

ProtParam

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User-provided sequence:

102030405060

MASTEGANNM PKQVEVRMHD SHLGSEEPKH RHLGLRLCDK LGKNLLLTLT VFGVILGAVC

708090100110120

GGLLRLASPI HPDVVMLIAF PGDILMRMLK MLILPLIISS LITGLSGLDA KASGRLGTRA

130140150160170180

MVYYMSTTII AAVLGVILVL AIHPGNPKLK KQLGPGKKND EVSSLDAFLD LIRNLFPENL

190200210220230240

VQACFQQIQT VTKKVLVAPP PDEEANATSA VVSLNETVT EVPEETKMVI KKGLEFKDGM

250260270280290300

NVLGLIGFFI AFGIAMGKMG DQAKLMVDFF NILNEIVMKL VIMIMWYSPL GIACLICGKI

310320330340350360

IAIKDLEVVA RQLGMYMVTV IIGLIHGGI FLPLIYFVVT RKNPFSFFAG IFQAWITALG

370380390

TASSAGTLPV TFRCLEENLG IDKRVTFRVL PVGATIN

[References](#) and [documentation](#) are available.

Number of amino acids: 397

Molecular weight: 43125.71

Theoretical pI: 8.93

Amino acid composition:

CSV format

Ala (A)	29	7.3%
Arg (R)	13	3.3%
Asn (N)	15	3.8%
Asp (D)	14	3.5%
Cys (C)	6	1.5%
Gln (Q)	9	2.3%
Glu (E)	17	4.3%
Gly (G)	35	8.8%
His (H)	7	1.8%
Ile (I)	37	9.3%
Leu (L)	54	13.6%
Lys (K)	24	6.0%
Met (M)	19	4.8%
Phe (F)	19	4.8%
Pro (P)	19	4.8%
Ser (S)	17	4.3%
Thr (T)	21	5.3%
Trp (W)	2	0.5%
Tyr (Y)	5	1.3%
Val (V)	35	8.8%
PyI (O)	0	0.0%
Sec (U)	0	0.0%
(B)	0	0.0%
(Z)	0	0.0%
(X)	0	0.0%

Total number of negatively charged residues (Asp + Glu): 31
Total number of positively charged residues (Arg + Lys): 37

Atomic composition:

Carbon	C	1969
Hydrogen	H	3214
Nitrogen	N	500
Oxygen	O	527
Sulfur	S	25

Formula: C₁₉₆₉H₃₂₁₄N₅₀₀O₅₂₇S₂₅

Total number of atoms: 6235

Extinction coefficients:

Extinction coefficients are in units of $M^{-1} cm^{-1}$, at 280 nm measured in water.

Ext. coefficient 18825

Abs 0.1% (=1 g/l) 0.437, assuming all pairs of Cys residues form cystines

Ext. coefficient 18450

Abs 0.1% (=1 g/l) 0.428, assuming all Cys residues are reduced

Estimated half-life:

The N-terminal of the sequence considered is M (Met).

The estimated half-life is: 30 hours (mammalian reticulocytes, in vitro).

>20 hours (yeast, in vivo).

>10 hours (Escherichia coli, in vivo).

Instability index:

The instability index (II) is computed to be 39.82

This classifies the protein as stable.

Aliphatic index: 122.27

Grand average of hydropathicity (GRAVY): 0.572



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