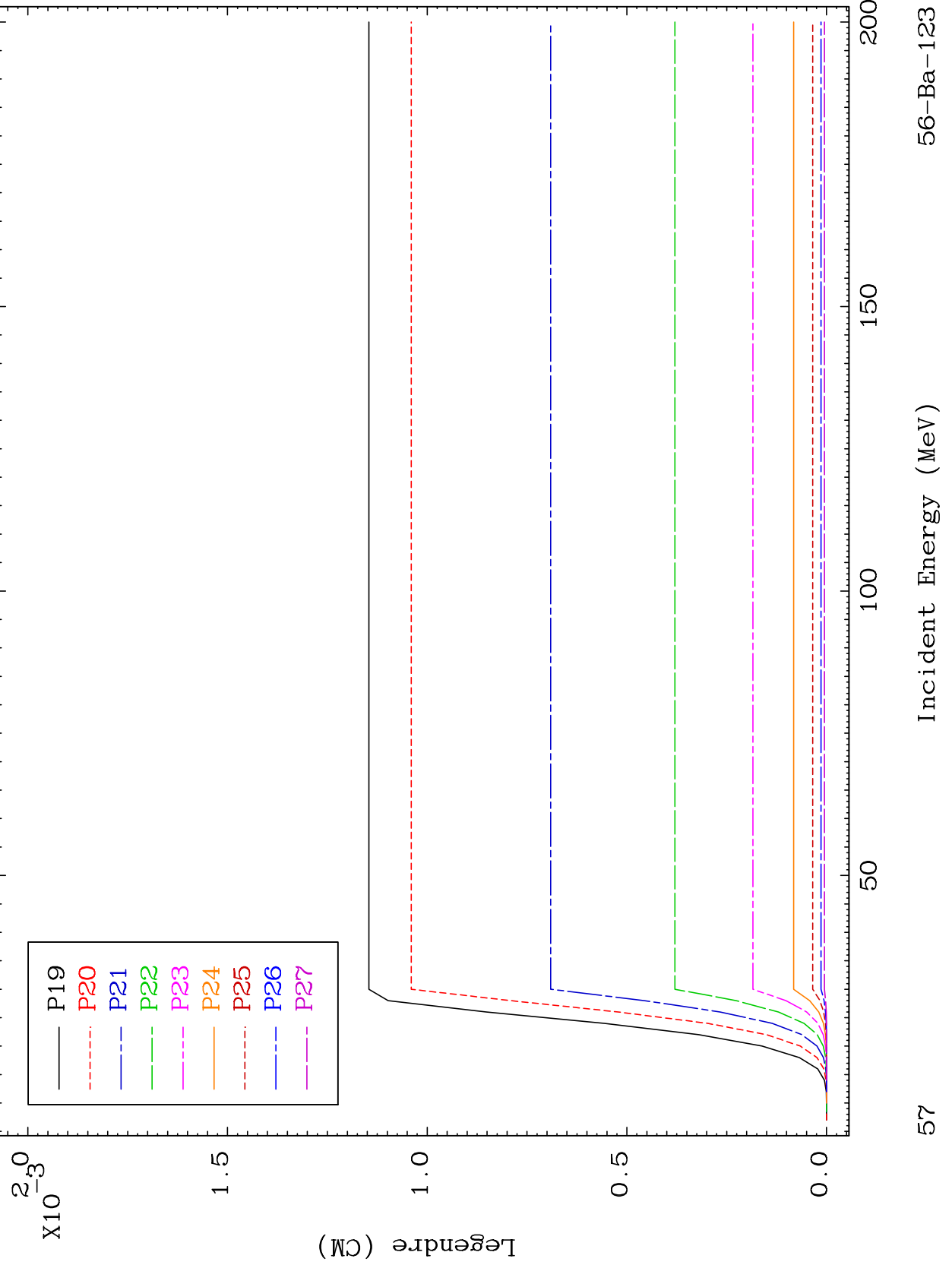
Incident Energy (MeV)

56

MAT 5604

MT= 60 (n,n') Level
Legendre Coefficients

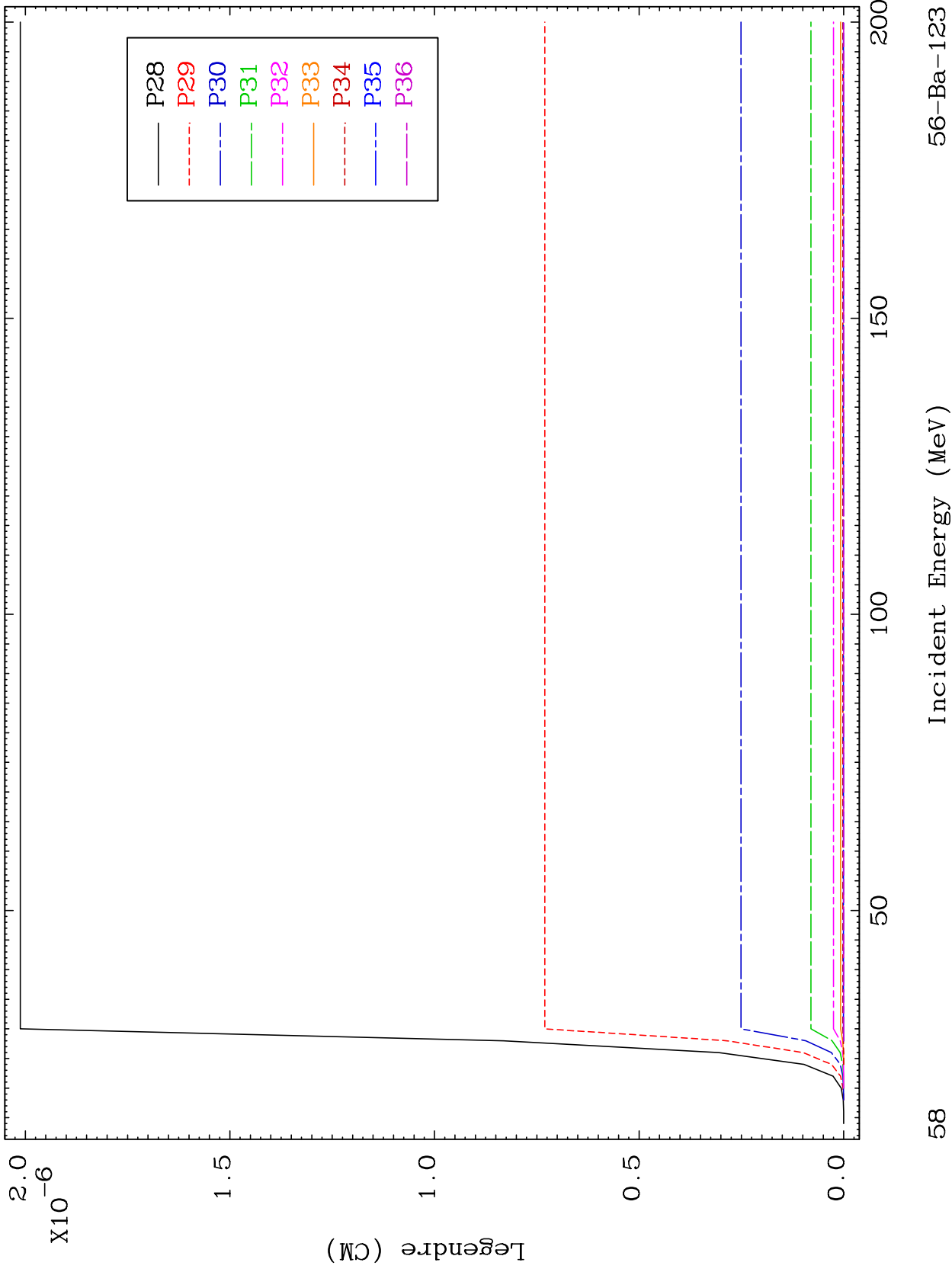
56-Ba-123



MAT 5604

MT= 60 (n,n') Level
Legendre Coefficients

56-Ba-123



58

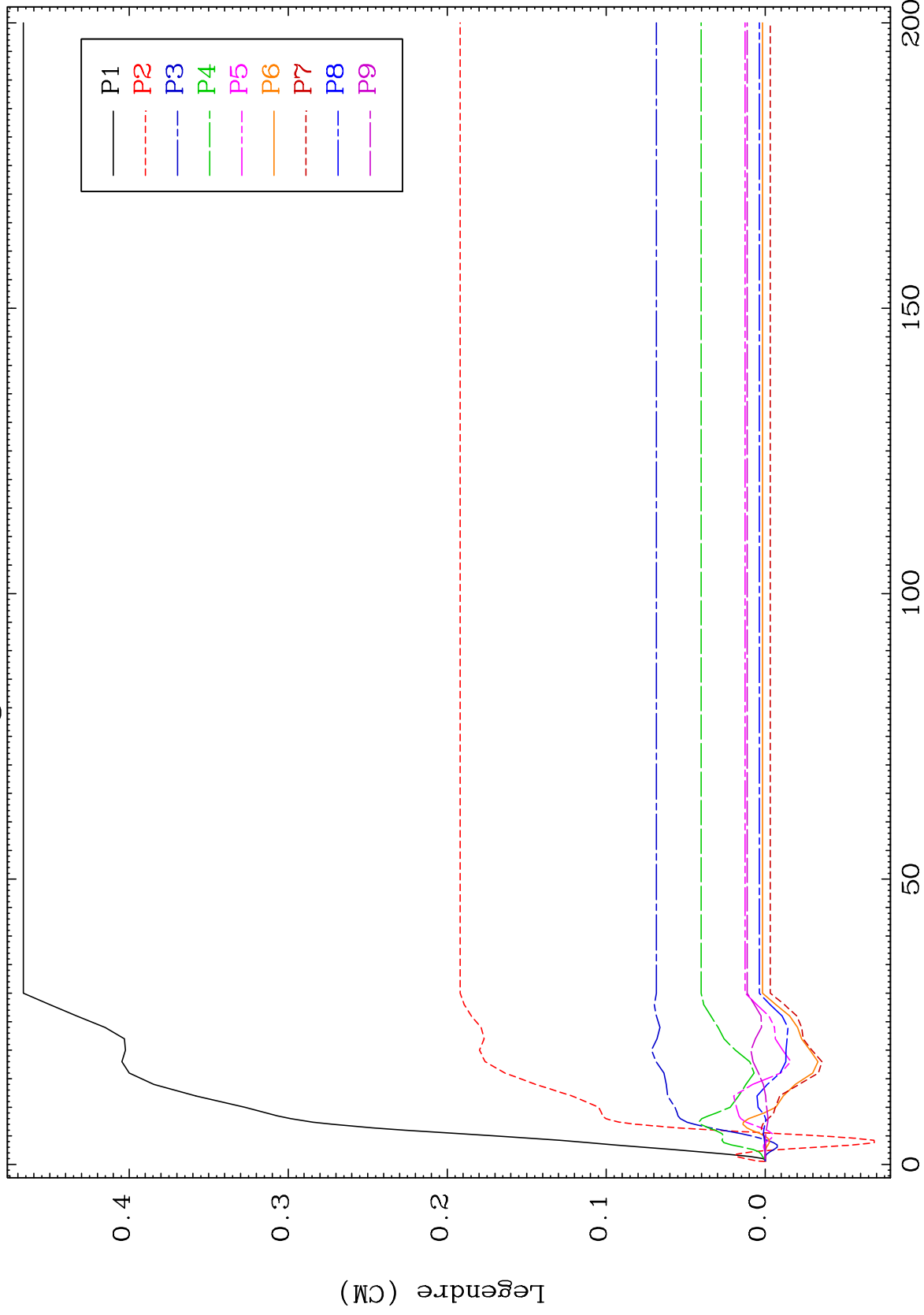
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 61 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

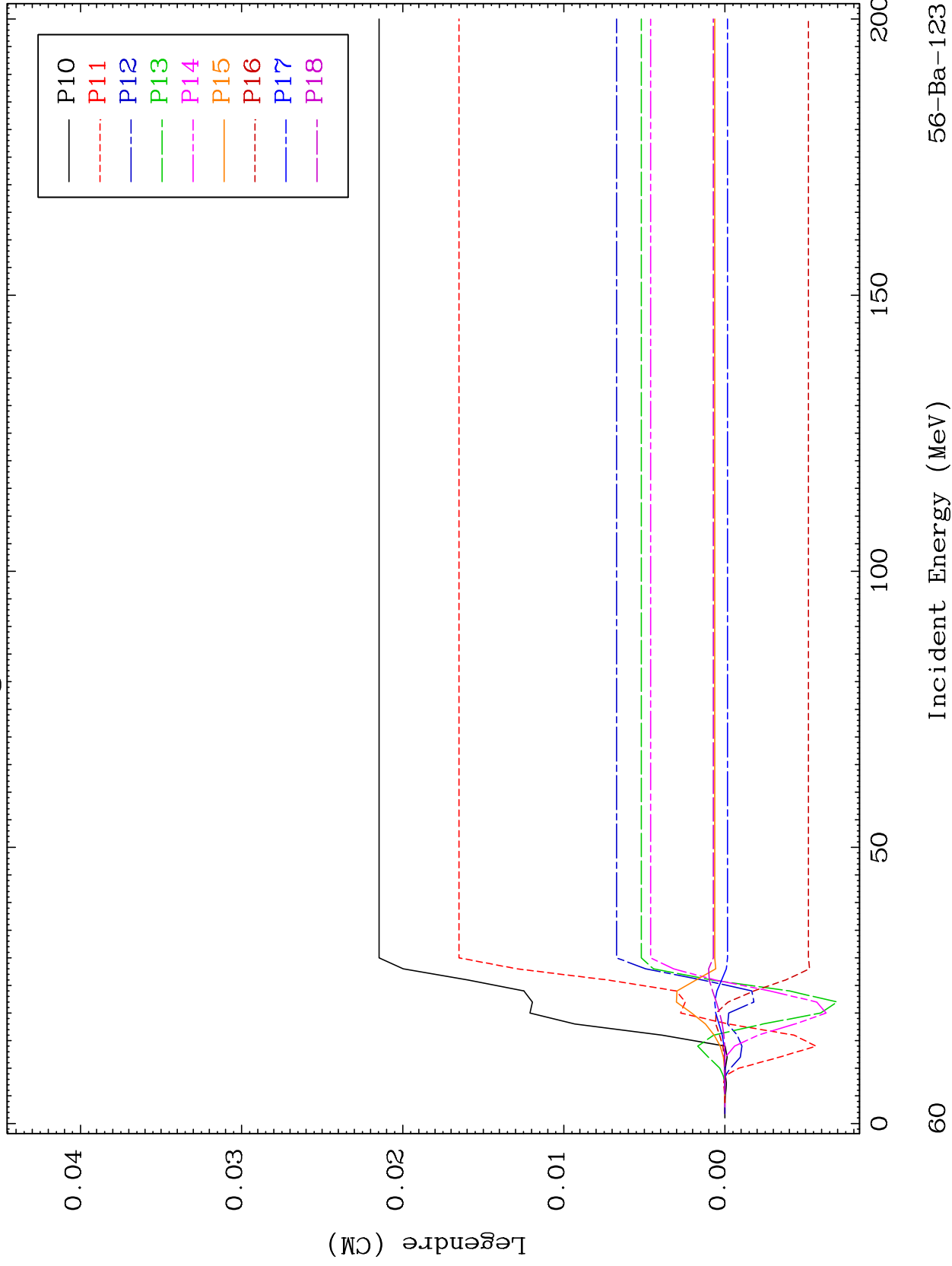
Incident Energy (MeV)

59

MAT 5604

MT= 61 (n,n') Level
Legendre Coefficients

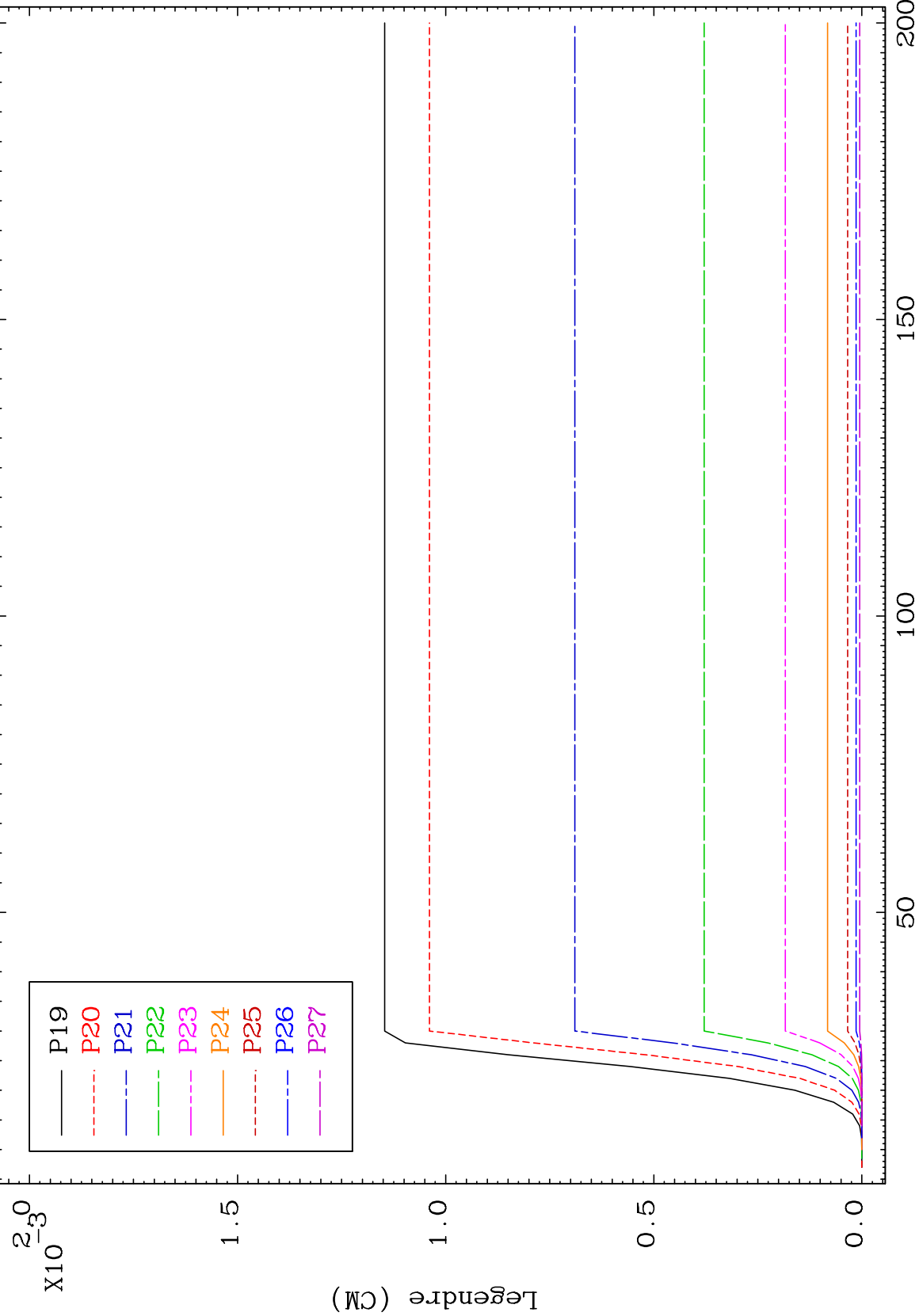
56-Ba-123



MAT 5604

MT= 61 (n,n') Level
Legendre Coefficients

56-Ba-123



61

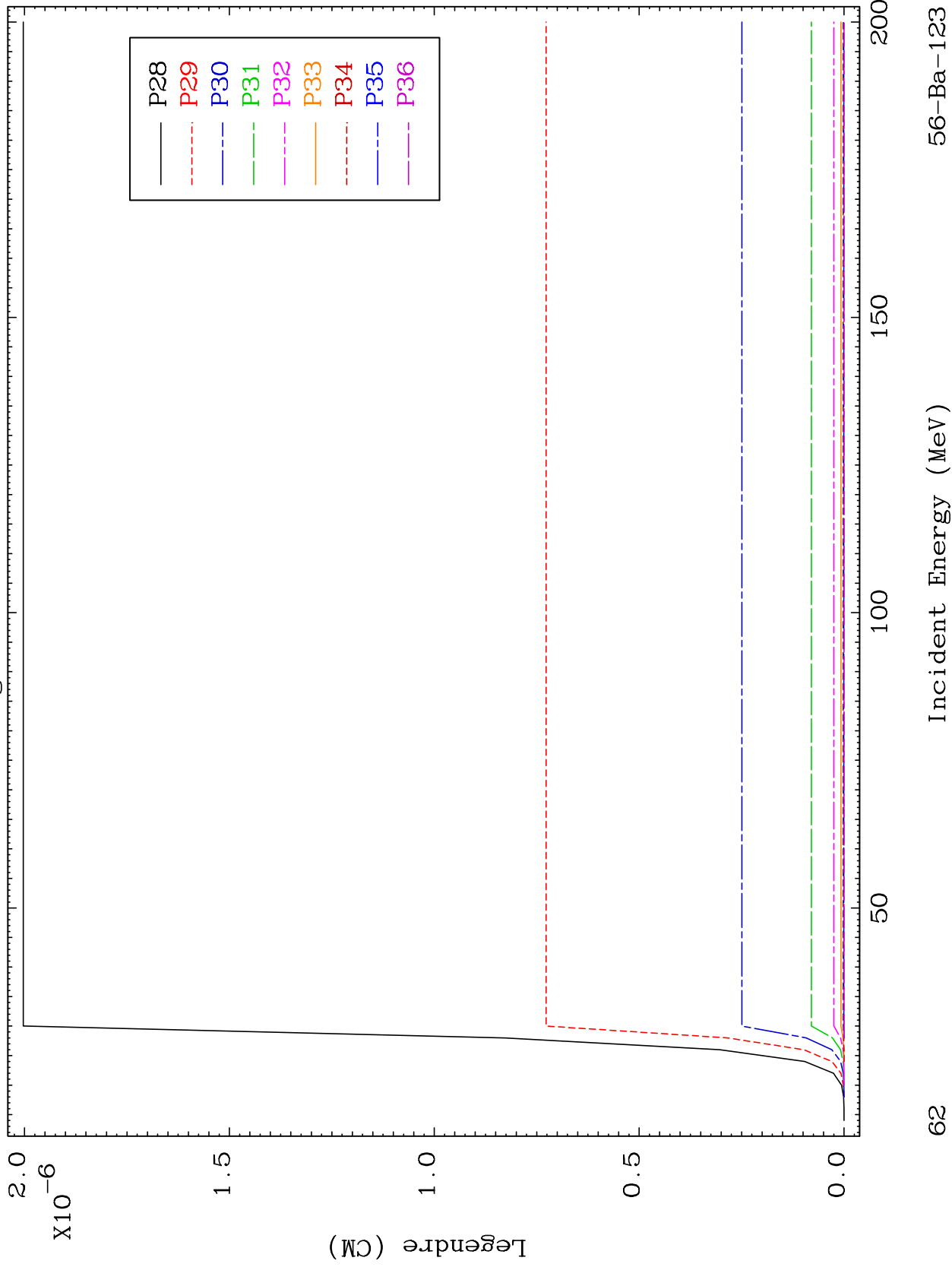
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 61 (n,n') Level
Legendre Coefficients

