

ProtParam

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User-provided sequence:

10 20 30 40 50 60  
MTKSNGEPEK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV  
70 80 90 100 110 120  
GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVPLI ISSLVTGMAA LDSKASGKMG  
130 140 150 160 170 180  
MRAVYYMTT TIIAVVIGII IVIIHPGKG TKENMHREGK IVRVTAADAF LDLIRYAPVG  
190 200 210 220 230 240  
ILFLIAGKIV EMEDMGVIGG QLAMYTVTVI VGLLIHAVIV LPLLYFLVTR KNPWFVIGGL  
250 260 270 280 290 300  
LQALITALGT SSSSATLPIT FKCLEENGV DKRVTRFVLP VGATINMDGT ALYEALAAIF  
310 320 330 340 350 360  
IAQVNNFELN FGQIITISIT ATAASIGAAG IPQAGLVMTV IVLTSVGLPT DDITLIIAVD  
370 380 390 400 410 420  
WFLDRLRTTT NVLGDSLGA IVEHLSRHEL KNRDVEMGNS VIEENEMKKP YQLIAQDNET  
430  
EKPIDSETKM

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

Number of amino acids: 430

Molecular weight: 47099.74

Theoretical pI: 9.05

Amino acid composition: 

CSV format

Ala (A)	33	7.7%
Arg (R)	20	4.7%
Asn (N)	16	3.7%
Asp (D)	15	3.5%
Cys (C)	1	0.2%
Gln (Q)	11	2.6%
Glu (E)	23	5.3%
Gly (G)	35	8.1%
His (H)	5	1.2%
Ile (I)	43	10.0%
Leu (L)	47	10.9%
Lys (K)	23	5.3%
Met (M)	20	4.7%
Phe (F)	16	3.7%
Pro (P)	14	3.3%
Ser (S)	19	4.4%
Thr (T)	35	8.1%
Trp (W)	2	0.5%
Tyr (Y)	11	2.6%
Val (V)	41	9.5%
Py1 (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): 38

Total number of positively charged residues (Arg + Lys): 43

**Atomic composition:**

Carbon	C	2131
Hydrogen	H	3488
Nitrogen	N	552
Oxygen	O	599
Sulfur	S	21

**Formula:** C<sub>2131</sub>H<sub>3488</sub>N<sub>552</sub>O<sub>599</sub>S<sub>21</sub>

**Total number of atoms:** 6791

**Extinction coefficients:**

Extinction coefficients are in units of M<sup>-1</sup> cm<sup>-1</sup>, at 280 nm measured in water.

Ext. coefficient 27390

Abs 0.1% (=1 g/l) 0.582, assuming all pairs of Cys residues form cystines

Ext. coefficient 27390

Abs 0.1% (=1 g/l) 0.582, 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 25.69

This classifies the protein as stable.

**Aliphatic index:** 116.95

**Grand average of hydropathicity (GRAVY):** 0.404



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