ProtParam

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User-provided sequence:

```
10 20 30 40 50 60
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV
```

70 80 90 100 110 120 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTDNIW LDSLLAIDAR

MLVLRTTRT

References and documentation are available.

```
Number of amino acids: 129
Molecular weight: 14918.87
```

```
Theoretical pI: 10.46
Amino acid composition: CSV format
Ala (A) 5
                3.9%
Arg (R) 12
                 9.3%
Asn (N)
        4
                 3.1%
Asp (D)
        4
                 3.1%
Cys (C)
         0
                 0.0%
Gln (Q)
        4
                3.1%
Glu (E)
                4.7%
Gly (G)
         7
                5.4%
                0.0%
His (H)
         0
Ile (I)
         7
                5.4%
                14.7%
Leu (L)
        19
Lys (K)
         9
                7.0%
Met (M)
         8
                 6.2%
Phe (F)
         6
                 4.7%
Pro (P)
         4
                 3.1%
Ser (S)
         7
                 5.4%
                 8.5%
Thr (T)
        11
Trp (W)
                 0.8%
        1
Tyr (Y)
                 3.1%
Val (V) 11
                 8.5%
Pyl (0)
        0
                 0.0%
Sec (U)
                 0.0%
                 0.0%
 (B)
      0
 (Z)
      0
                 0.0%
 (X)
                 0.0%
```

```
Total number of negatively charged residues (Asp + Glu): 10
Total number of positively charged residues (Arg + Lys): 21
```

Atomic composition:

Carbon	C	674
Hydrogen	Н	1115
Nitrogen	N	183
0xygen	0	180
Sulfur	S	8

 $\begin{array}{llll} \textbf{Formula:} & \textbf{C}_{674} \textbf{H}_{1115} \textbf{N}_{183} \textbf{O}_{180} \textbf{S}_{8} \\ \textbf{Total number of atoms:} & 2160 \\ \end{array}$

Extinction coefficients:

```
Extinction coefficients are in units of M<sup>-1</sup> cm<sup>-1</sup>, at 280 nm measured in water.

Ext. coefficient 11460
Abs 0.1% (=1 g/1) 0.768

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 39.38
This classifies the protein as stable.

Aliphatic index: 107.21

Grand average of hydropathicity (GRAVY): 0.079
```



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