56-Ba-123



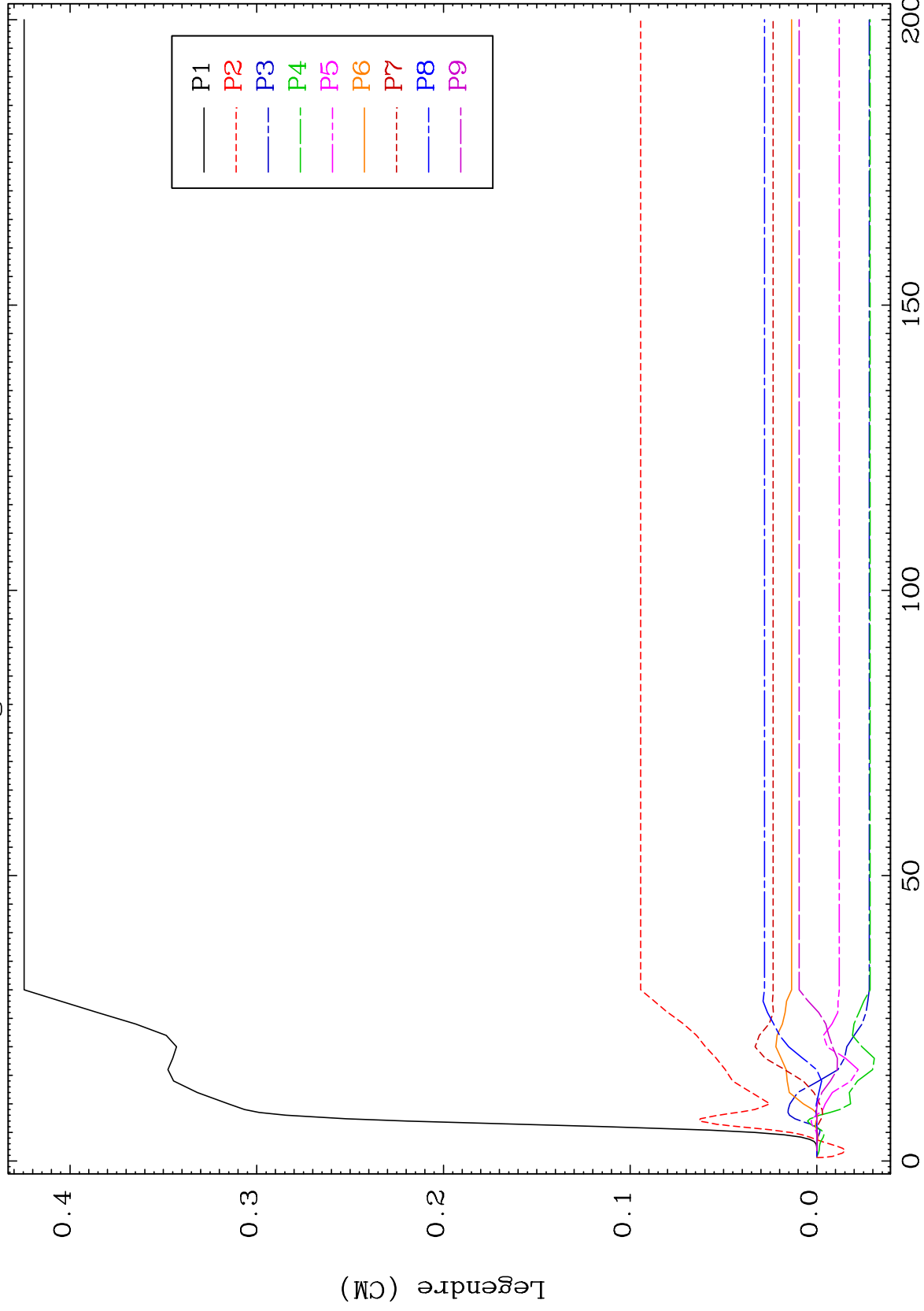
62

56-Ba-123

MAT 5604

MT= 62 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

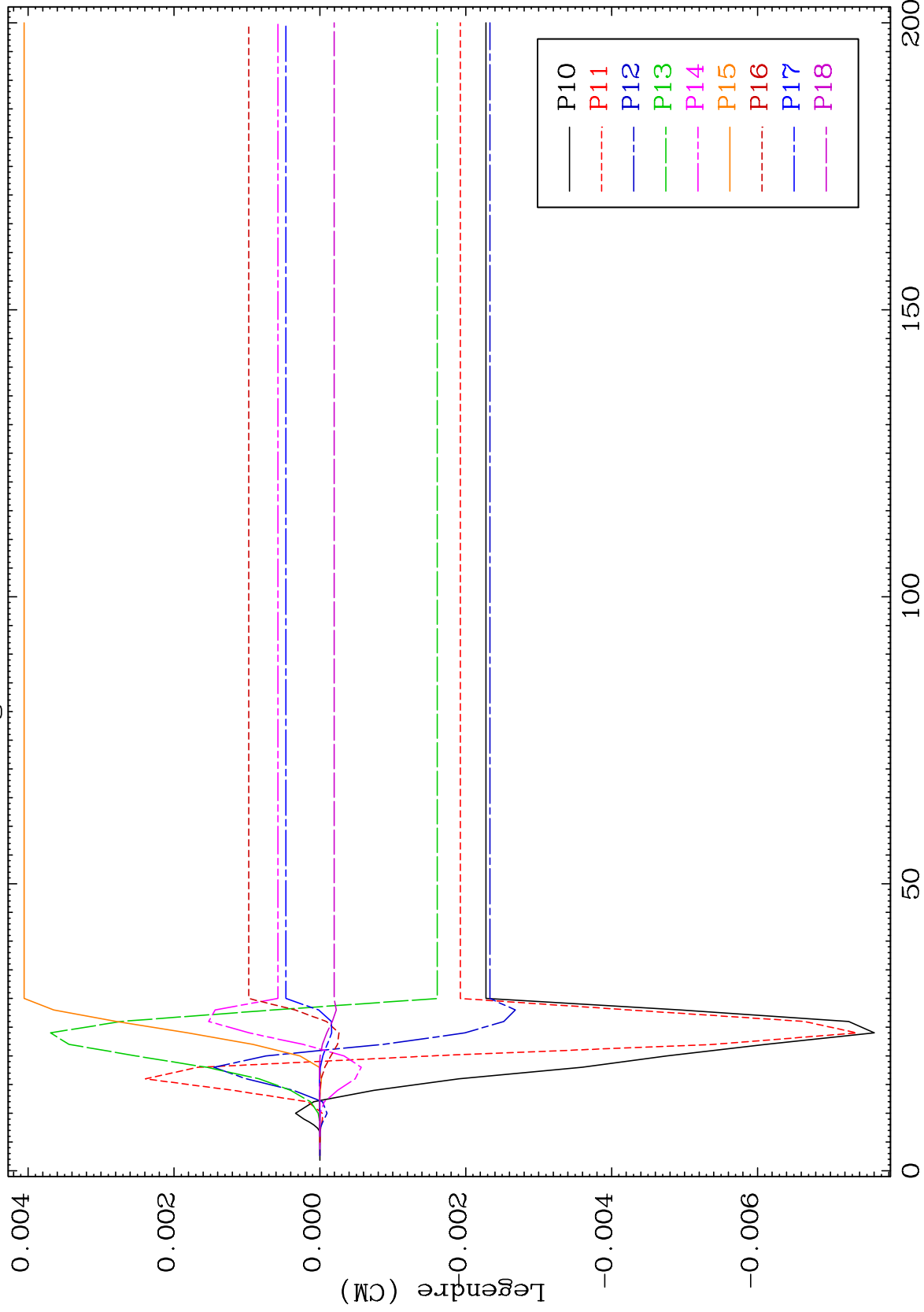
Incident Energy (MeV)

63

MAT 5604

MT= 62 (n,n') Level
Legendre Coefficients

56-Ba-123



64

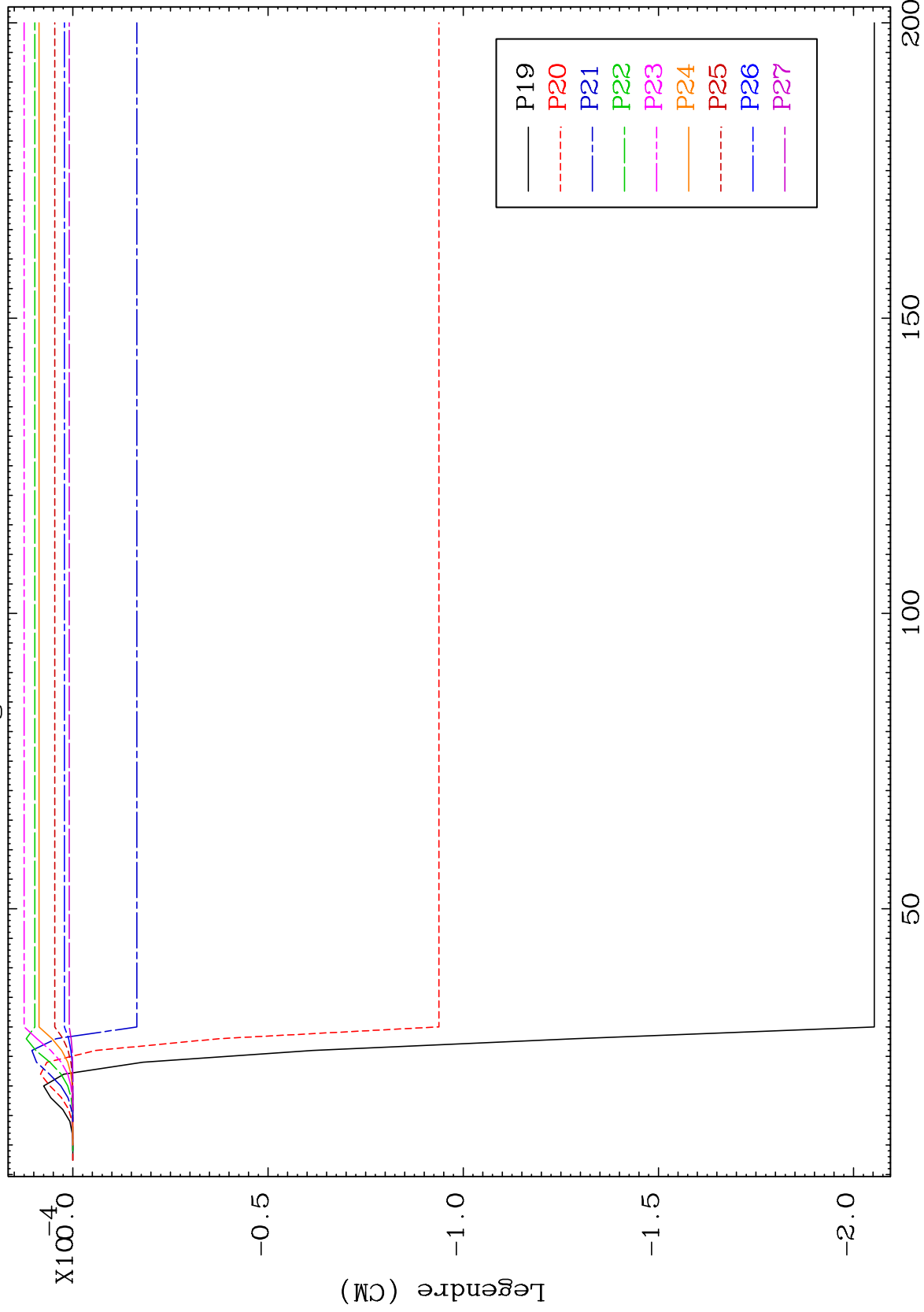
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 62 (n,n') Level
Legendre Coefficients

56-Ba-123



65

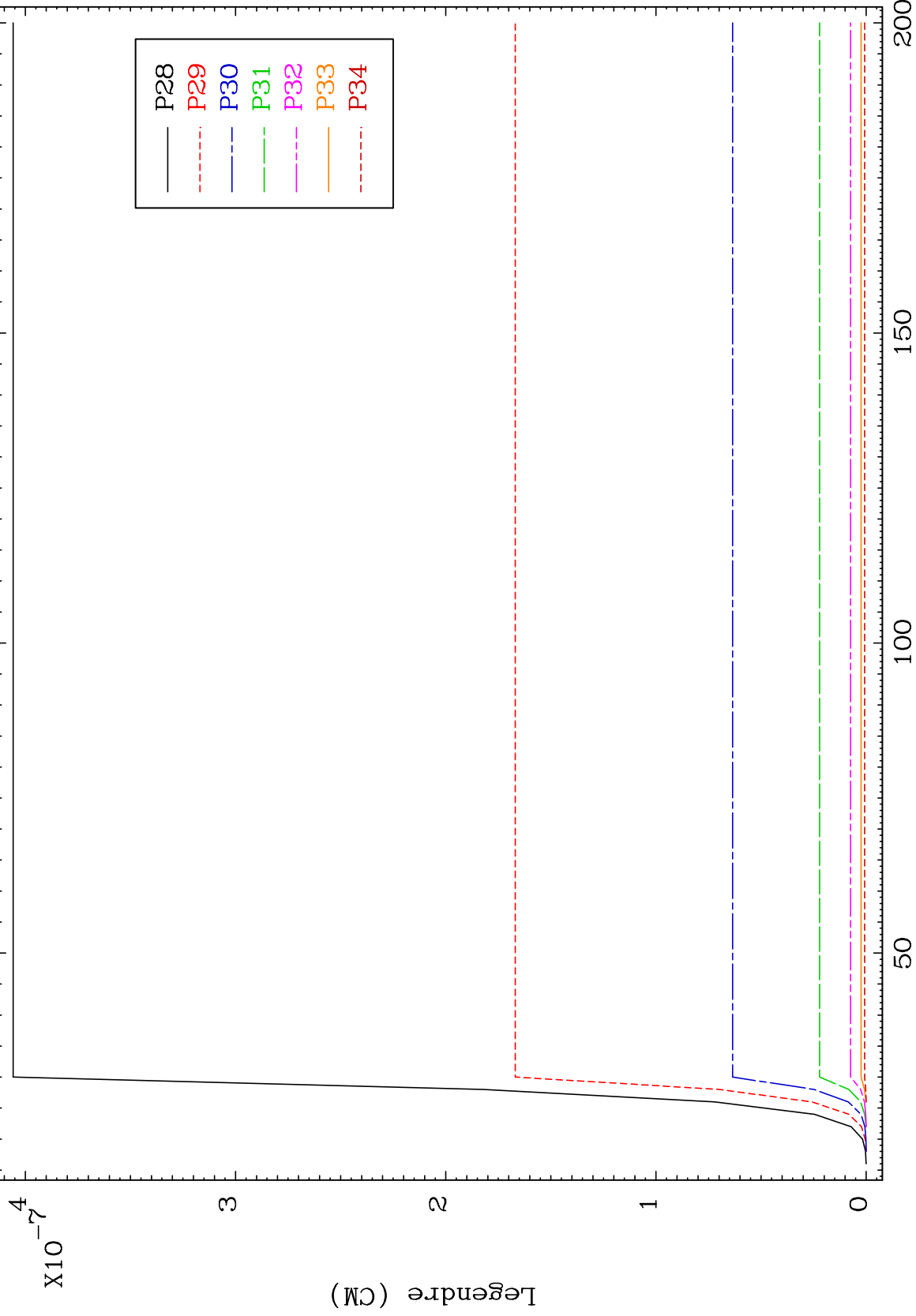
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 62 (n,n') Level
Legendre Coefficients

56-Ba-123



66

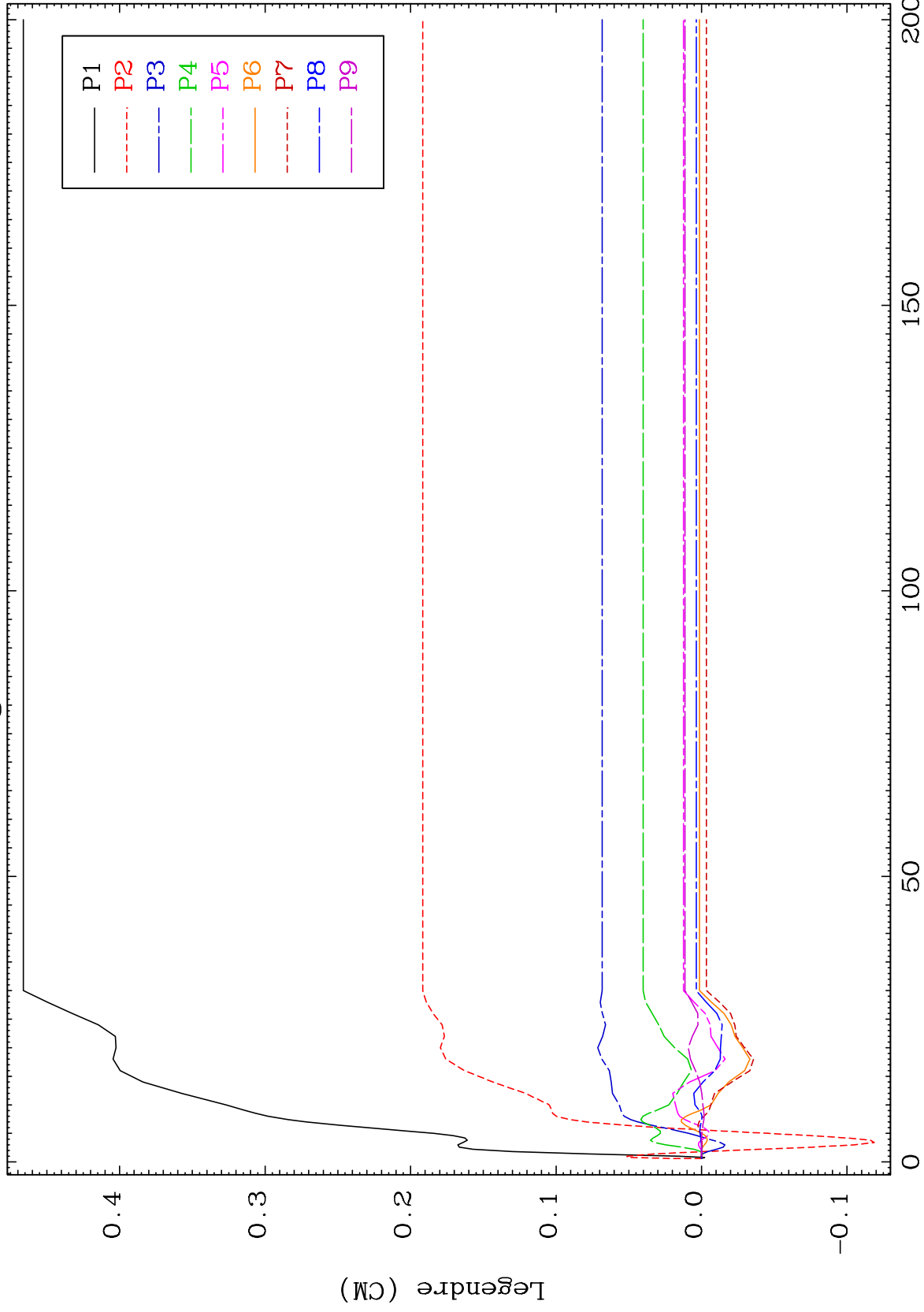
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 63 (n,n') Level
Legendre Coefficients

56-Ba-123



67

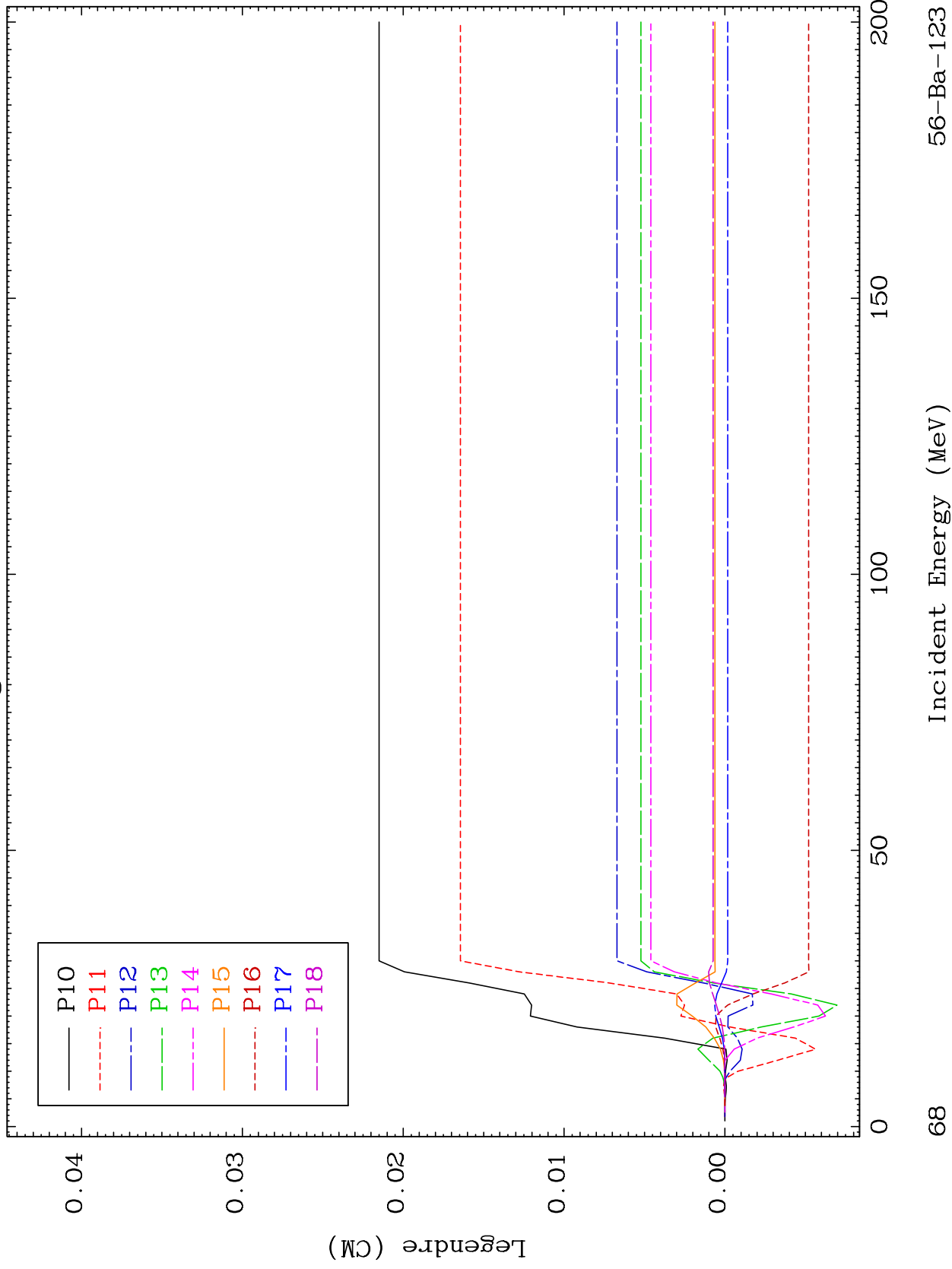
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 63 (n,n') Level
Legendre Coefficients

