

## ProtParam

### User-provided sequence:

```
      10      20      30      40      50      60
MATPASAPDT RALVADFGY KLRQKGYVCG AGPGEGPAAD PLHQAMRAAG DEFETRFRRT

      70      80      90     100     110     120
FSDLAAQLHV TPGSAQQRFT QVSDELFQGG PNWGRLVAFF VFGAALCAES VNKEMEPLVG

     130     140     150     160     170     180
QVQEWNVAYL ETRLADWIHS SGGWAEFTAL YDGALEEAR RLREGNWASV RTVLTGAVAL

     190
GALVTVGAFF ASK
```

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

Number of amino acids: 193

Molecular weight: 20774.45

Theoretical pI: 5.40

Amino acid composition:

[CSV format](#)

Ala (A)	30	15.5%
Arg (R)	13	6.7%
Asn (N)	3	1.6%
Asp (D)	8	4.1%
Cys (C)	2	1.0%
Gln (Q)	9	4.7%
Glu (E)	13	6.7%
Gly (G)	21	10.9%
His (H)	3	1.6%
Ile (I)	1	0.5%
Leu (L)	17	8.8%
Lys (K)	4	2.1%
Met (M)	4	2.1%
Phe (F)	12	6.2%
Pro (P)	8	4.1%
Ser (S)	9	4.7%
Thr (T)	11	5.7%
Trp (W)	5	2.6%
Tyr (Y)	4	2.1%
Val (V)	16	8.3%
Pro (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): 21

Total number of positively charged residues (Arg + Lys): 17

Atomic composition:

Carbon	C	930
Hydrogen	H	1421
Nitrogen	N	259
Oxygen	O	272
Sulfur	S	6

Formula: C<sub>930</sub>H<sub>1421</sub>N<sub>259</sub>O<sub>272</sub>S<sub>6</sub>

Total number of atoms: 2888

Extinction coefficients:

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

Ext. coefficient      33585

Abs 0.1% (=1 g/l)    1.617, assuming all pairs of Cys residues form cystines

Ext. coefficient      33460  
Abs 0.1% (=1 g/l)    1.611, 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 18.14  
This classifies the protein as stable.

**Aliphatic index:** 75.96

**Grand average of hydropathicity (GRAVY):** -0.044



ExPASy is operated by the [SIB Swiss Institute of Bioinformatics](#) | [Terms of Use](#)  
[Back to the top](#)