ProtParam

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User-provided sequence:

```
        10         20         30         40         50         60
TSVNVVGDSF GAGIVYHLSK SELDTIDSQH RVHEDIEMTK TQSIYDDMKN HRESNSNQCV

        70         80         90
YAAHNSVIVD ECKGPFVLRI KPAIGTDLTA L
```

References and documentation are available.

Number of amino acids: 91

Molecular weight: 10062.22

Theoretical pI: 5.34

Amino acid composition: CSV format

Ala (A)	5	5.5%
Arg (R)	3	3.3%
Asn (N)	5	5.5%
Asp (D)	8	8.8%
Cys (C)	2	2.2%
Gln (Q)	3	3.3%
Glu (E)	5	5.5%
Gly (G)	5	5.5%
His (H)	5	5.5%
Ile (I)	7	7.7%
Leu (L)	5	5.5%
Lys (K)	5	5.5%
Met (M)	2	2.2%
Phe (F)	2	2.2%
Pro (P)	2	2.2%
Ser (S)	9	9.9%
Thr (T)	6	6.6%
Trp (W)	0	0.0%
Tyr (Y)	3	3.3%
Val (V)	9	9.9%
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): 13
Total number of positively charged residues (Arg + Lys): 8

Atomic composition:

Carbon	C	434
Hydrogen	H	689
Nitrogen	N	123
Oxygen	O	144
Sulfur	S	4

Formula: $C_{434}H_{689}N_{123}O_{144}S_4$
Total number of atoms: 1394

Extinction coefficients:

This protein does not contain any Trp residues. Experience shows that
this could result in more than 10% error in the computed extinction coefficient.

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

Ext. coefficient 4595
Abs 0.1% (=1 g/l) 0.457, assuming all pairs of Cys residues form cystines

Ext. coefficient 4470
Abs 0.1% (=1 g/l) 0.444, assuming all Cys residues are reduced

Estimated half-life:

The N-terminal of the sequence considered is T (Thr).

The estimated half-life is: 7.2 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 34.77
This classifies the protein as stable.

Aliphatic index: 85.60

Grand average of hydropathicity (GRAVY): -0.344