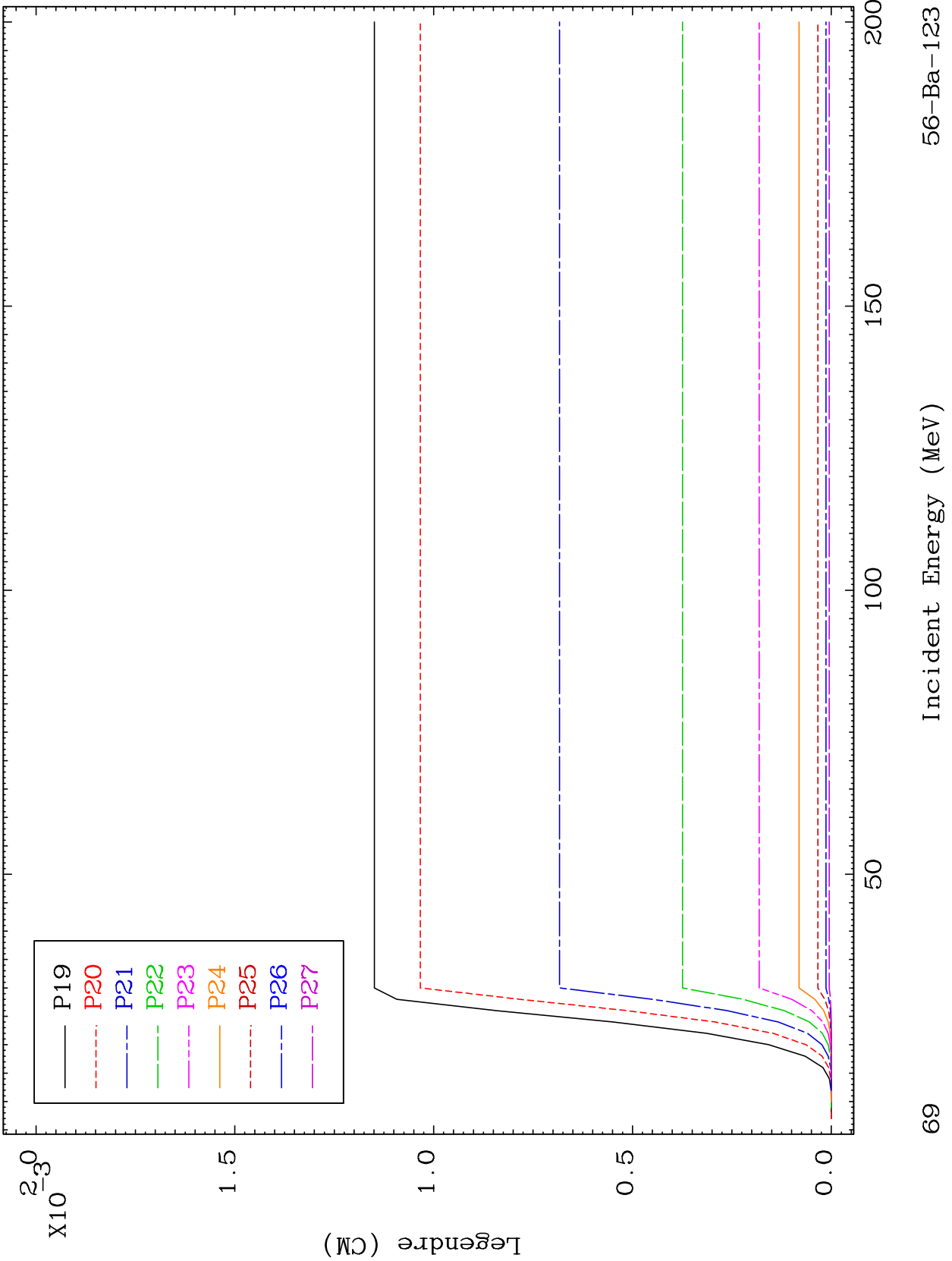
56-Ba-123



MAT 5604

MT= 63 (n,n') Level
Legendre Coefficients

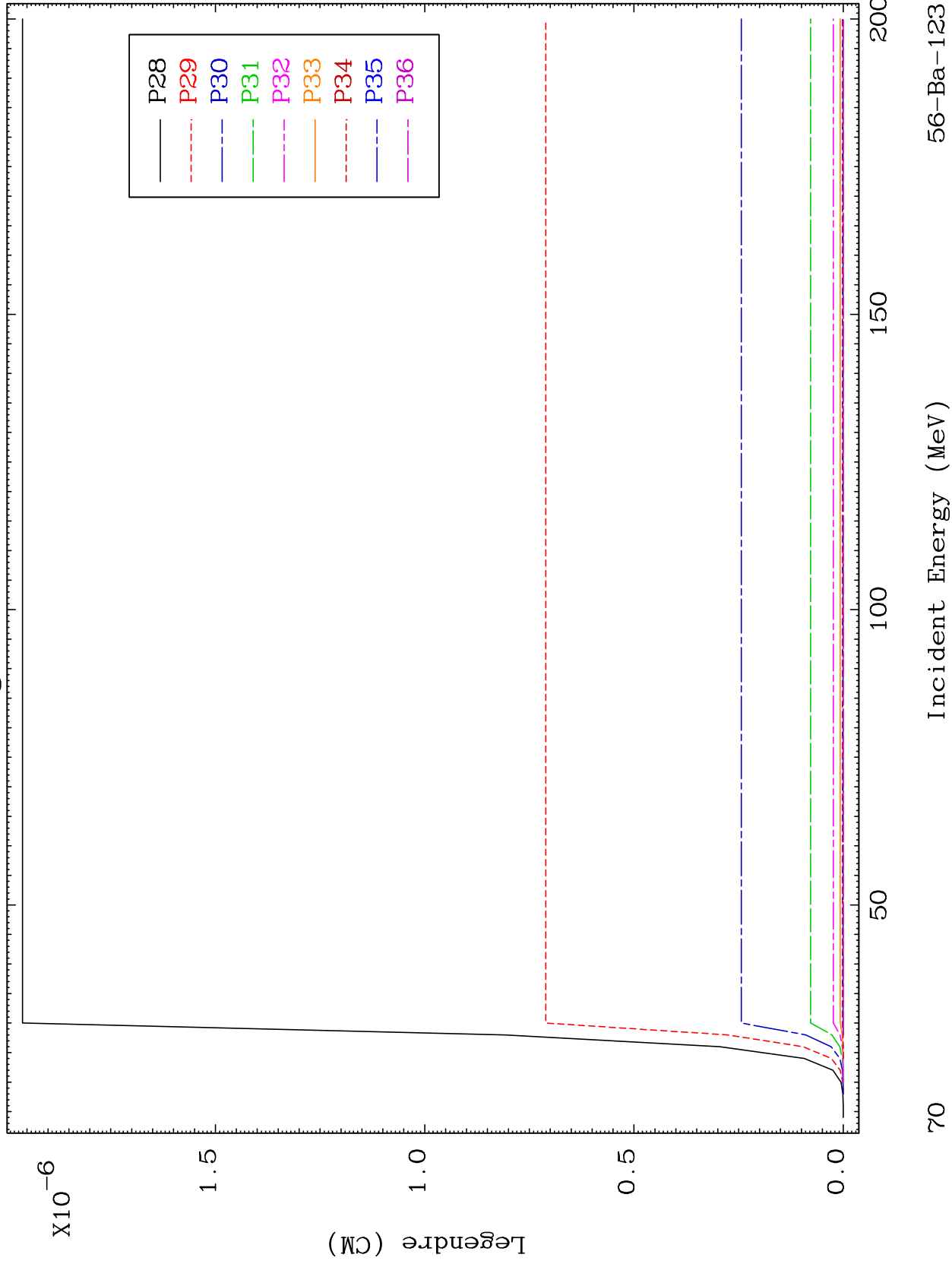
56-Ba-123



MAT 5604

MT= 63 (n,n') Level
Legendre Coefficients

56-Ba-123



70

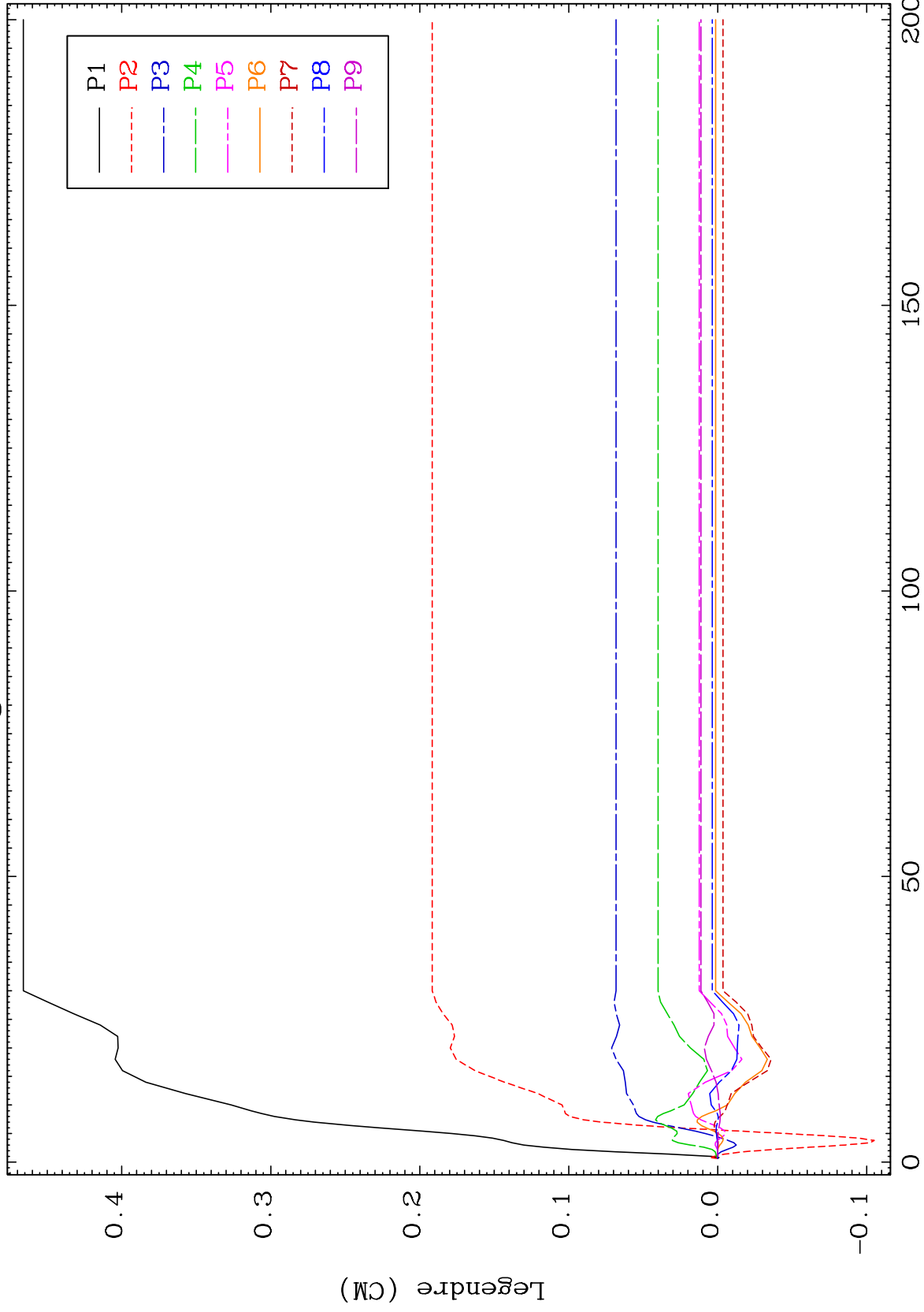
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 64 (n,n') Level
Legendre Coefficients

56-Ba-123



71

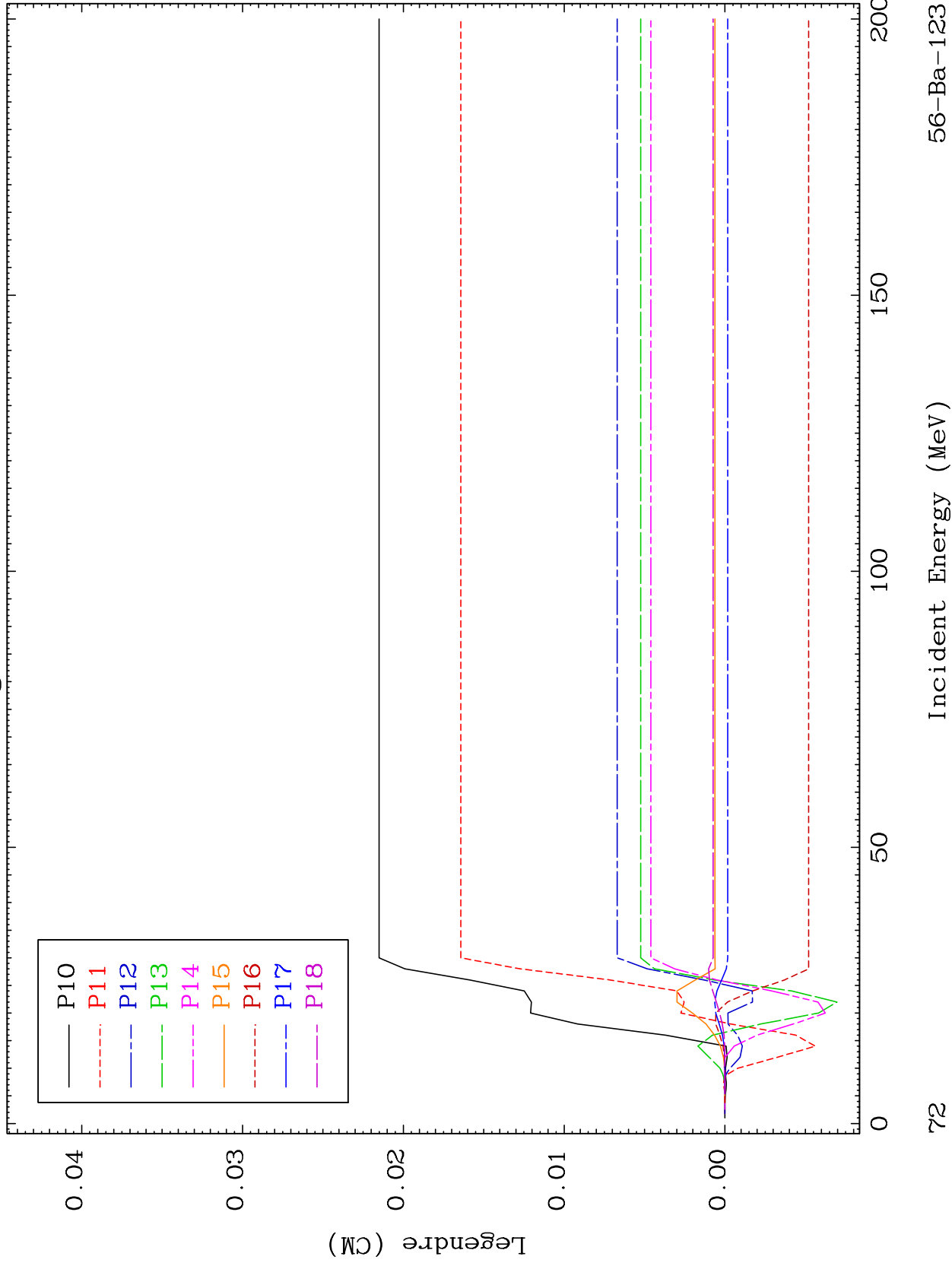
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 64 (n,n') Level
Legendre Coefficients

56-Ba-123



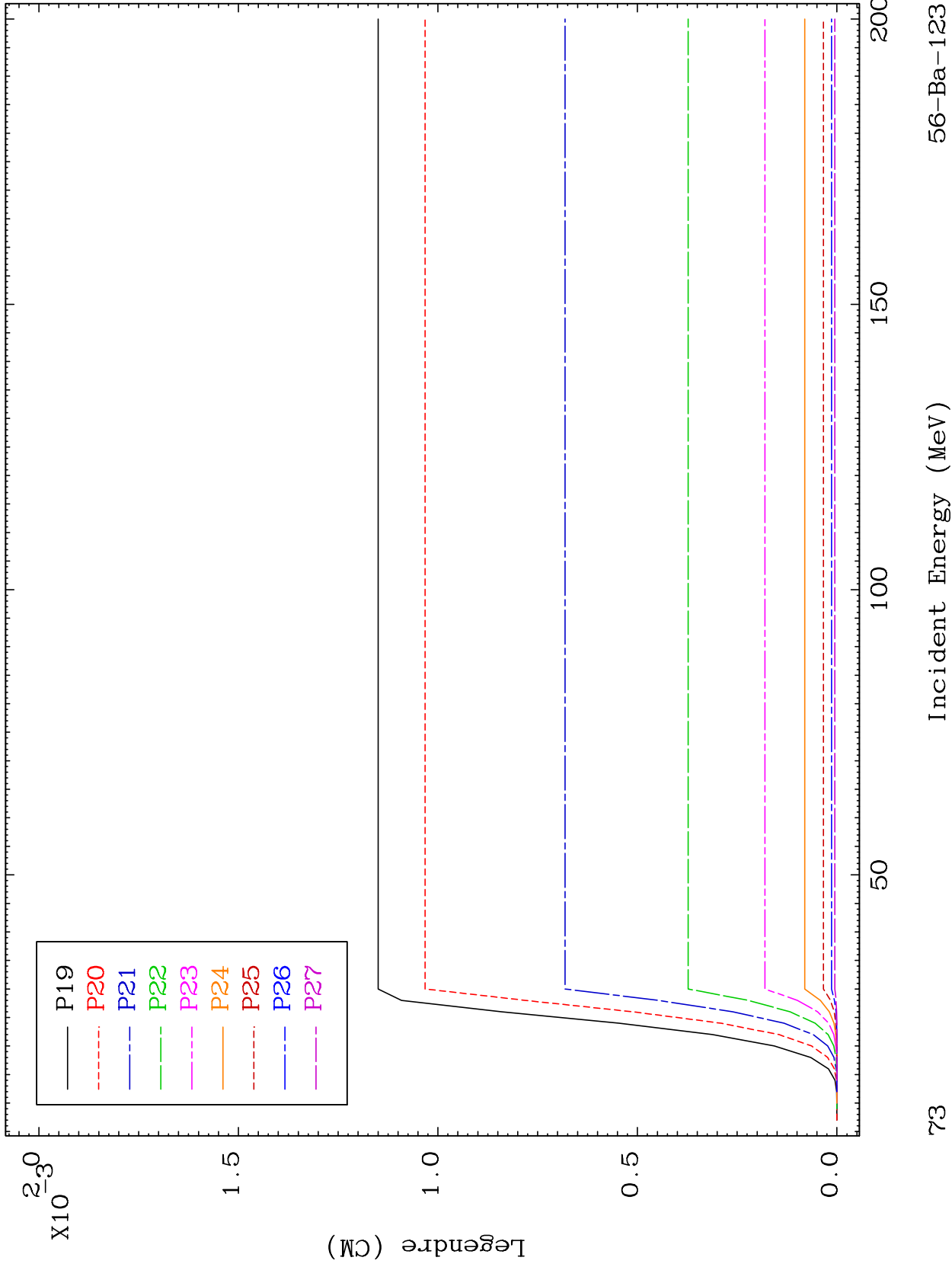
56-Ba-123

72

MAT 5604

MT= 64 (n,n') Level
Legendre Coefficients

56-Ba-123



73

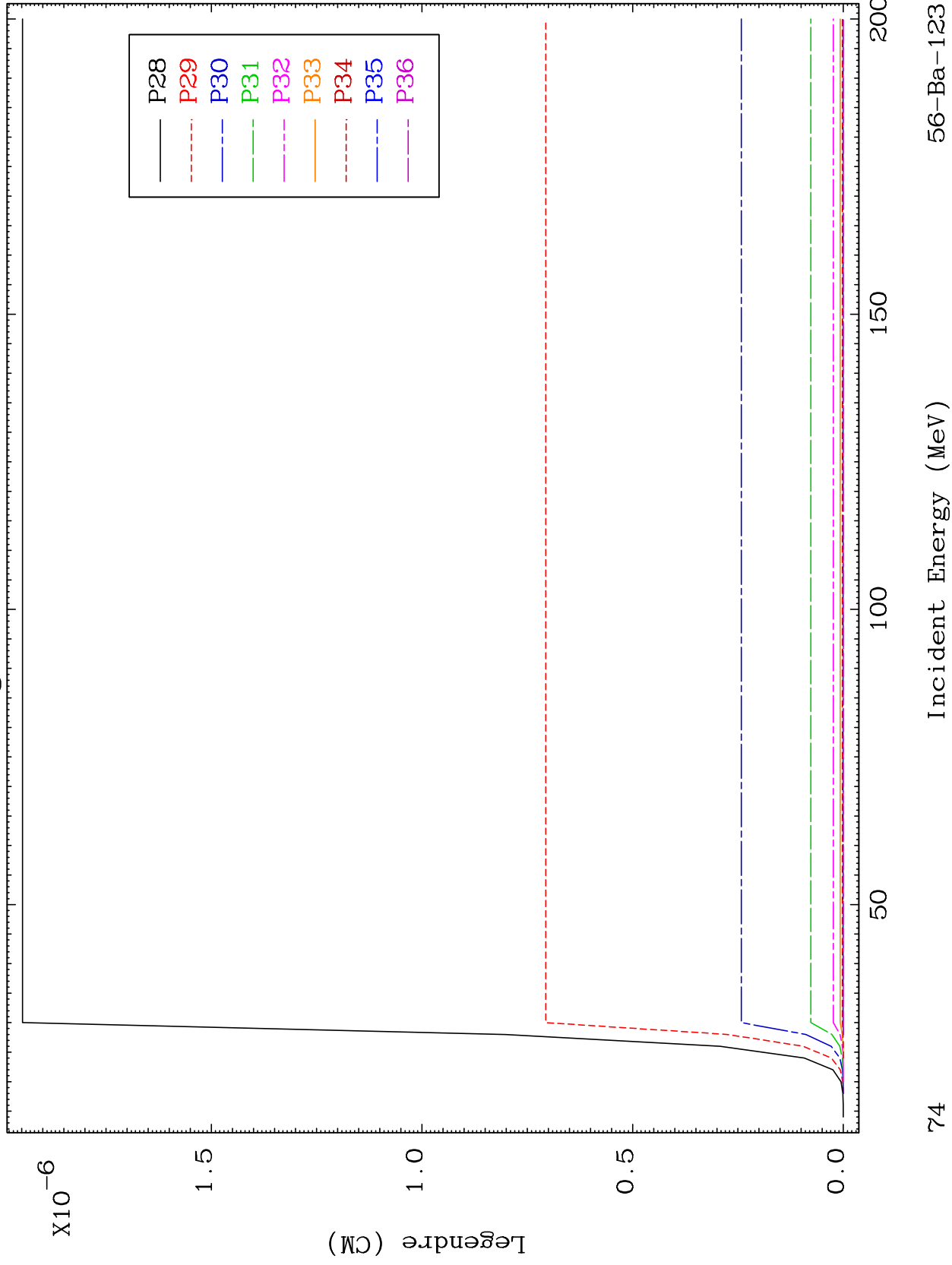
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 64 (n,n') Level
Legendre Coefficients

