ProtParam

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User-provided sequence:

```
        10         20         30         40         50         60
MSSHGNSLFL RESGQRLGRV GWLQRLQESL QQRALRTRLR LQTMTLEHVL RFLRRNAFIL

        70         80         90        100        110        120
LTVSAVVIGV SLAFALRPYQ LTYRQIKYFS FPGELLMRML QMLVLPLIVS SLVTGMASLD

       130        140        150        160
NKATGRMGMR AAVYYMVTTI IAVFIGILMV TIIHPGKGSK
```

References and documentation are available.

Number of amino acids: 160

Molecular weight: 18114.76

Theoretical pI: 11.68

Amino acid composition: CSV format

Ala (A)	10	6.2%
Arg (R)	16	10.0%
Asn (N)	3	1.9%
Asp (D)	1	0.6%
Cys (C)	0	0.0%
Gln (Q)	9	5.6%
Glu (E)	4	2.5%
Gly (G)	12	7.5%
His (H)	3	1.9%
Ile (I)	10	6.2%
Leu (L)	26	16.2%
Lys (K)	4	2.5%
Met (M)	10	6.2%
Phe (F)	7	4.4%
Pro (P)	4	2.5%
Ser (S)	12	7.5%
Thr (T)	10	6.2%
Trp (W)	1	0.6%
Tyr (Y)	5	3.1%
Val (V)	13	8.1%
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): 5
Total number of positively charged residues (Arg + Lys): 20

Atomic composition:

Carbon	C	819
Hydrogen	H	1351
Nitrogen	N	231
Oxygen	O	210
Sulfur	S	10

Formula: $C_{819}H_{1351}N_{231}O_{210}S_{10}$
Total number of atoms: 2621

Extinction coefficients:

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

Ext. coefficient 12950
Abs 0.1% (=1 g/l) 0.715

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 46.18
This classifies the protein as unstable.

Aliphatic index: 117.56

Grand average of hydropathicity (GRAVY): 0.394