ProtParam

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User-provided sequence:

```
        10         20         30         40         50         60
MVPHAILARG RDVCRRNGLL ILSVLSVIVG CLLGFFLRTR RLSPQEISYF QFPGELLMRM

        70         80         90        100        110        120
LKMMILPLVV SSLMSGLASL DAKTSSRLGV LTVAYYLWTT FMAVIVGIFM VSIIHPGSAA

       130        140        150
QKETTEQSGK PIMSSADALL DLIRNMFPAN LVEATFKQ
```

References and documentation are available.

Number of amino acids: 158

Molecular weight: 17422.90

Theoretical pI: 9.82

Amino acid composition: CSV format

Ala (A)	12	7.6%
Arg (R)	10	6.3%
Asn (N)	3	1.9%
Asp (D)	4	2.5%
Cys (C)	2	1.3%
Gln (Q)	5	3.2%
Glu (E)	5	3.2%
Gly (G)	10	6.3%
His (H)	2	1.3%
Ile (I)	11	7.0%
Leu (L)	24	15.2%
Lys (K)	5	3.2%
Met (M)	10	6.3%
Phe (F)	8	5.1%
Pro (P)	7	4.4%
Ser (S)	15	9.5%
Thr (T)	8	5.1%
Trp (W)	1	0.6%
Tyr (Y)	3	1.9%
Val (V)	13	8.2%
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): 9
Total number of positively charged residues (Arg + Lys): 15

Atomic composition:

Carbon	C	789
Hydrogen	H	1290
Nitrogen	N	206
Oxygen	O	211
Sulfur	S	12

Formula: $C_{789}H_{1290}N_{206}O_{211}S_{12}$
Total number of atoms: 2508

Extinction coefficients:

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

Ext. coefficient 10095
Abs 0.1% (=1 g/l) 0.579, assuming all pairs of Cys residues form cystines

Ext. coefficient 9970
Abs 0.1% (=1 g/l) 0.572, 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 52.04
This classifies the protein as unstable.

Aliphatic index: 117.85

Grand average of hydropathicity (GRAVY): 0.603