56-Ba-123



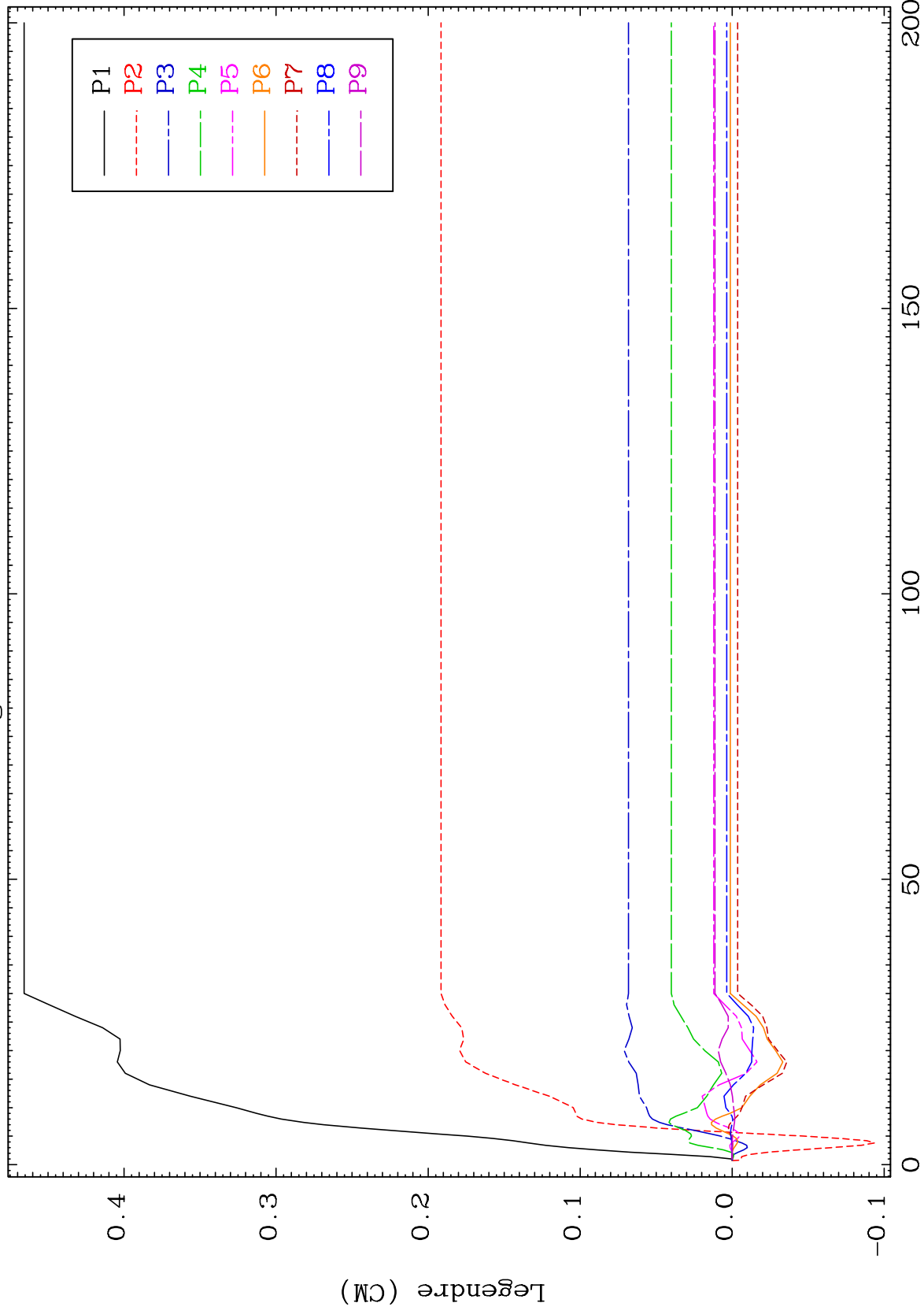
74

56-Ba-123

MAT 5604

MT= 65 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

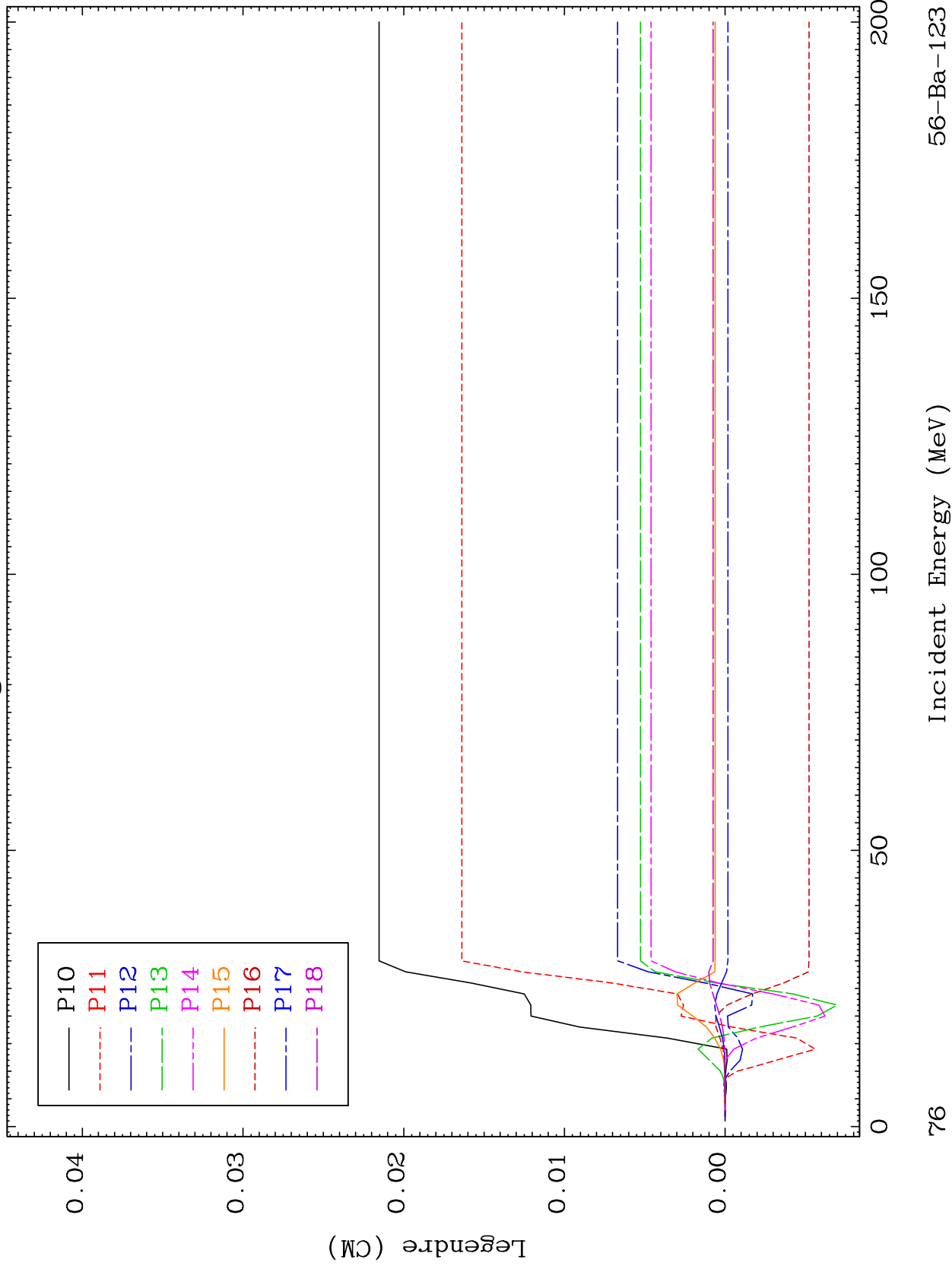
Incident Energy (MeV)

75

MAT 5604

MT= 65 (n,n') Level
Legendre Coefficients

56-Ba-123



76

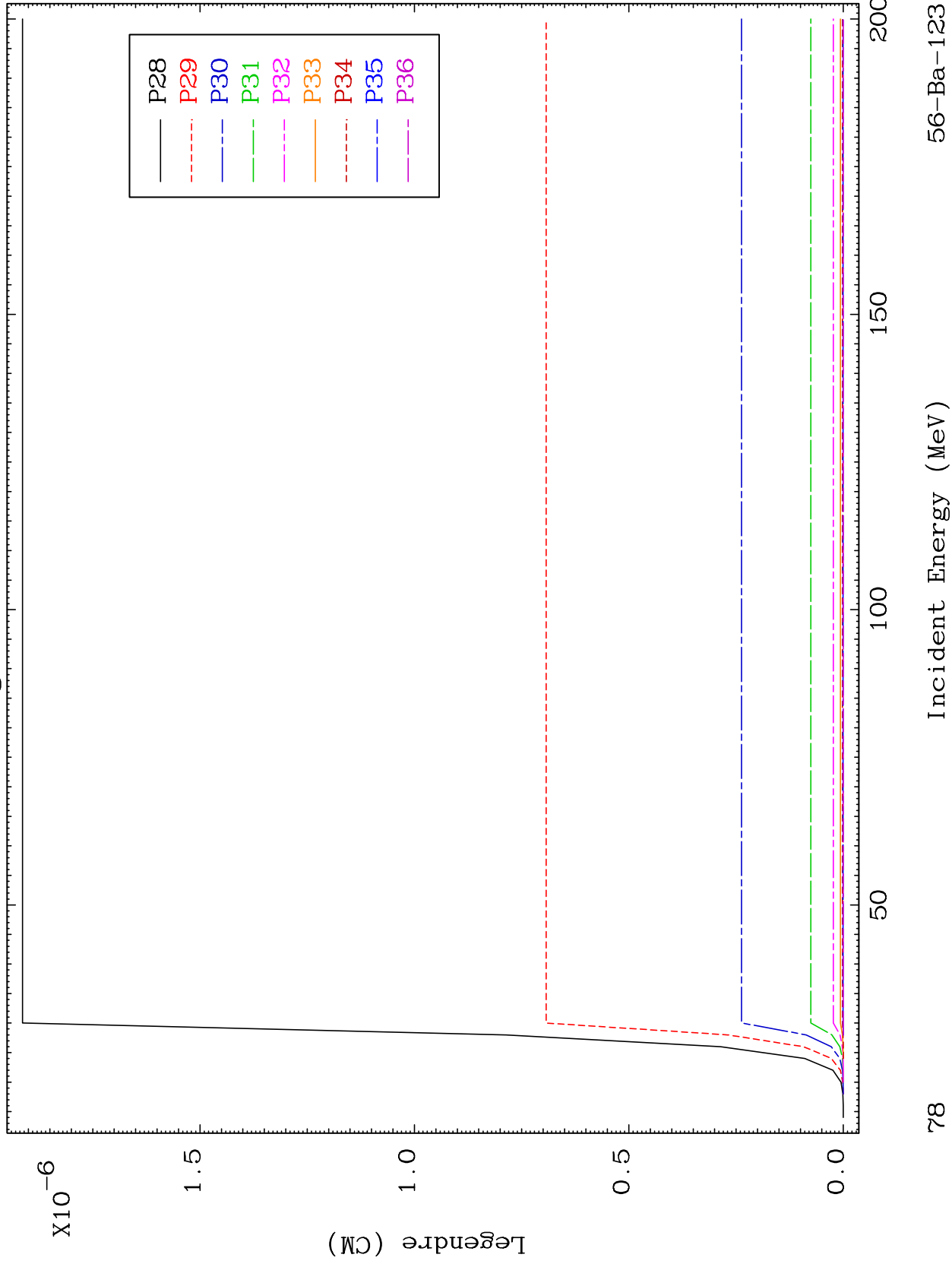
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 65 (n,n') Level
Legendre Coefficients

56-Ba-123



78

Incident Energy (MeV)

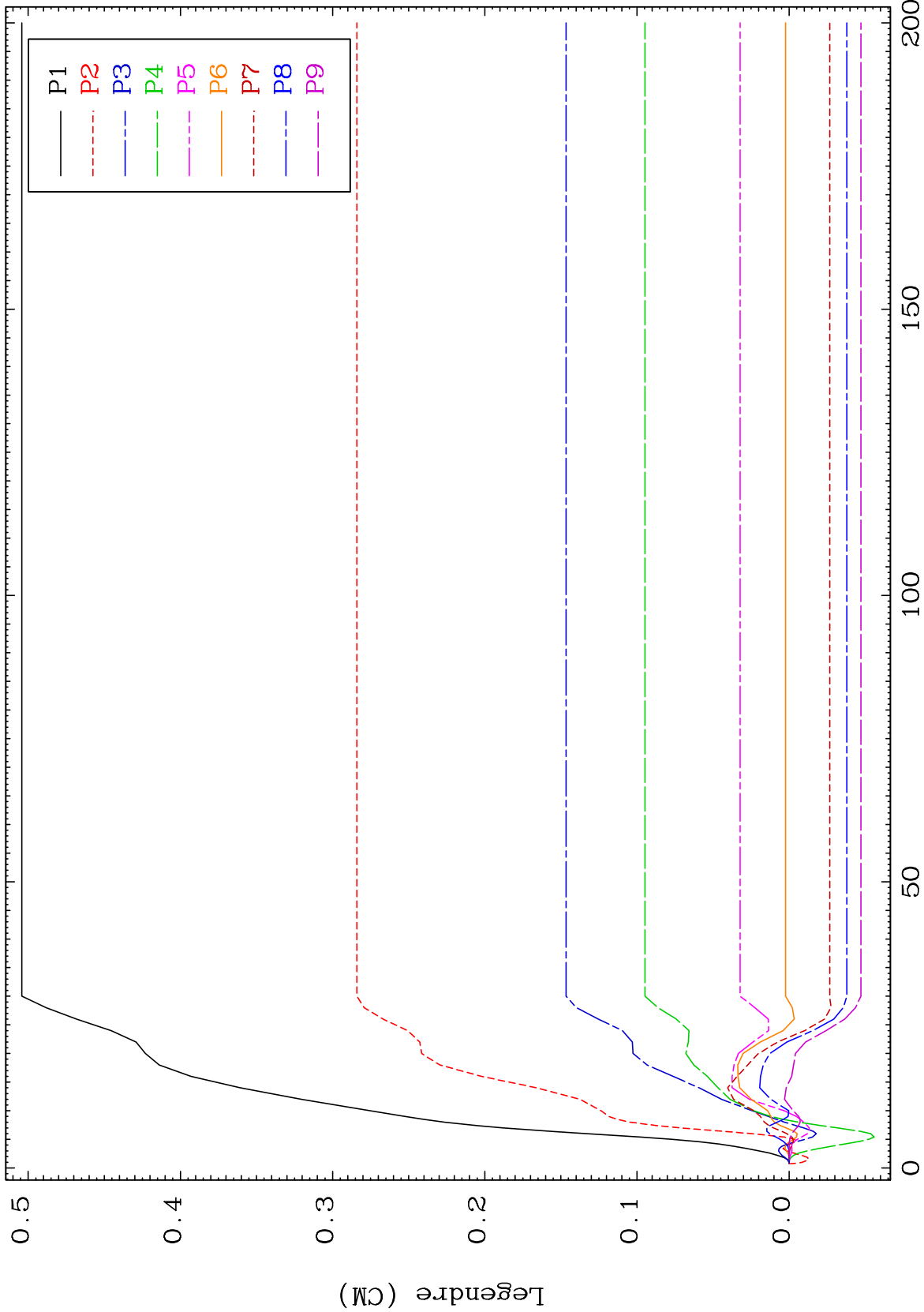
56-Ba-123

MAT 5604

MT= 66 (n,n') Level

56-Ba-123

Legendre Coefficients



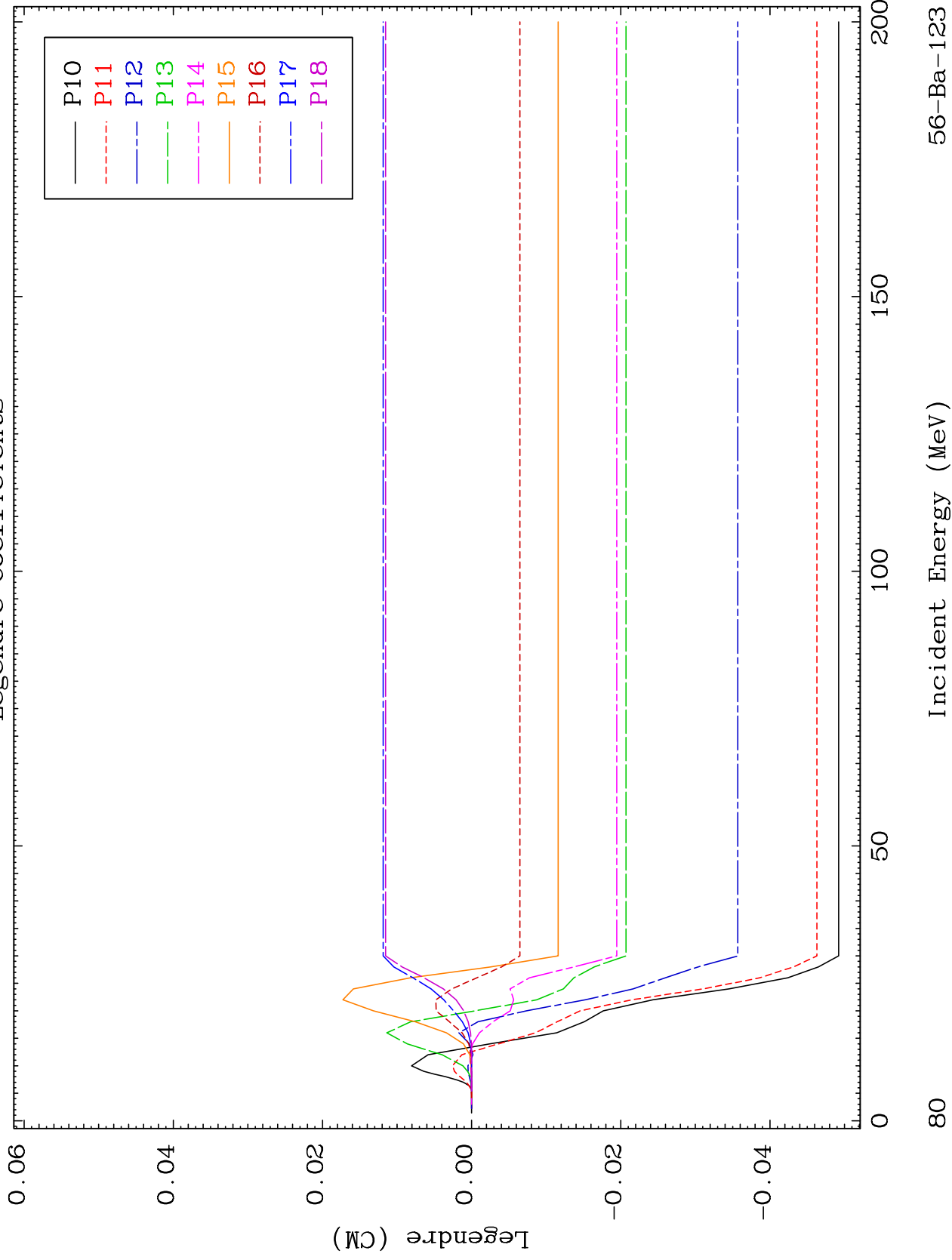
79

56-Ba-123

MAT 5604

MT= 66 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

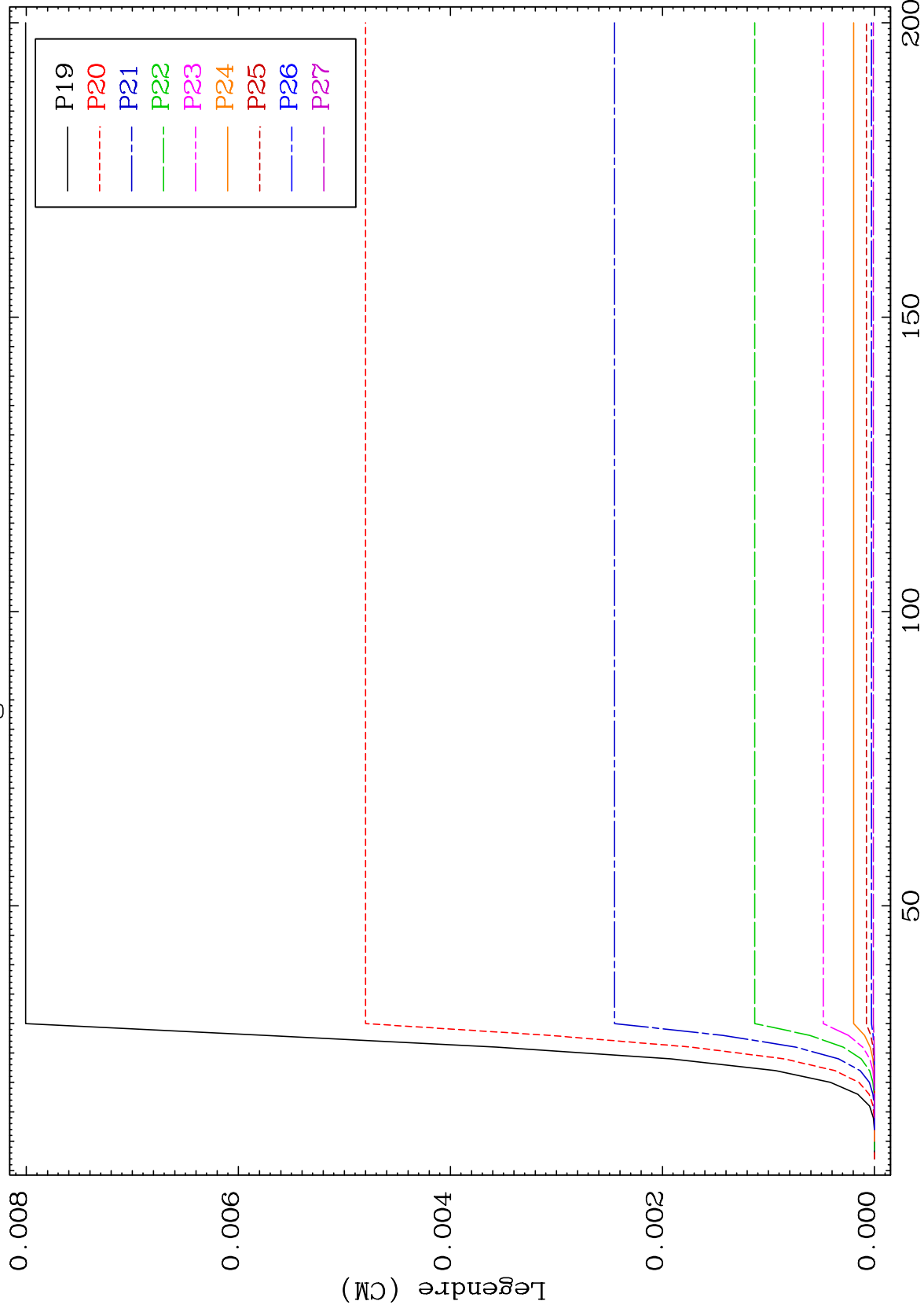
Incident Energy (MeV)

