

ProtParam

User-provided sequence:

102030405060

VFGVILGAVCGLLRLASPIHPDVVMLIAFPGDILMRMLKMLILPLIISSLITGLSGLDA

708090100110120

KASGRLGTRAMVYYMSTTIIAAVLGVILVLAIHGPNPKLKQLGPGKKNDVSSSLDAFLD

130140150160170180

LIRNLFPENLVQACFQQIQT VTKKVLVAPPDDEEANATSAVVSLLNETVT EVPEETKMVI

190200210220230240

KKGLEFKDGM NVLGLIGFFI AFGIAMGKMGDQAKLMVDFFNILEIVMKLVIMIMCAGTL

250260270280290300

PVTFRCLEEN LGIDKRVTRFVLPVGATINMDGTALYEAVA AIFIAQMNGV VLDGGQIVTV

310320330340350360

SLTATLASVGAASIPSAGLVTMLLILTAVGLPTEDISLLVAVDWLLDRMR TSVNVVGDSF

370380390400410420

GAGIVYHLSK SELDTIDSQHRVHEDIEMTKTQSIYDDMKNHRESNSQCVYAAHNSVIVD

430

ECKVHFPFMD IETCI

References and documentation are available.

Number of amino acids: 435

Molecular weight: 46890.33

Theoretical pI: 5.24

Amino acid composition: CSV format

Ala (A)	35	8.0%
Arg (R)	12	2.8%
Asn (N)	17	3.9%
Asp (D)	24	5.5%
Cys (C)	7	1.6%
Gln (Q)	11	2.5%
Glu (E)	20	4.6%
Gly (G)	33	7.6%
His (H)	8	1.8%
Ile (I)	37	8.5%
Leu (L)	52	12.0%
Lys (K)	21	4.8%
Met (M)	21	4.8%
Phe (F)	17	3.9%
Pro (P)	17	3.9%
Ser (S)	24	5.5%
Thr (T)	26	6.0%
Trp (W)	1	0.2%
Tyr (Y)	6	1.4%
Val (V)	46	10.6%
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): 44

Total number of positively charged residues (Arg + Lys): 33

**Atomic composition:**

Carbon	C	2105
Hydrogen	H	3433
Nitrogen	N	537
Oxygen	O	608
Sulfur	S	28

**Formula:** C<sub>2105</sub>H<sub>3433</sub>N<sub>537</sub>O<sub>608</sub>S<sub>28</sub>

**Total number of atoms:** 6711

**Extinction coefficients:**

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

Ext. coefficient 14815

Abs 0.1% (=1 g/l) 0.316, assuming all pairs of Cys residues form cystines

Ext. coefficient 14440

Abs 0.1% (=1 g/l) 0.308, assuming all Cys residues are reduced

**Estimated half-life:**

The N-terminal of the sequence considered is V (Val).

The estimated half-life is: 100 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 33.10

This classifies the protein as stable.

**Aliphatic index:** 118.51

**Grand average of hydropathicity (GRAVY):** 0.518



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