

ProtParam

User-provided sequence:

```
      10      20      30      40      50      60
MVDQLRERTT MADPLRERTE LLLADYLGYC AREPGTPEPA PSTPEAAVLR SAAARLRQIH

      70      80      90     100     110     120
RSFFSAYLGY PGNRFELVAL MADSVLSDSP GPTWGRVVTL VTFAGTLLER GPLVTARWKK

     130     140     150     160     170     180
WGFQPRLKEQ EGDVARDCCR LVALSSRLM GQHRAWLQAQ GGWDGFCHFF RTPFPLAFWR

     190     200
KQLVQAFLSC LLTTAFIYLW TRLL
```

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

Number of amino acids: 204

Molecular weight: 23203.88

Theoretical pI: 9.63

Amino acid composition:

[CSV format](#)

| | | |
|---------|----|-------|
| Ala (A) | 21 | 10.3% |
| Arg (R) | 21 | 10.3% |
| Asn (N) | 1 | 0.5% |
| Asp (D) | 8 | 3.9% |
| Cys (C) | 4 | 2.0% |
| Gln (Q) | 10 | 4.9% |
| Glu (E) | 10 | 4.9% |
| Gly (G) | 14 | 6.9% |
| His (H) | 3 | 1.5% |
| Ile (I) | 2 | 1.0% |
| Leu (L) | 30 | 14.7% |
| Lys (K) | 4 | 2.0% |
| Met (M) | 4 | 2.0% |
| Phe (F) | 12 | 5.9% |
| Pro (P) | 13 | 6.4% |
| Ser (S) | 10 | 4.9% |
| Thr (T) | 14 | 6.9% |
| Trp (W) | 7 | 3.4% |
| Tyr (Y) | 5 | 2.5% |
| Val (V) | 11 | 5.4% |
| 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): 18

Total number of positively charged residues (Arg + Lys): 25

Atomic composition:

| | | |
|----------|---|------|
| Carbon | C | 1055 |
| Hydrogen | H | 1635 |
| Nitrogen | N | 295 |
| Oxygen | O | 281 |
| Sulfur | S | 8 |

Formula: C₁₀₅₅H₁₆₃₅N₂₉₅O₂₈₁S₈

Total number of atoms: 3274

Extinction coefficients:

Extinction coefficients are in units of M⁻¹ cm⁻¹, at 280 nm measured in water.

Ext. coefficient 46200

Abs 0.1% (=1 g/l) 1.991, assuming all pairs of Cys residues form cystines

Ext. coefficient 45950
Abs 0.1% (=1 g/l) 1.980, 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 42.82
This classifies the protein as unstable.

Aliphatic index: 87.11

Grand average of hydropathicity (GRAVY): -0.098



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