80

MAT 5604

MT= 66 (n,n') Level
Legendre Coefficients

56-Ba-123



81

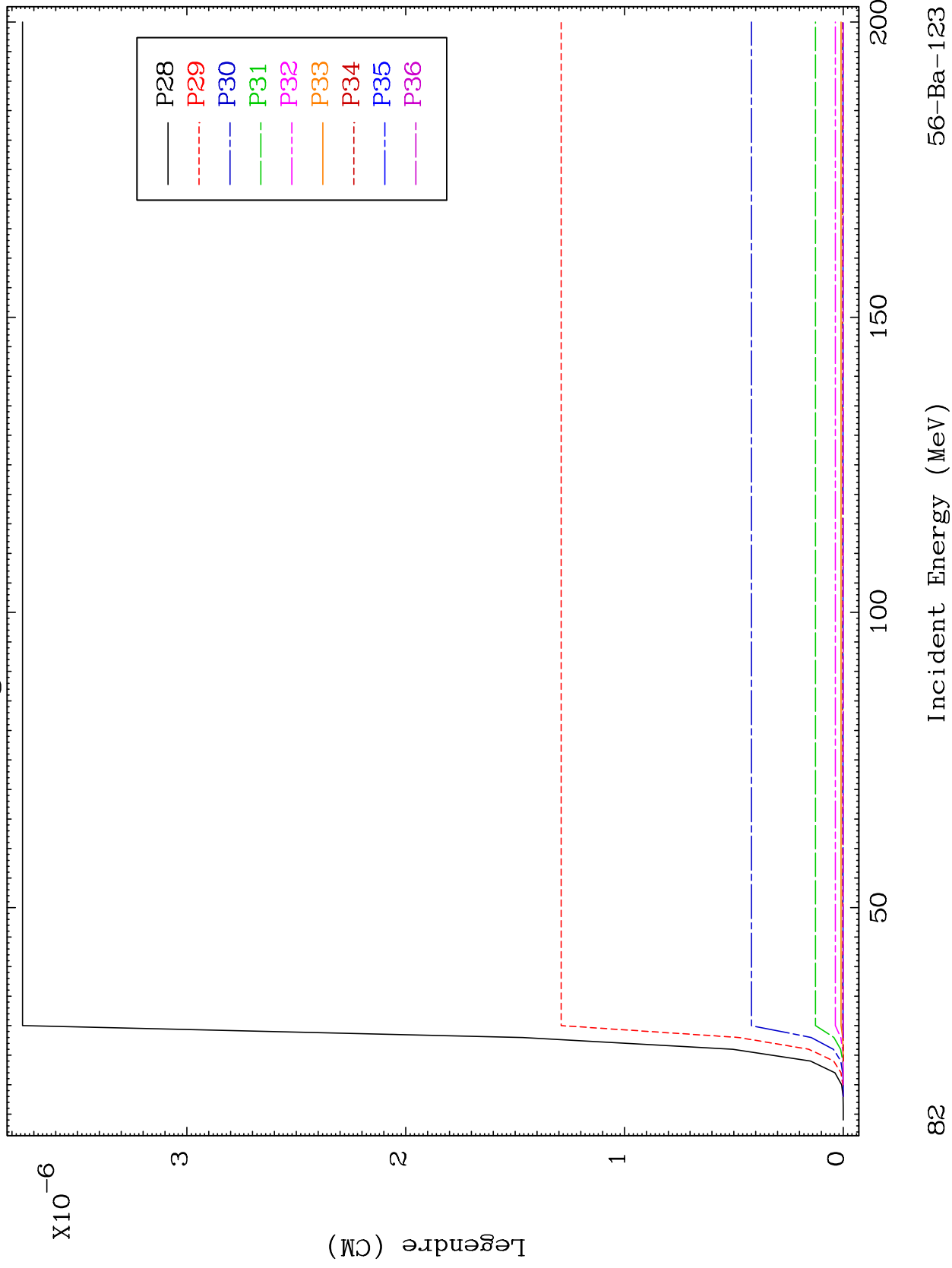
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 66 (n,n') Level
Legendre Coefficients

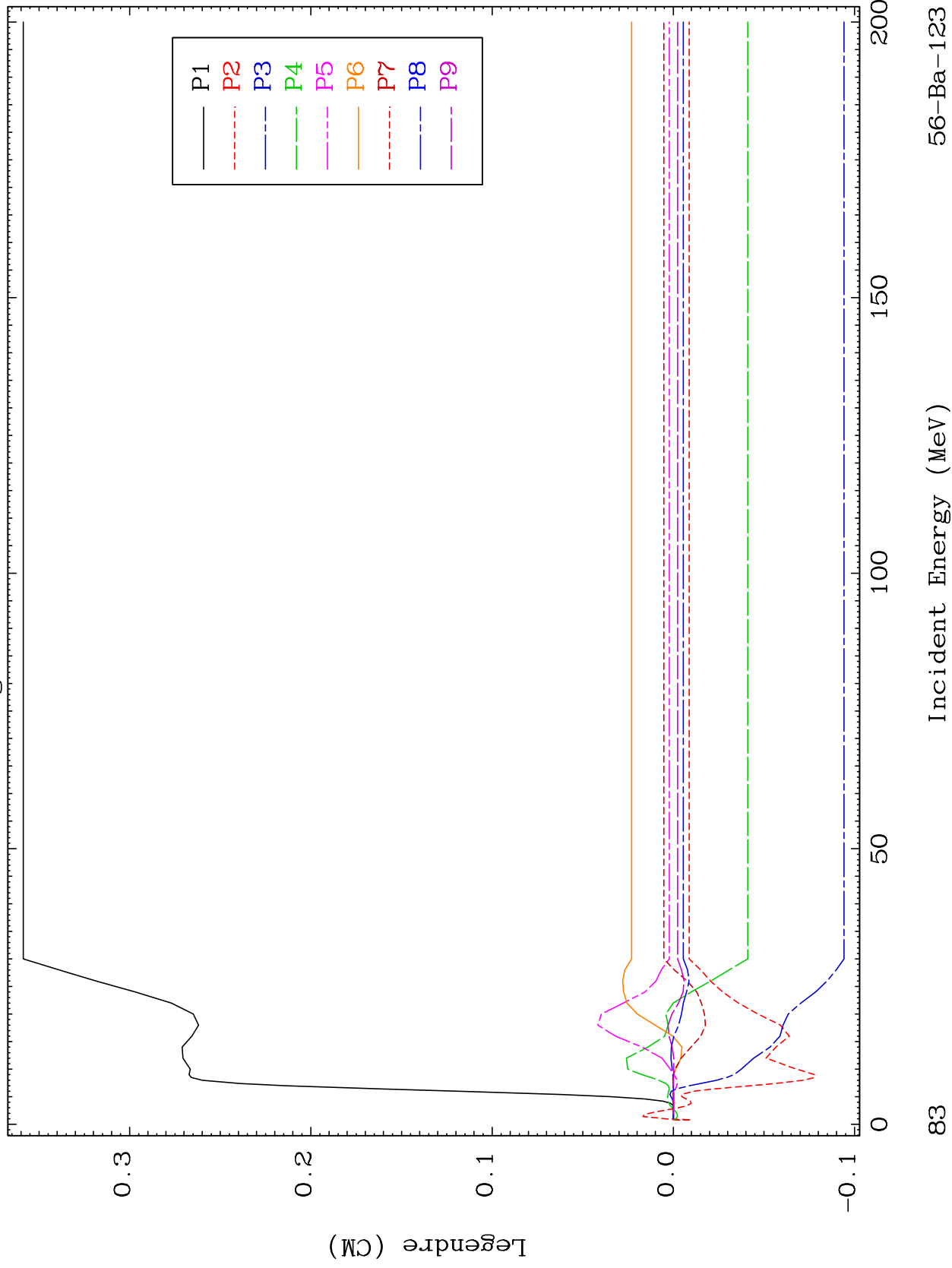
56-Ba-123



MAT 5604

MT= 67 (n,n') Level
Legendre Coefficients

56-Ba-123



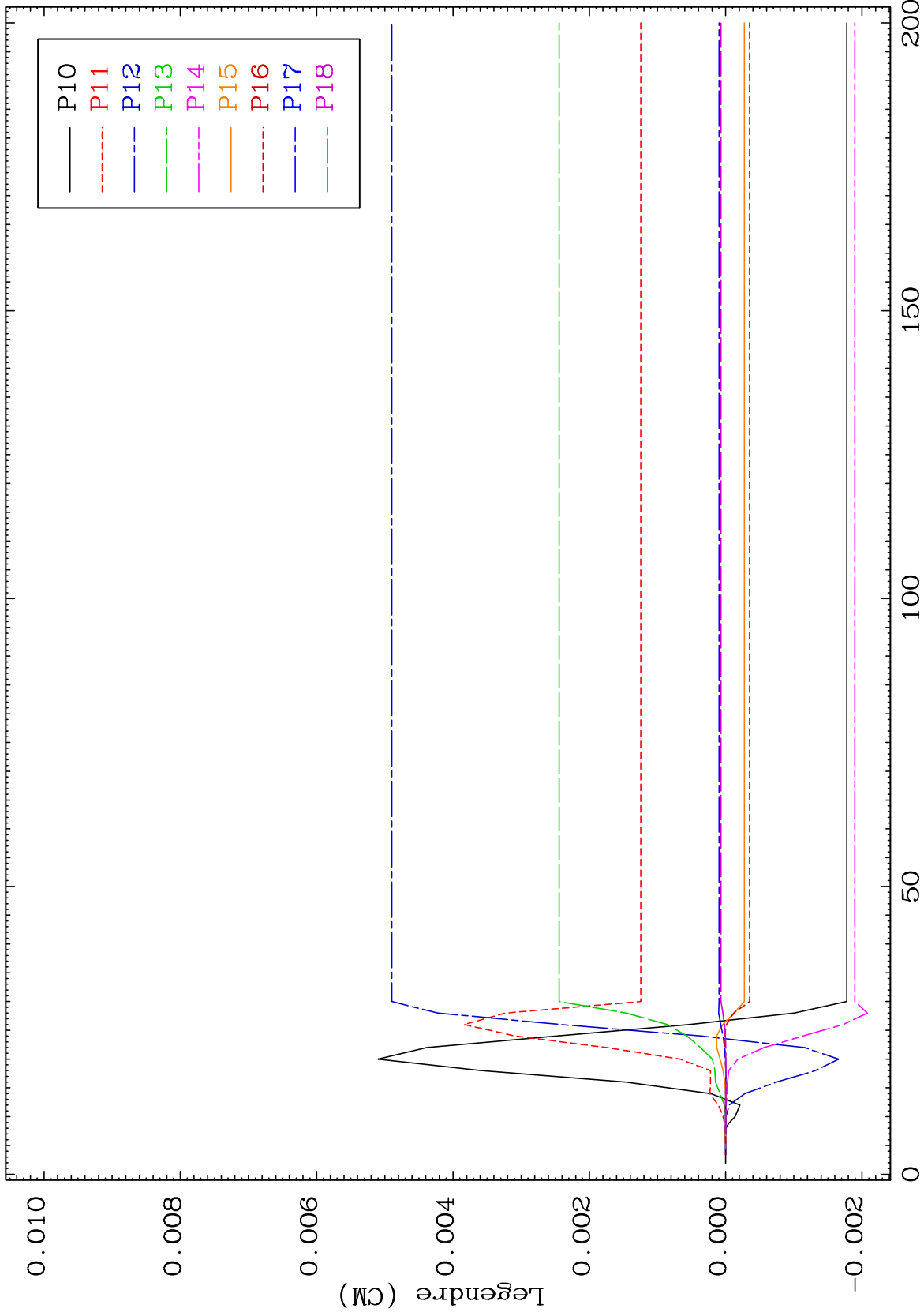
83

56-Ba-123

MAT 5604

MT= 67 (n,n') Level
Legendre Coefficients

56-Ba-123



84

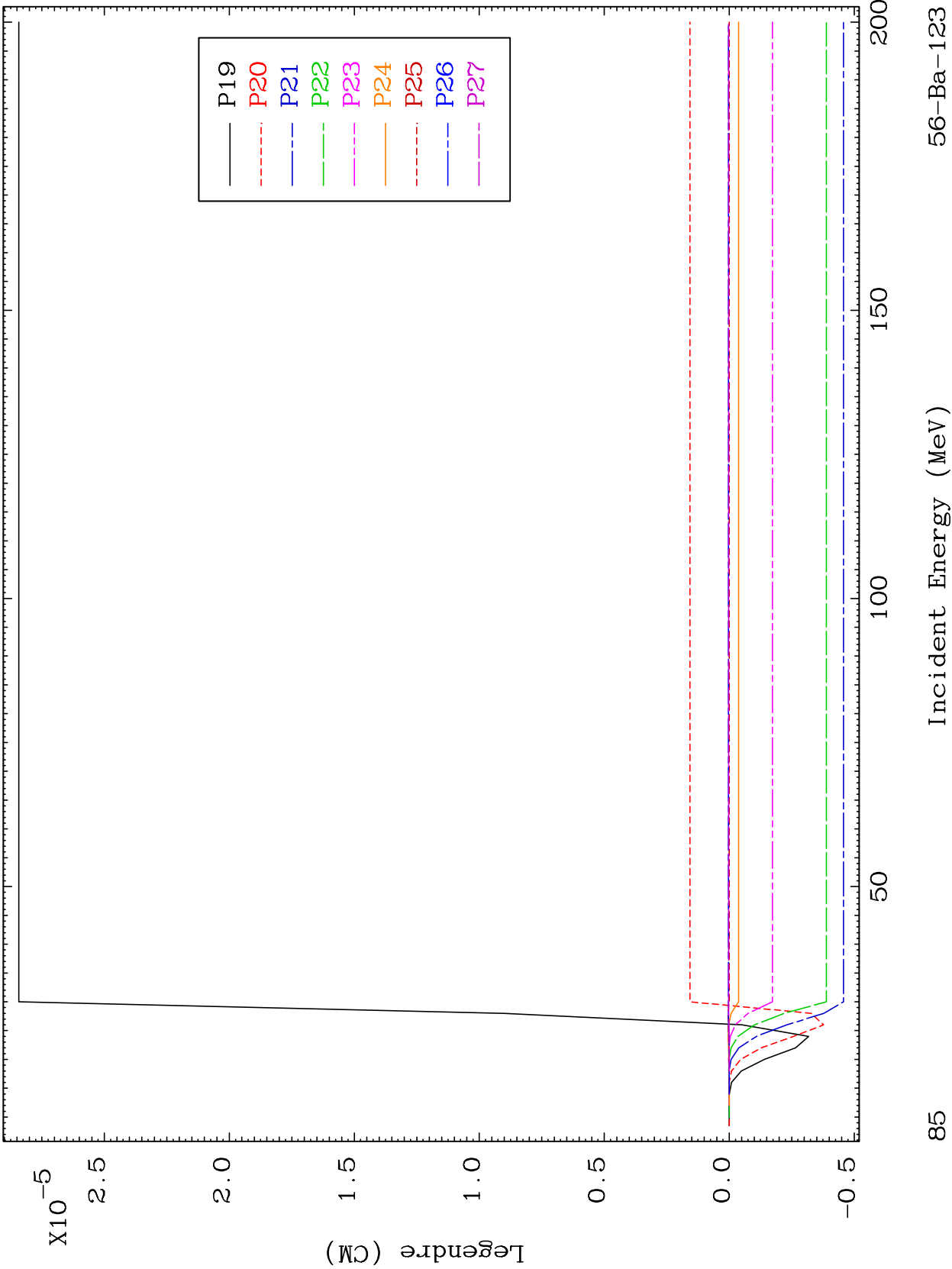
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 67 (n,n') Level
Legendre Coefficients

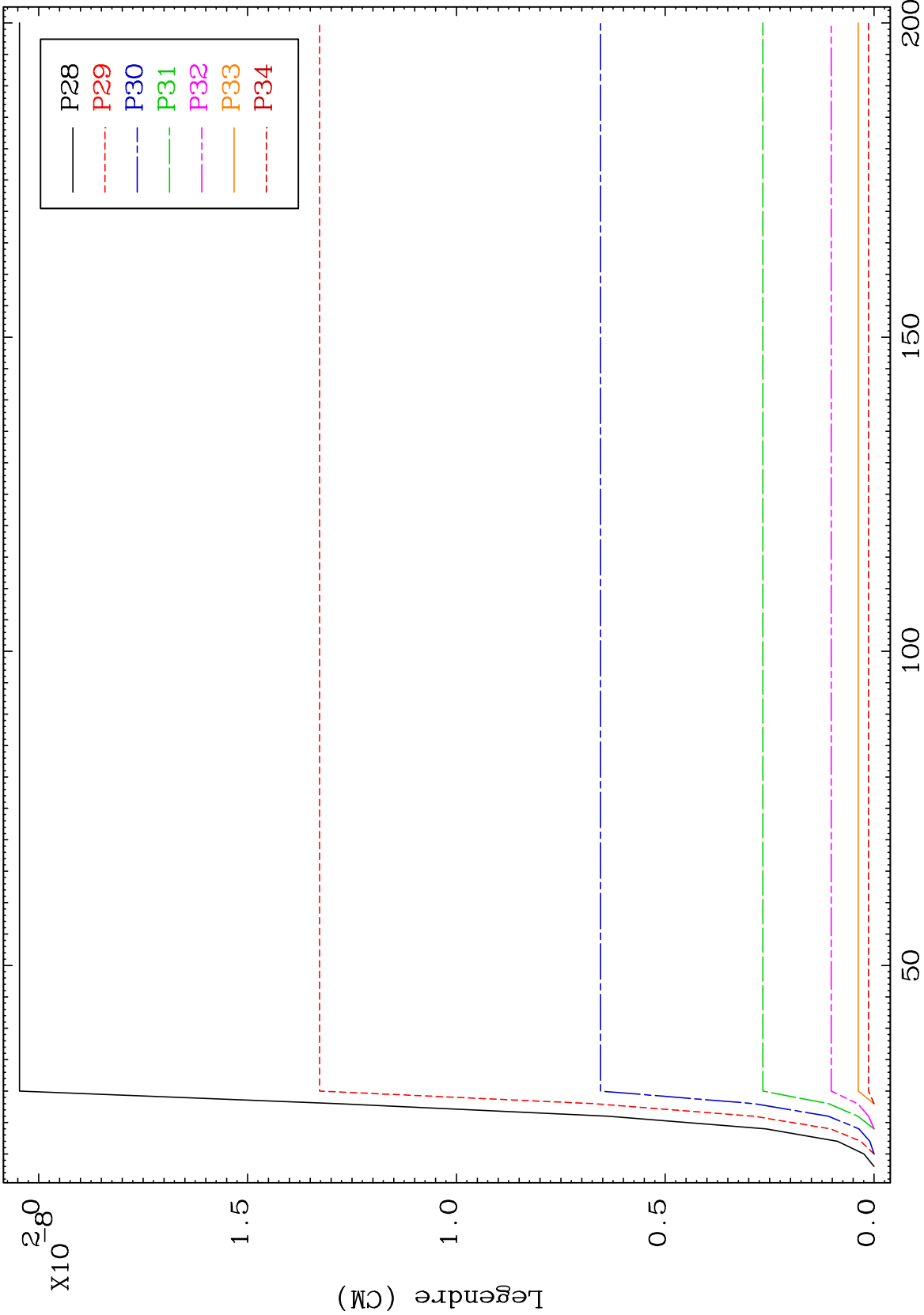
56-Ba-123



MAT 5604

MT= 67 (n,n') Level
Legendre Coefficients

56-Ba-123



86

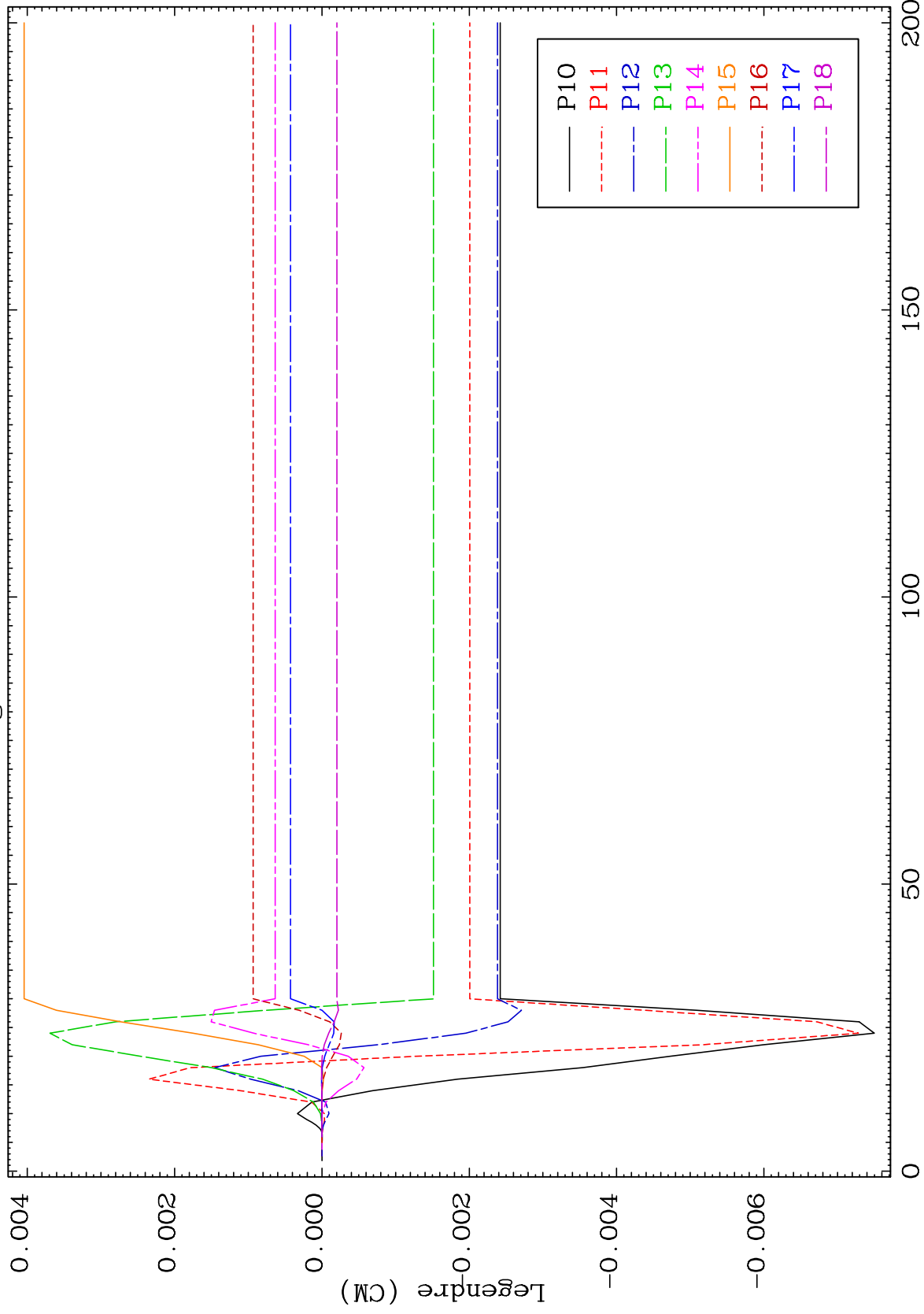
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 68 (n,n') Level
Legendre Coefficients

