

ProtParam

User-provided sequence:

102030405060

MTKSNGEPEK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV

708090100110120

GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVGTIAS GPPPTYWETP

130

WELGLWSTCH DMN

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

Number of amino acids: 133

Molecular weight: 15278.09

Theoretical pI: 9.88

Amino acid composition: CSV format

Ala (A)	4	3.0%
Arg (R)	9	6.8%
Asn (N)	4	3.0%
Asp (D)	2	1.5%
Cys (C)	1	0.8%
Gln (Q)	4	3.0%
Glu (E)	8	6.0%
Gly (G)	10	7.5%
His (H)	1	0.8%
Ile (I)	6	4.5%
Leu (L)	16	12.0%
Lys (K)	9	6.8%
Met (M)	8	6.0%
Phe (F)	6	4.5%
Pro (P)	8	6.0%
Ser (S)	8	6.0%
Thr (T)	11	8.3%
Trp (W)	3	2.3%
Tyr (Y)	5	3.8%
Val (V)	10	7.5%
Pyl (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): 10
Total number of positively charged residues (Arg + Lys): 18

Atomic composition:

Carbon	C	695
Hydrogen	H	1108
Nitrogen	N	182
Oxygen	O	186
Sulfur	S	9

Formula: C₆₉₅H₁₁₀₈N₁₈₂O₁₈₆S₉
Total number of atoms: 2180

Extinction coefficients:

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

Ext. coefficient 23950
Abs 0.1% (=1 g/l) 1.568, assuming all pairs of Cys residues form cystines

Ext. coefficient 23950
Abs 0.1% (=1 g/l) 1.568, 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 36.23
This classifies the protein as stable.

Aliphatic index: 89.32

Grand average of hydropathicity (GRAVY): -0.078



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