ProtParam

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User-provided sequence:

```
        10         20         30         40         50         60
FKTNYEKRSF KVPIQANETL VGAVINNVSE AMETLTRITE ELVPVPGSVN GVNALGLVVF

        70         80         90        100        110        120
SMCFGFVIGN MKEQGQALRE FFDSLNEAIM RLVAVIMCSA TLPITFKCLE ENNGVDKRVT

       130        140        150        160
RFVLPVGATI NMDGTALYEA LAAIFIAQVN NFELNFGQII TI
```

References and documentation are available.

Number of amino acids: 162

Molecular weight: 17757.68

Theoretical pI: 4.87

Amino acid composition: CSV format

Ala (A)	14	8.6%
Arg (R)	6	3.7%
Asn (N)	14	8.6%
Asp (D)	3	1.9%
Cys (C)	3	1.9%
Gln (Q)	5	3.1%
Glu (E)	13	8.0%
Gly (G)	11	6.8%
His (H)	0	0.0%
Ile (I)	13	8.0%
Leu (L)	14	8.6%
Lys (K)	6	3.7%
Met (M)	6	3.7%
Phe (F)	12	7.4%
Pro (P)	5	3.1%
Ser (S)	6	3.7%
Thr (T)	11	6.8%
Trp (W)	0	0.0%
Tyr (Y)	2	1.2%
Val (V)	18	11.1%
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): 16
Total number of positively charged residues (Arg + Lys): 12

Atomic composition:

Carbon	C	798
Hydrogen	H	1275
Nitrogen	N	205
Oxygen	O	233
Sulfur	S	9

Formula: $C_{798}H_{1275}N_{205}O_{233}S_9$
Total number of atoms: 2520

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 3105
Abs 0.1% (=1 g/l) 0.175, assuming all pairs of Cys residues form cystines

Ext. coefficient 2980
Abs 0.1% (=1 g/l) 0.168, assuming all Cys residues are reduced

Estimated half-life:

The N-terminal of the sequence considered is F (Phe).

The estimated half-life is: 1.1 hours (mammalian reticulocytes, in vitro).
3 min (yeast, in vivo).
2 min (Escherichia coli, in vivo).

Instability index:

The instability index (II) is computed to be 22.75
This classifies the protein as stable.

Aliphatic index: 105.86

Grand average of hydropathicity (GRAVY): 0.399