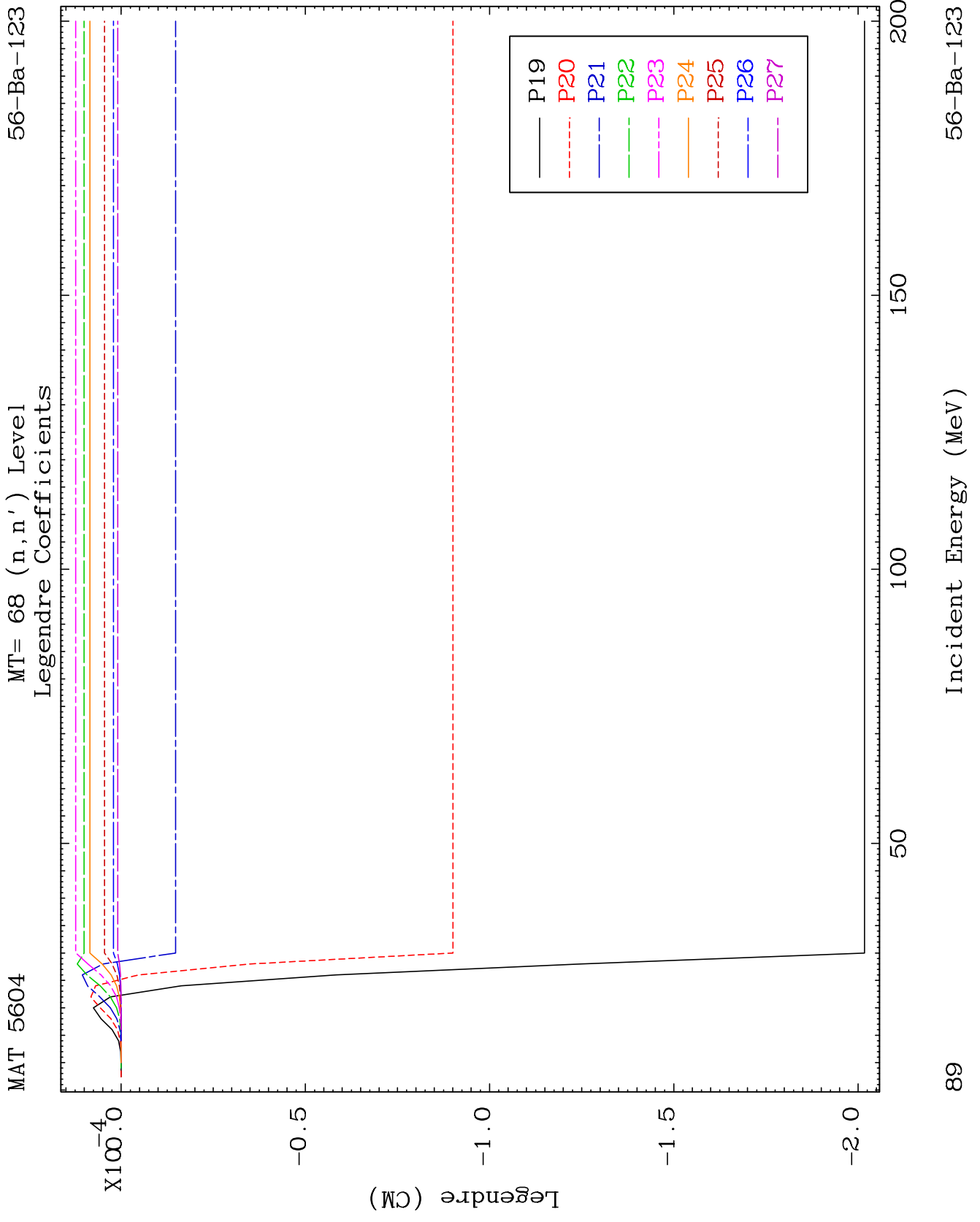
56-Ba-123



88

Incident Energy (MeV)

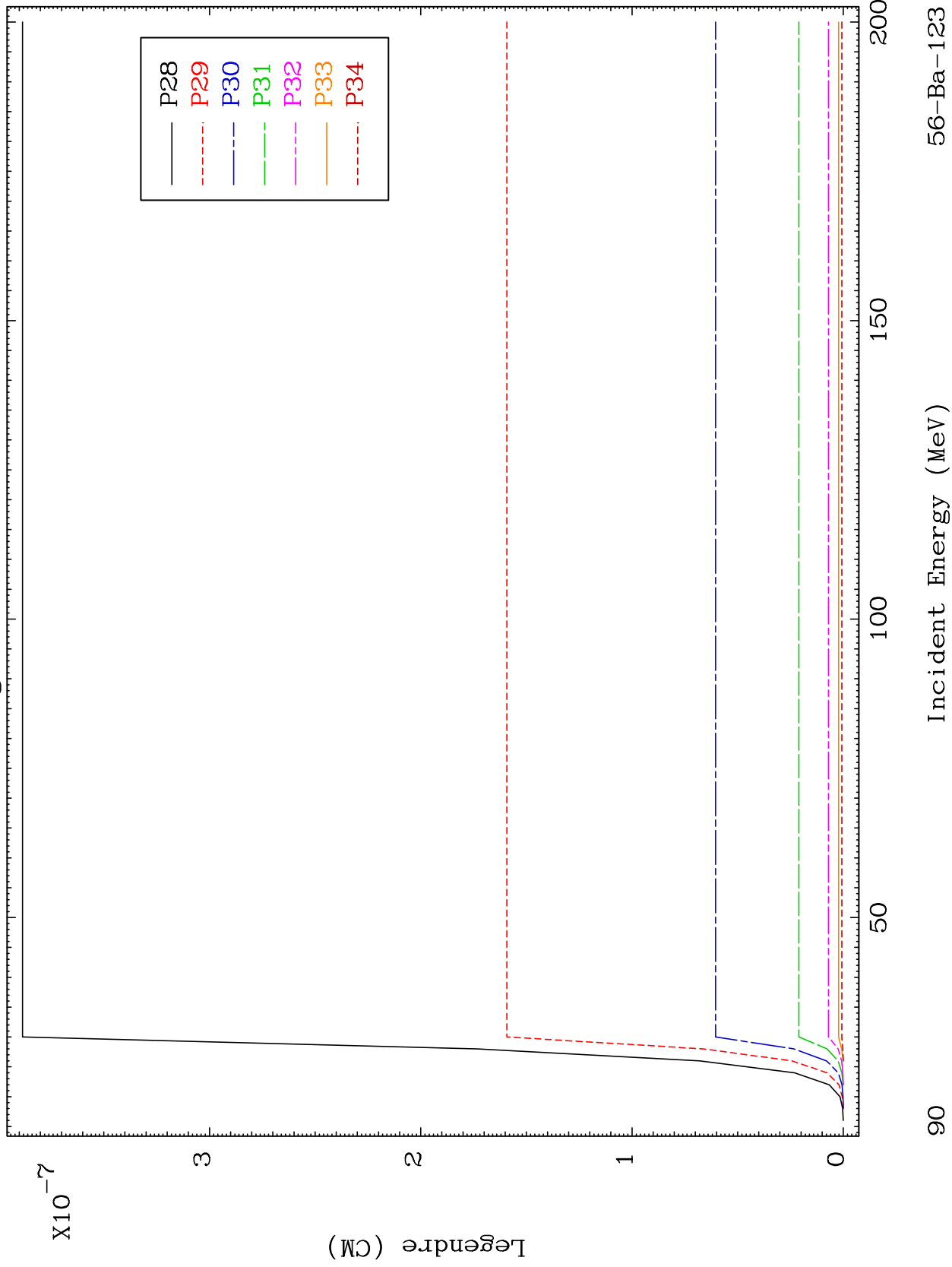
56-Ba-123



MAT 5604

MT= 68 (n,n') Level
Legendre Coefficients

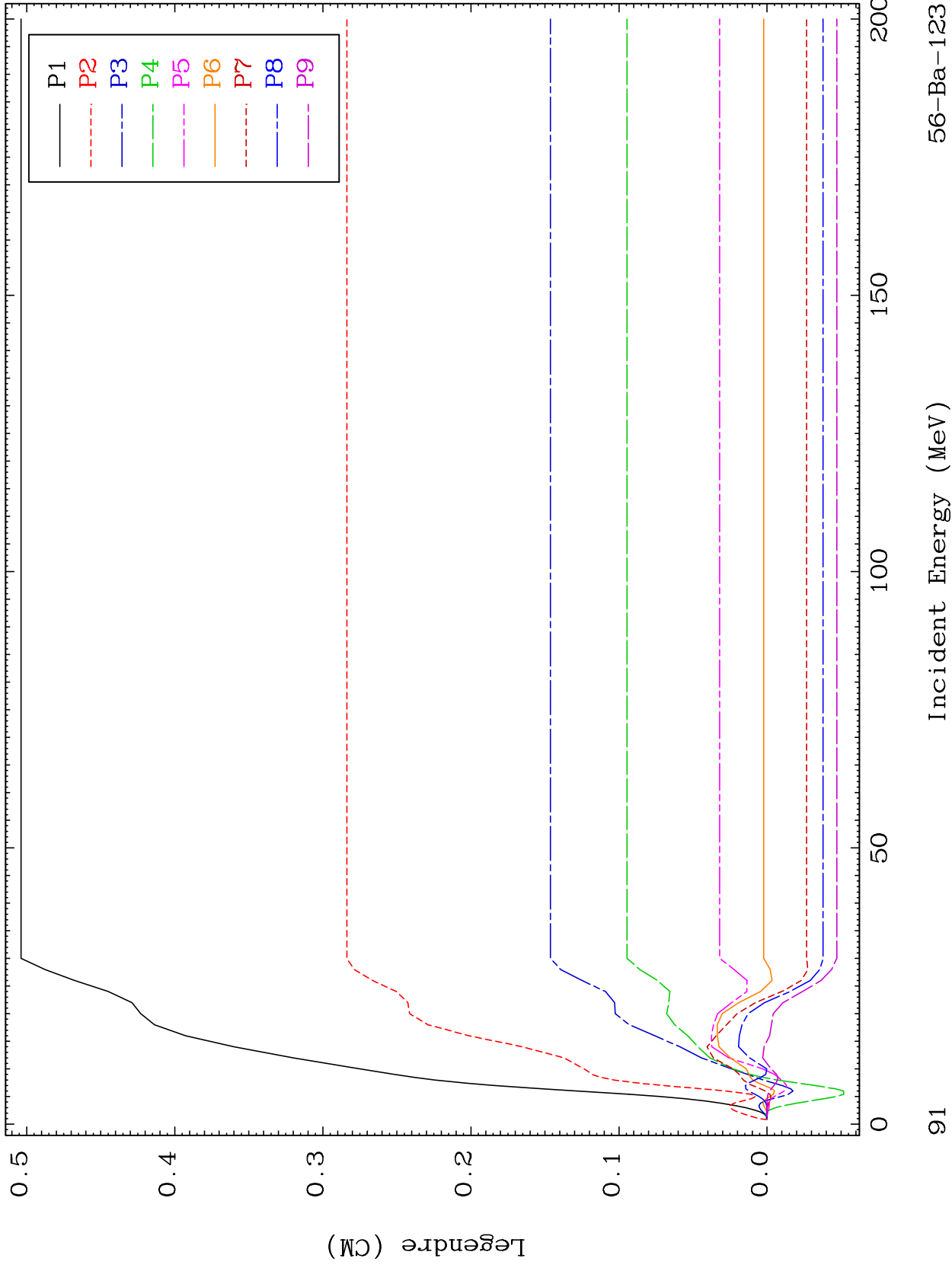
56-Ba-123



MAT 5604

MT= 69 (n,n') Level
Legendre Coefficients

56-Ba-123



56-Ba-123

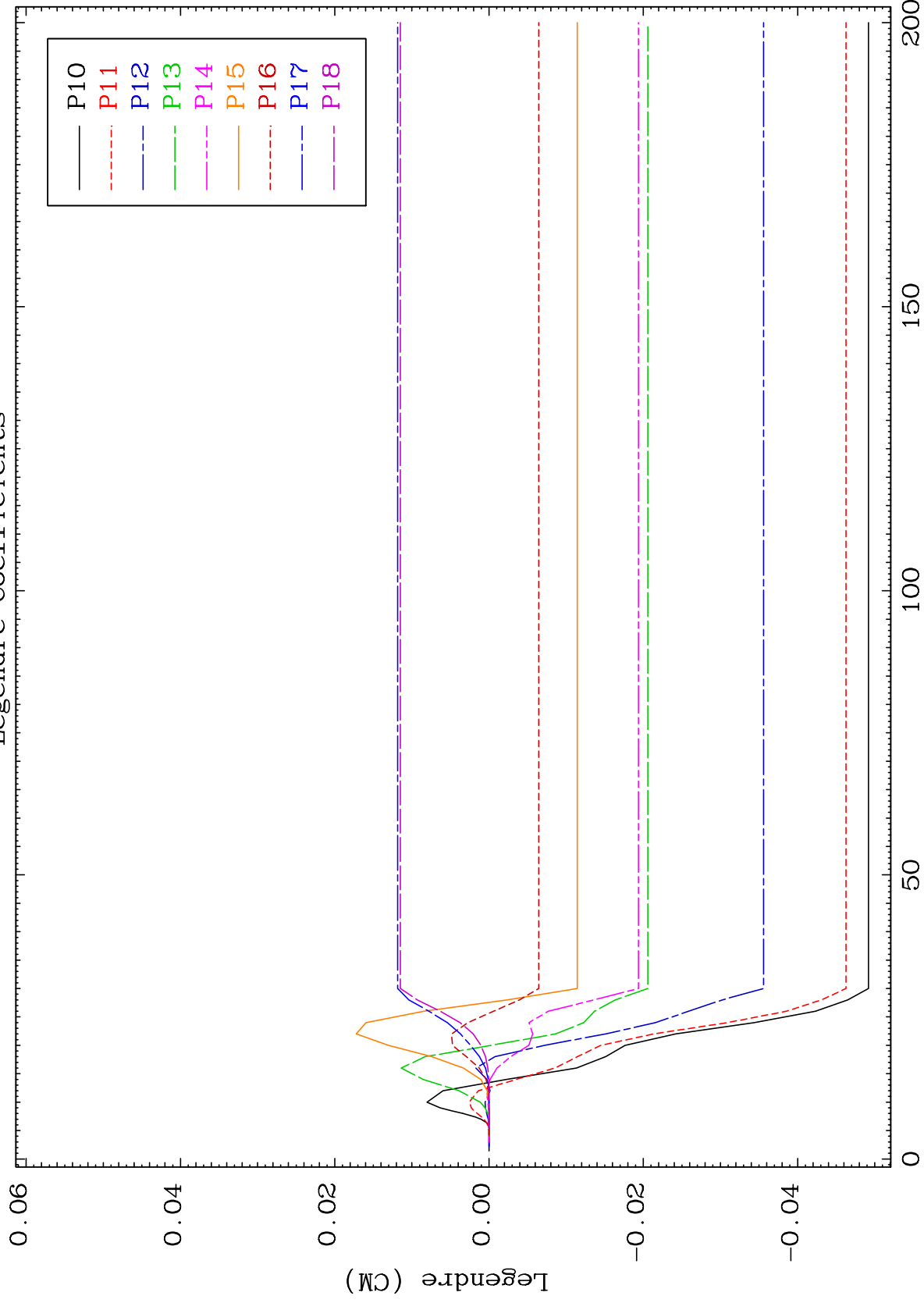
Incident Energy (MeV)

91

MAT 5604

MT= 69 (n,n') Level
Legendre Coefficients

56-Ba-123



92

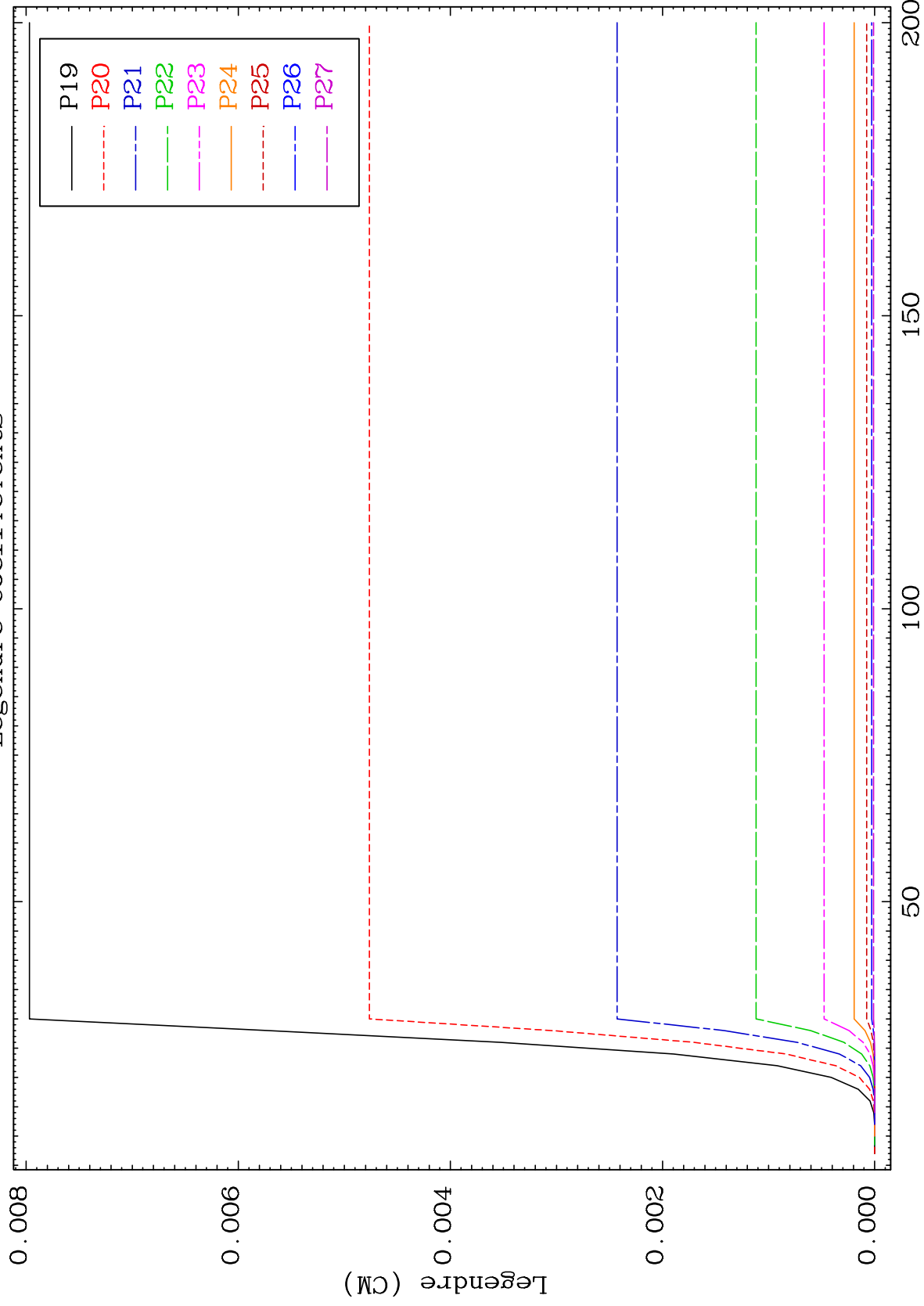
Incident Energy (MeV)

56-Ba-123

MAT 5604

MT= 69 (n,n') Level
Legendre Coefficients

56-Ba-123



93

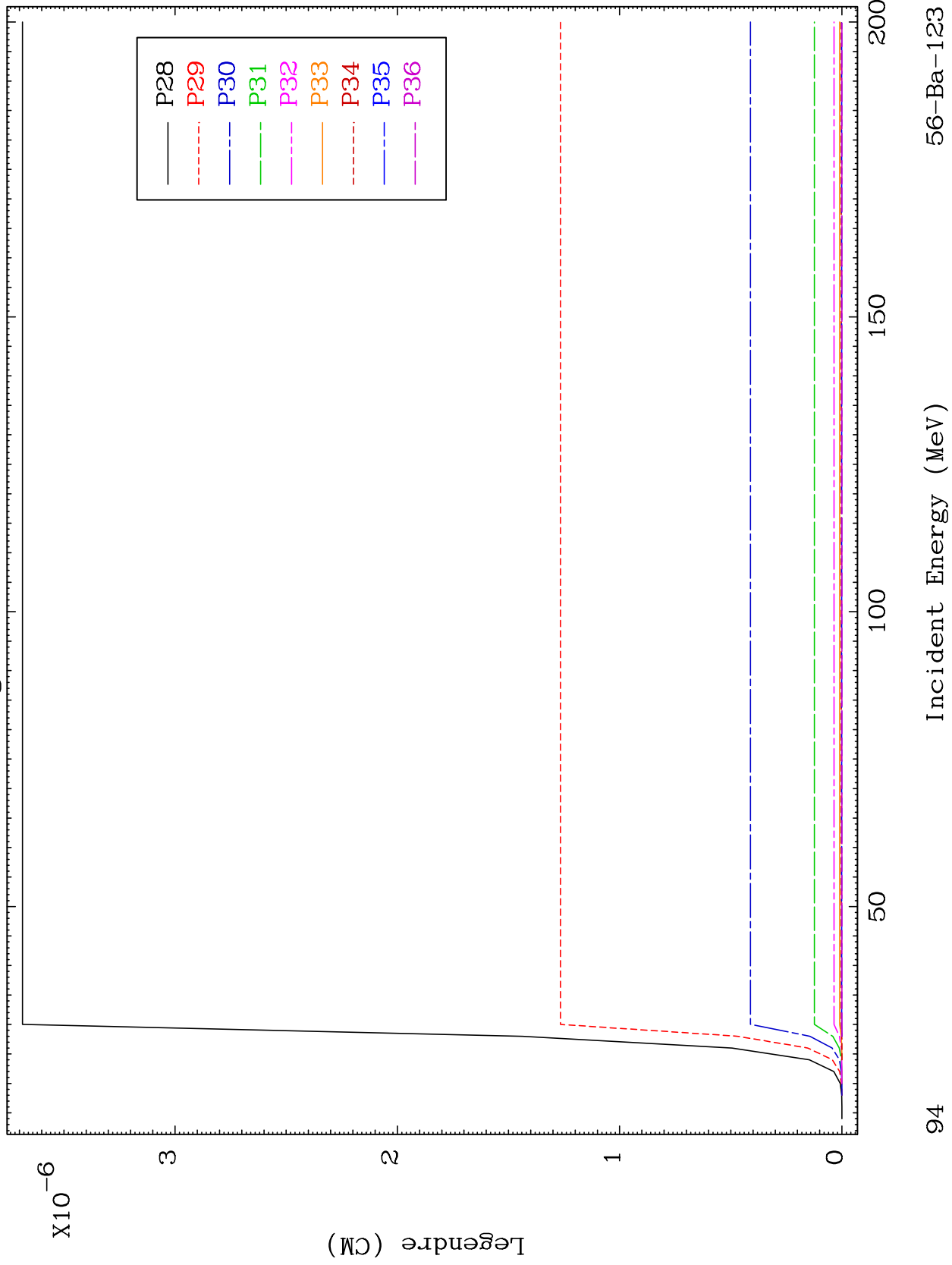
Incident Energy (MeV)

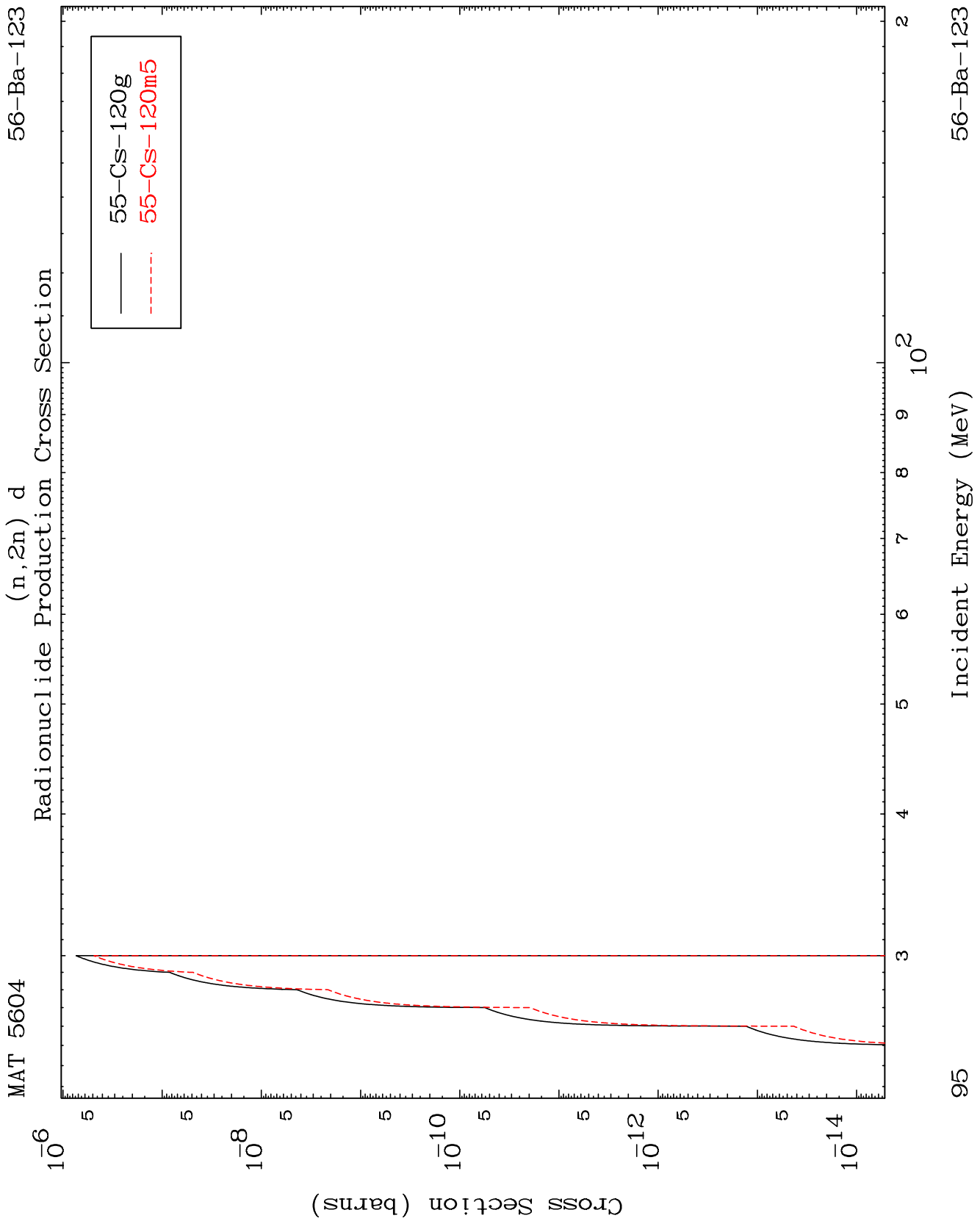
56-Ba-123

MAT 5604

MT= 69 (n,n') Level
Legendre Coefficients

56-Ba-123



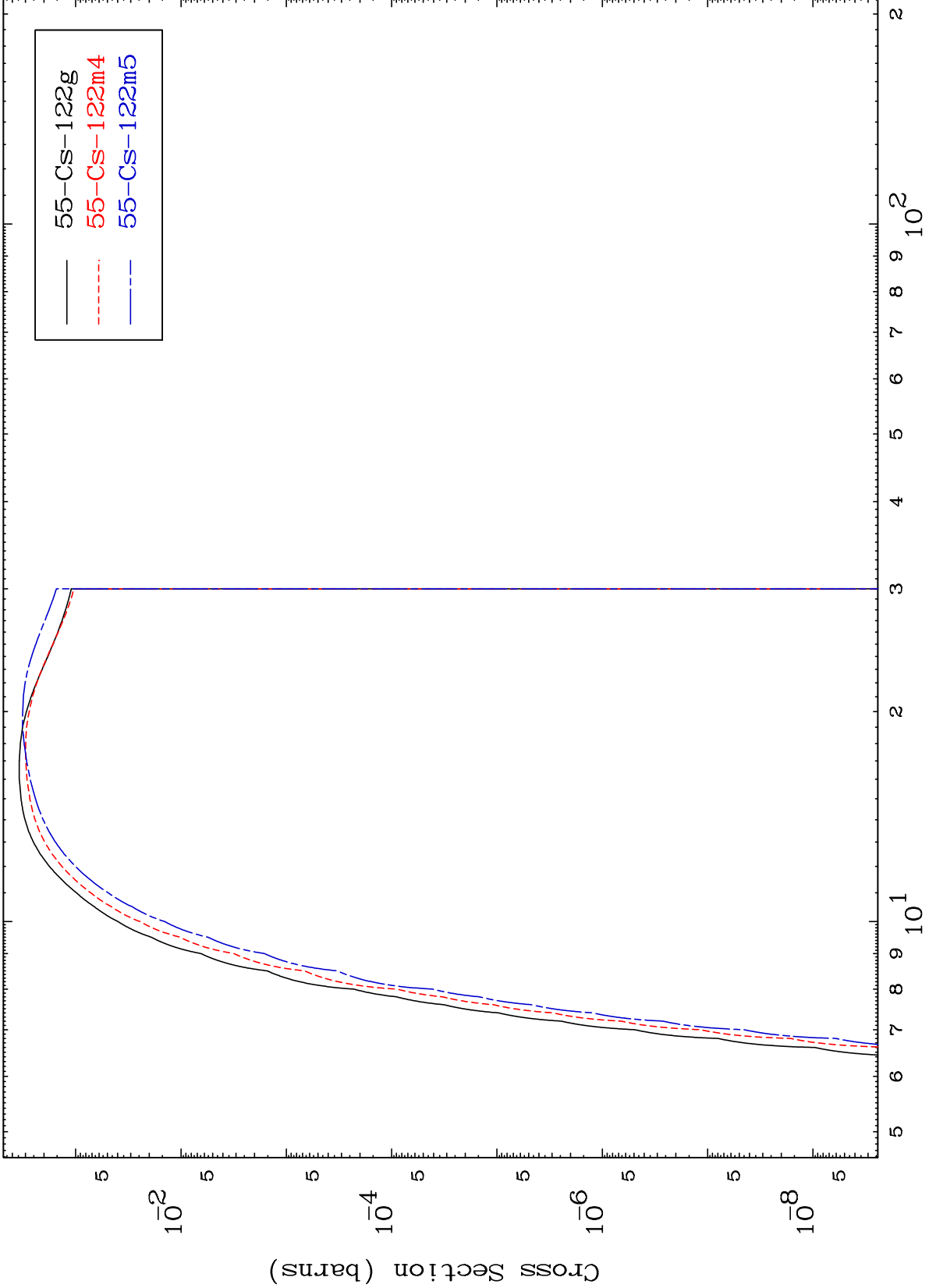


MAT 5604

(n,n') p

56-Ba-123

Radionuclide Production Cross Section



96

Incident Energy (MeV)

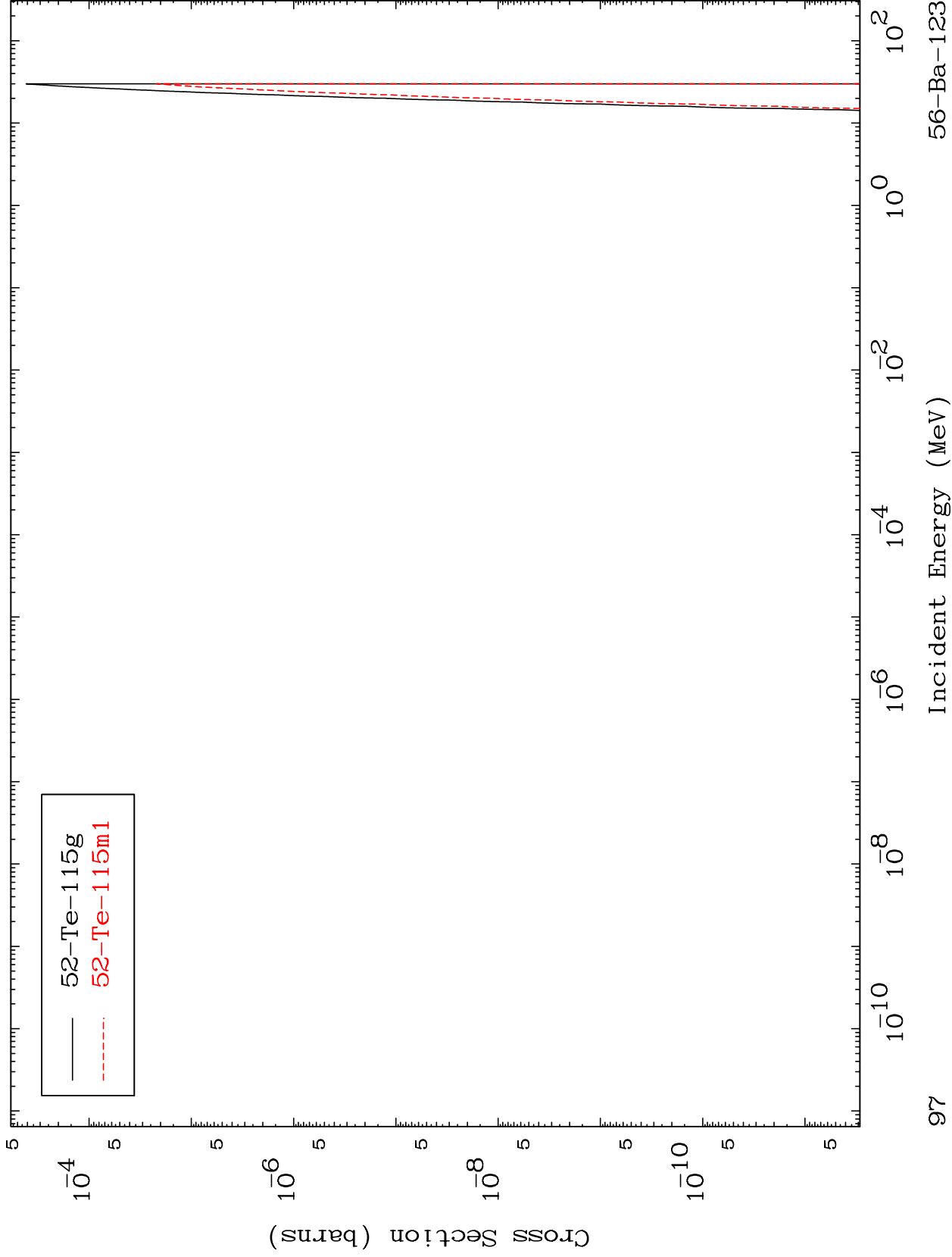
56-Ba-123

MAT 5604

(n,n') 2 α

56-Ba-123

Radionuclide Production Cross Section

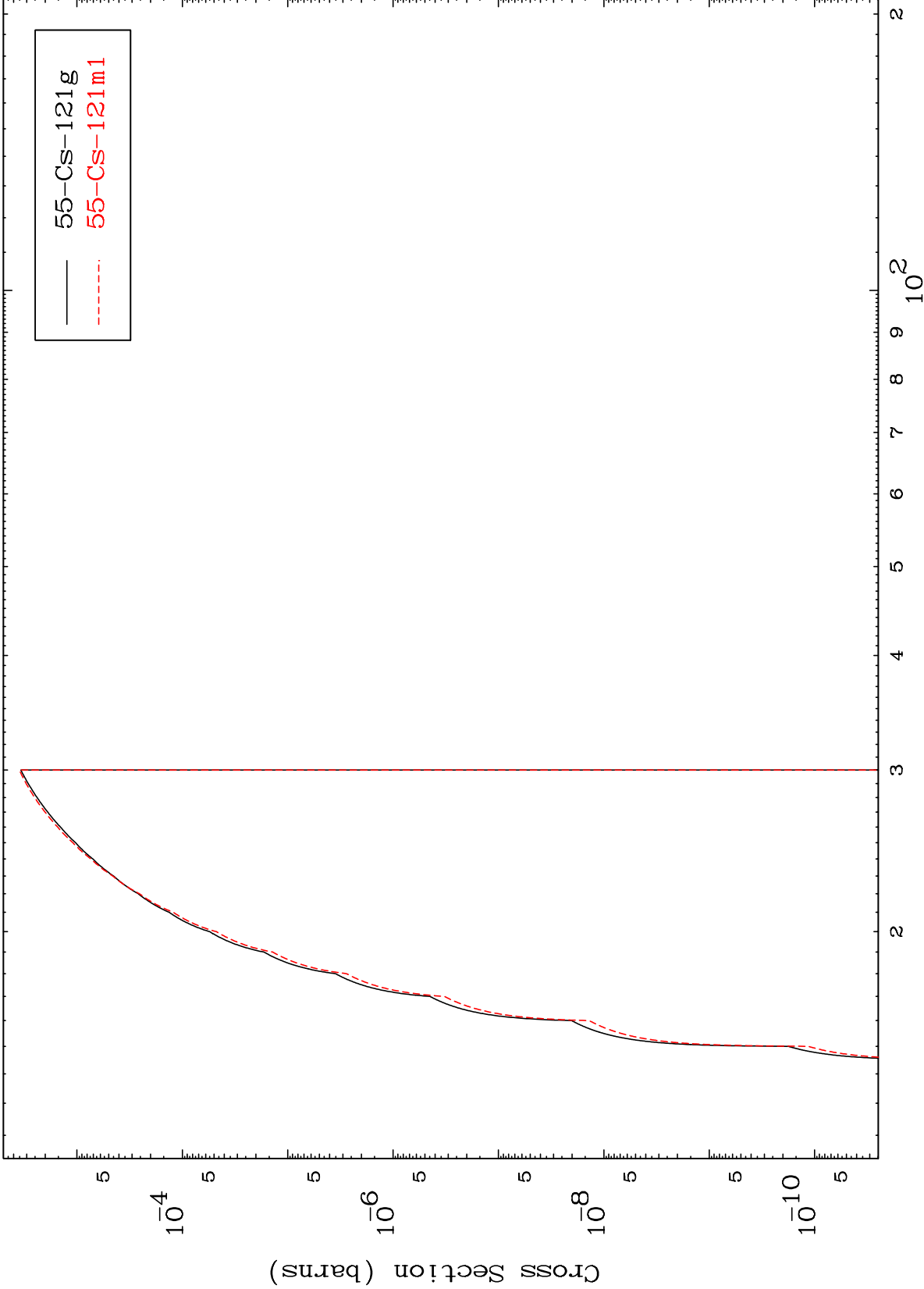


MAT 5604

(n,n') d

56-Ba-123

Radionuclide Production Cross Section



98

Incident Energy (MeV)

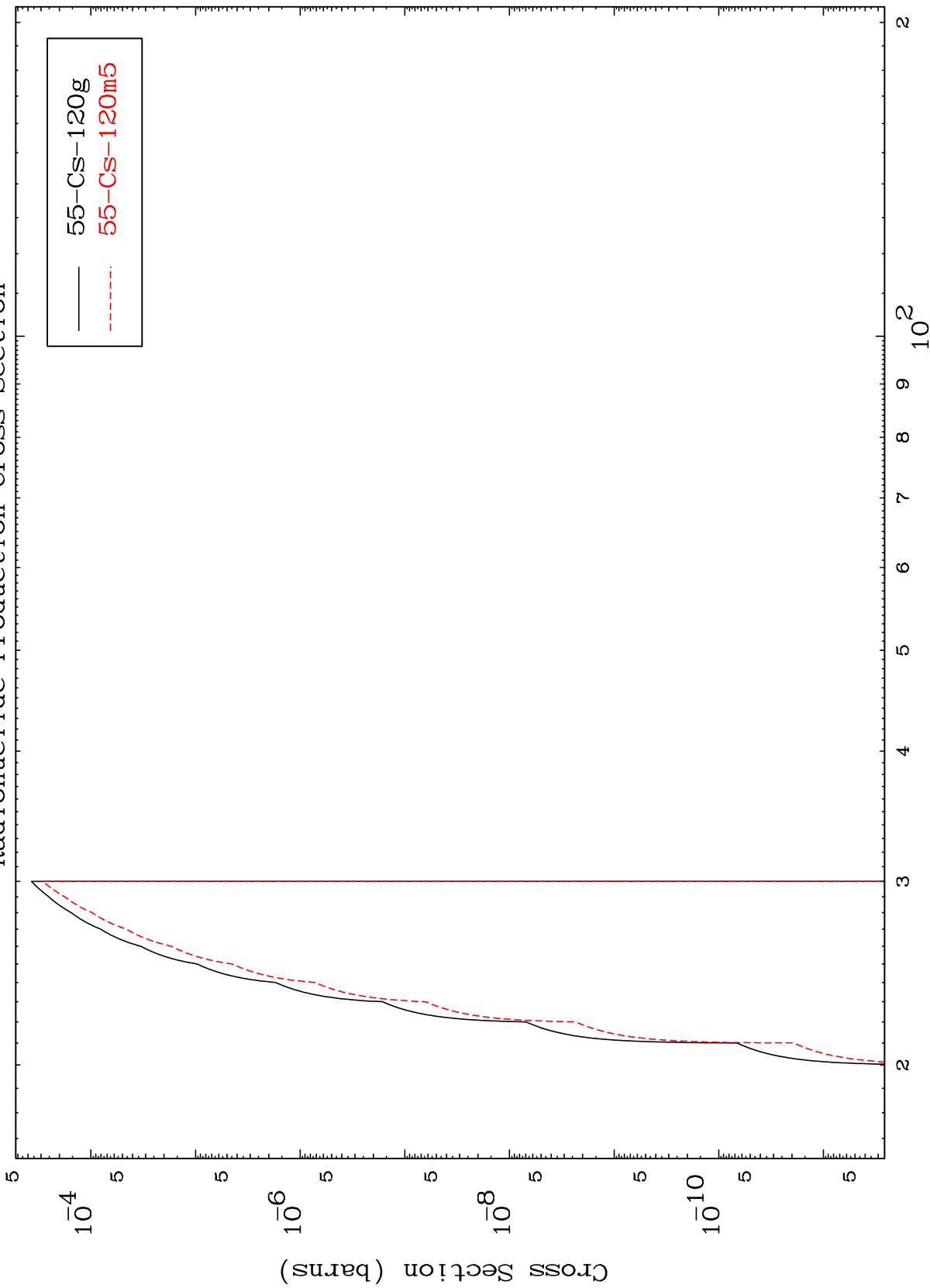
56-Ba-123

MAT 5604

(n,n') t

56-Ba-123

Radionuclide Production Cross Section



55-Cs-120g
55-Cs-120m5

99

Incident Energy (MeV)

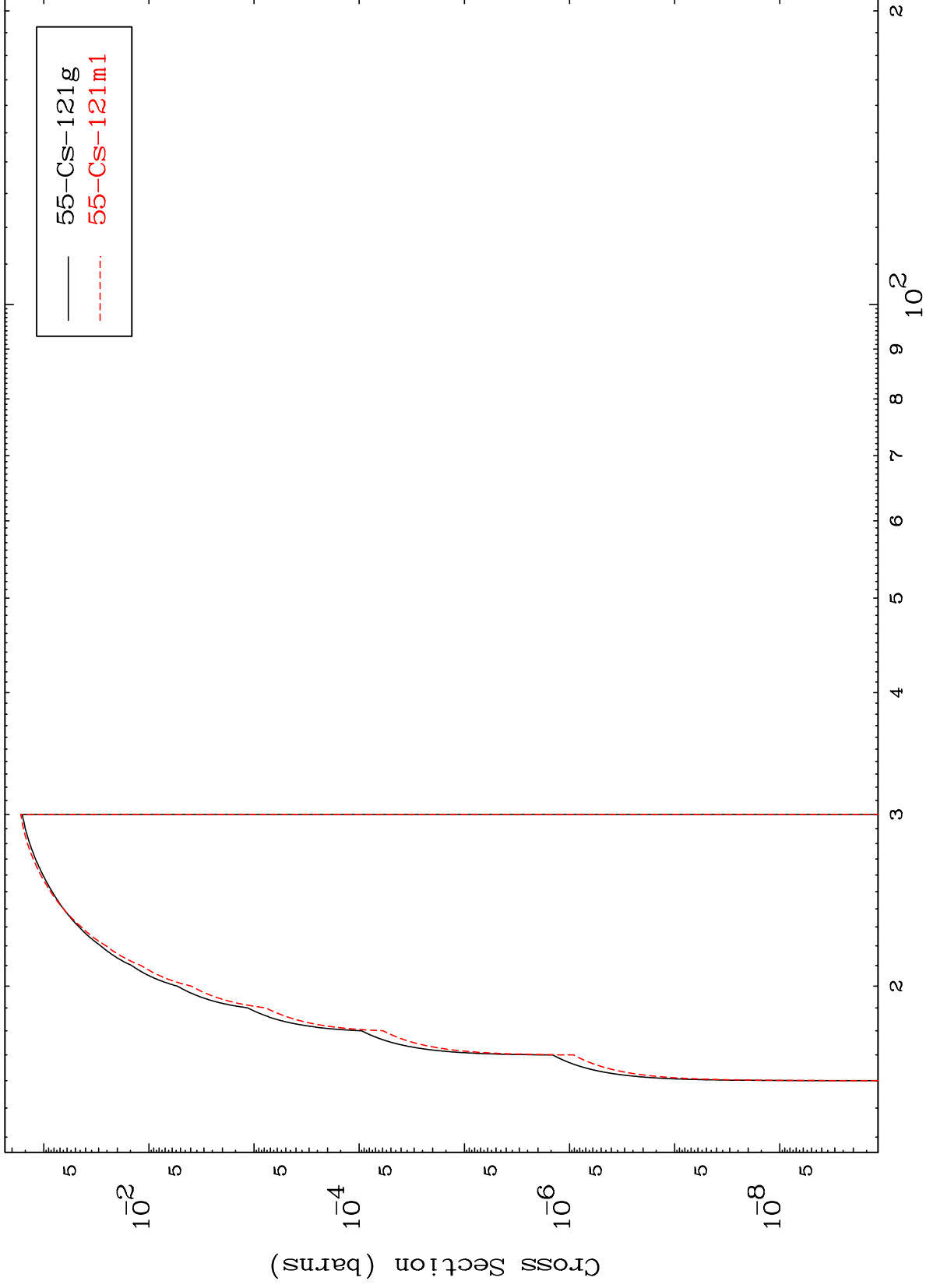
56-Ba-123

MAT 5604

(n,2n) p

56-Ba-123

Radionuclide Production Cross Section



100

Incident Energy (MeV)

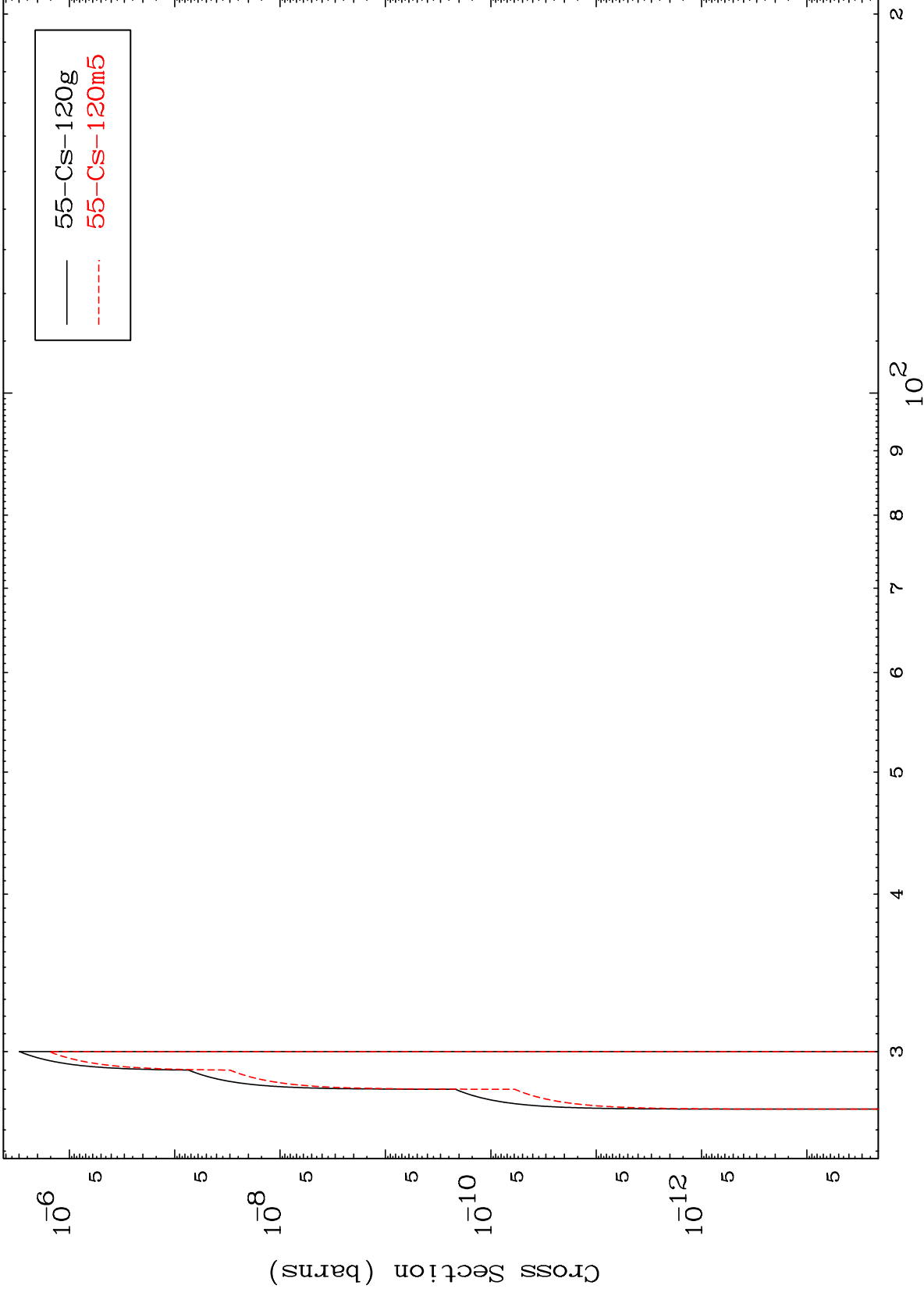
56-Ba-123

MAT 5604

(n,3n) p

56-Ba-123

Radionuclide Production Cross Section



101

Incident Energy (MeV)

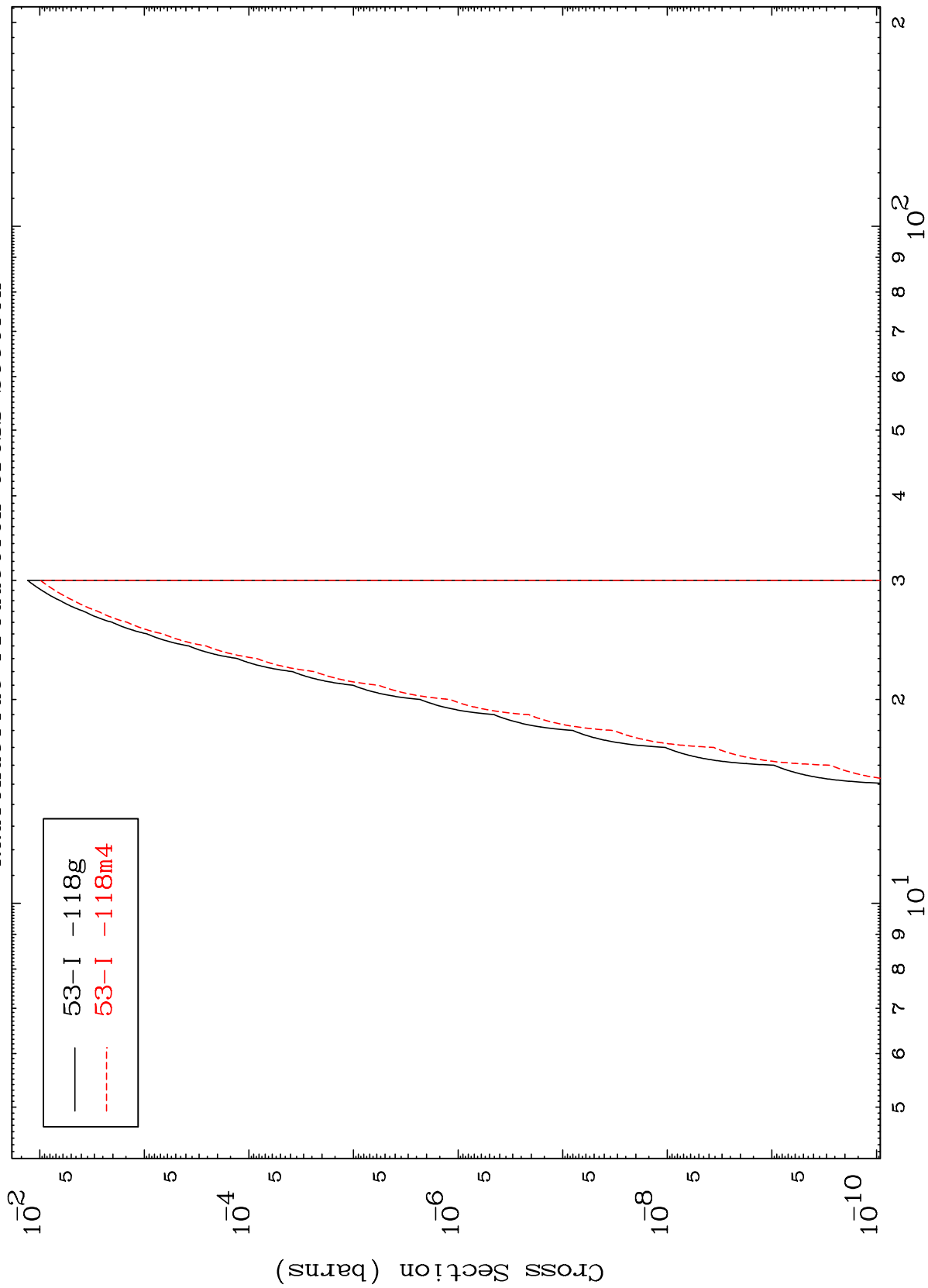
56-Ba-123

MAT 5604

(n,n') p α

56-Ba-123

Radionuclide Production Cross Section



102

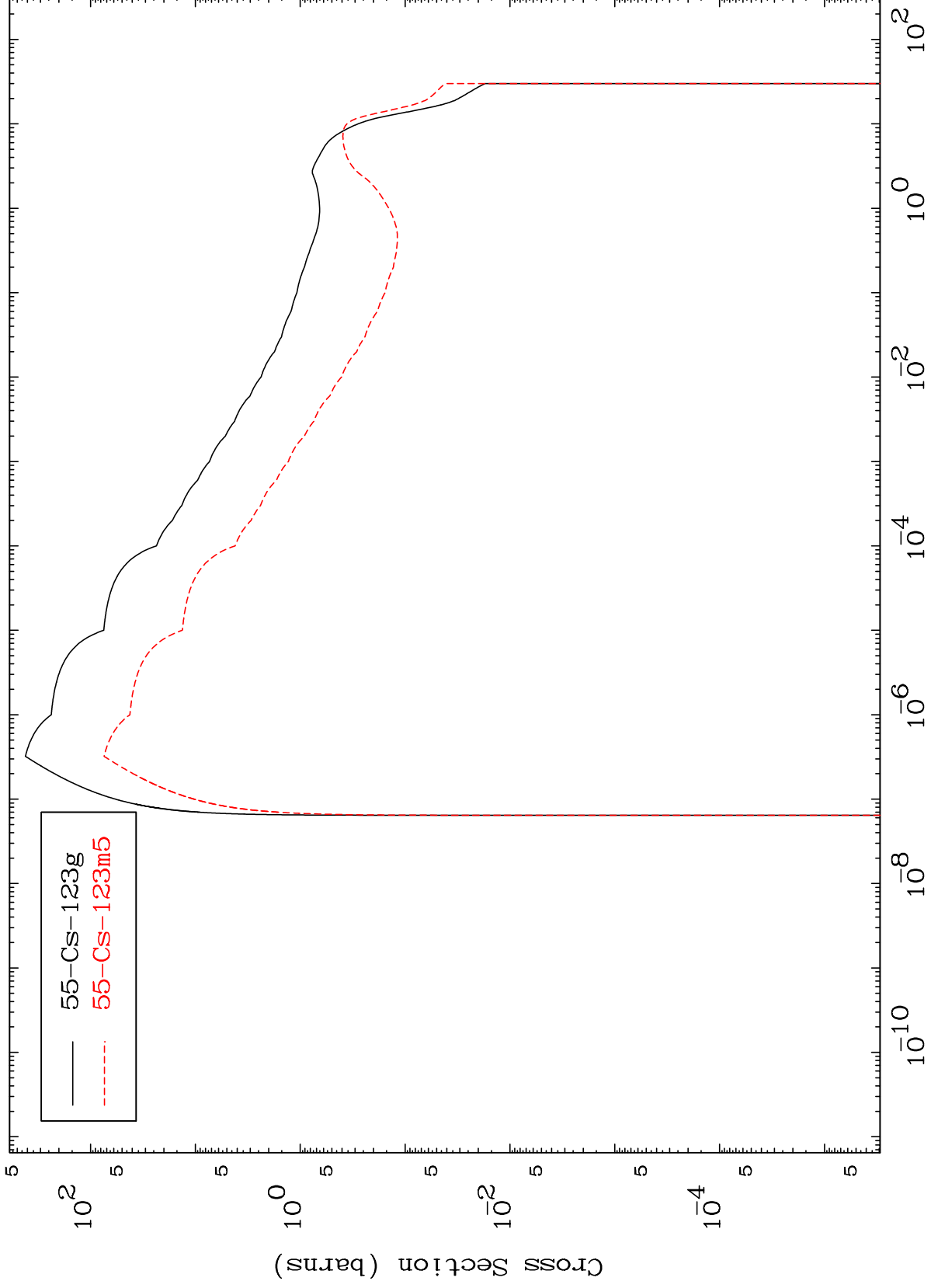
Incident Energy (MeV)

56-Ba-123

MAT 5604

56-Ba-123

(n,p)
Radionuclide Production Cross Section



— 55-Cs-123g
- - - 55-Cs-123m5

56-Ba-123

Incident Energy (MeV)

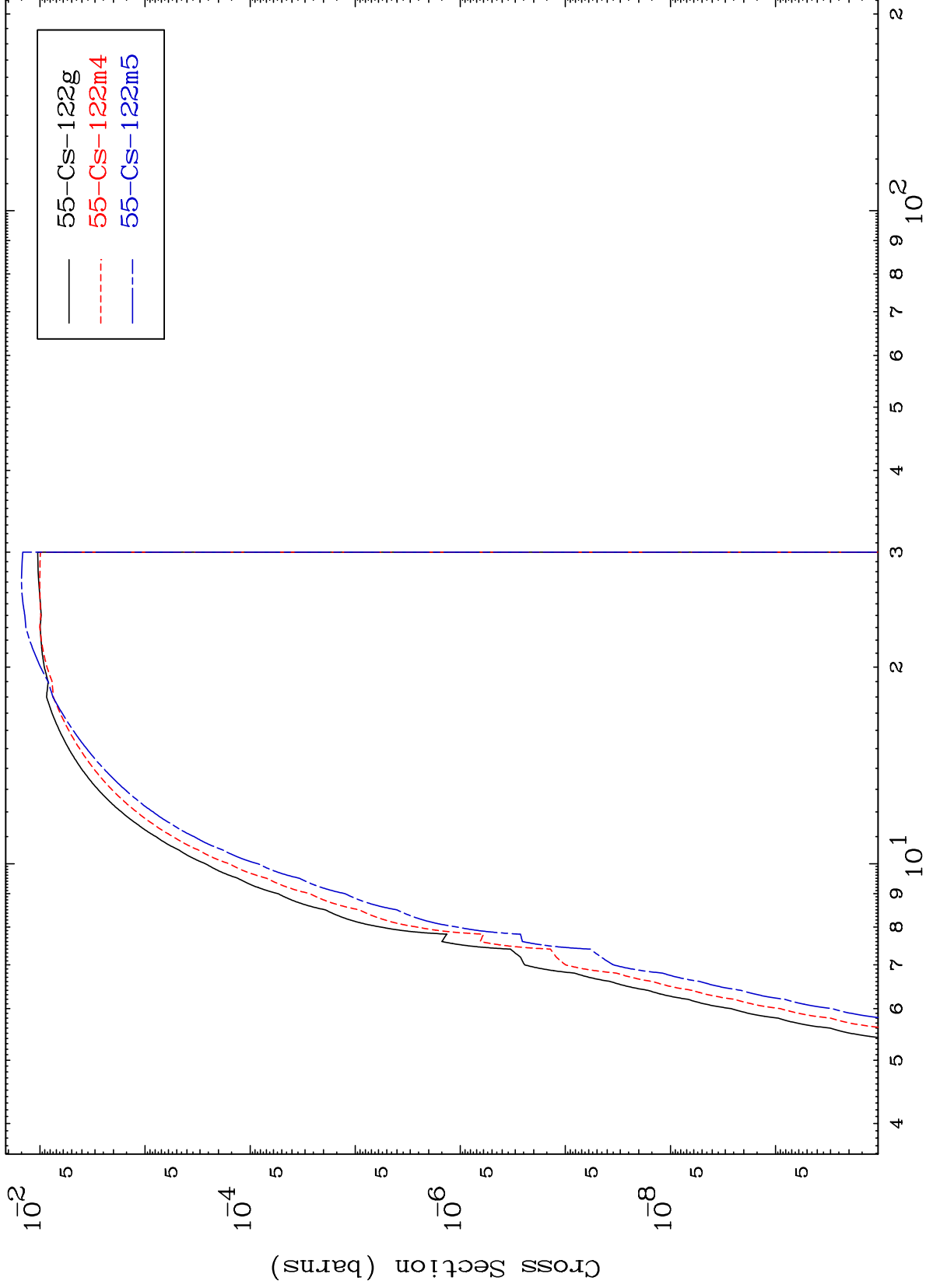
103

MAT 5604

(n,d)

56-Ba-123

Radionuclide Production Cross Section



104

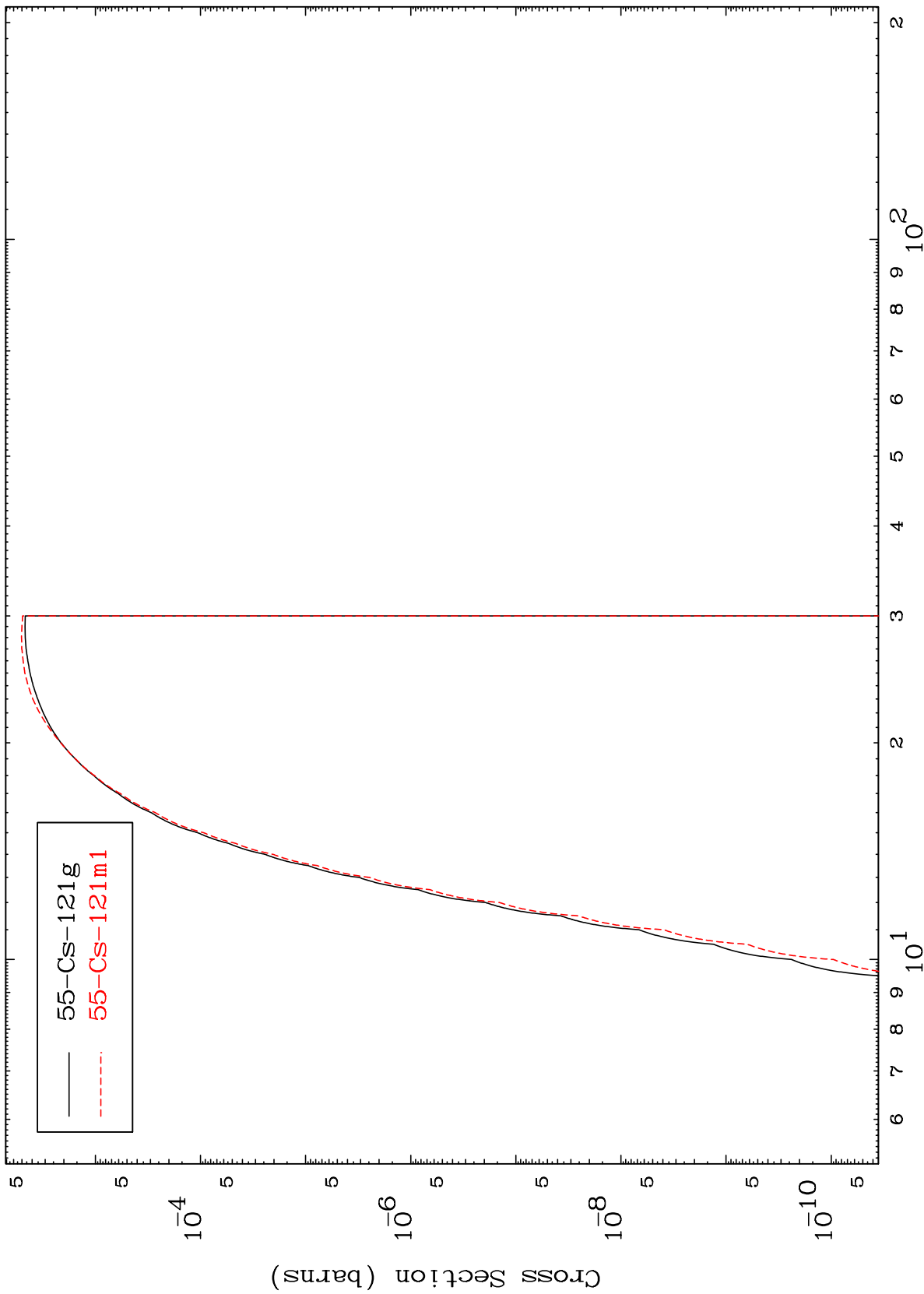
Incident Energy (MeV)

56-Ba-123

MAT 5604

56-Ba-123

(n, t)
Radionuclide Production Cross Section



56-Ba-123

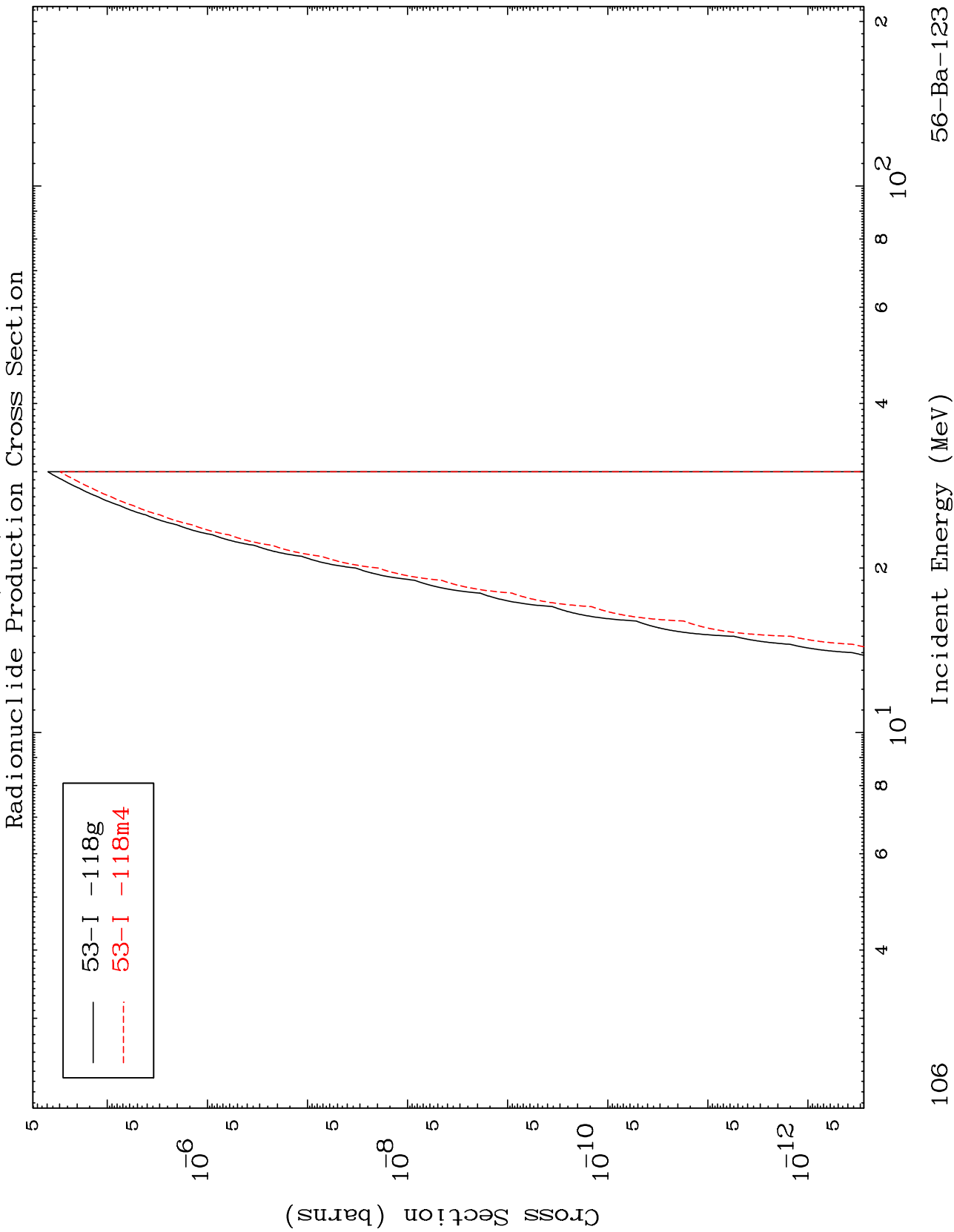
Incident Energy (MeV)

105

MAT 5604

(n,d) α

56-Ba-123



106

56-Ba-123