

TLR5m

Number of amino acids: 619

Molecular weight: 70139.62

Theoretical pI: 6.73

Amino acid composition

Ala (A)	28	4.5%
Arg (R)	27	4.4%
Asn (N)	56	9.0%
Asp (D)	35	5.7%
Cys (C)	11	1.8%
Gln (Q)	25	4.0%
Glu (E)	18	2.9%
Gly (G)	36	5.8%
His (H)	15	2.4%
Ile (I)	38	6.1%
Leu (L)	105	17.0%
Lys (K)	24	3.9%
Met (M)	8	1.3%
Phe (F)	43	6.9%
Pro (P)	24	3.9%
Ser (S)	49	7.9%
Thr (T)	27	4.4%
Trp (W)	6	1.0%
Tyr (Y)	20	3.2%
Val (V)	24	3.9%
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): 53

Total number of positively charged residues (Arg + Lys): 51

Atomic composition:

Carbon	C	3190
Hydrogen	H	4949
Nitrogen	N	841
Oxygen	O	903
Sulfur	S	19

Formula: C₃₁₉₀H₄₉₄₉N₈₄₁O₉₀₃S₁₉

Total number of atoms: 9902

Extinction coefficients:

Extinction coefficients are in units of M⁻¹ cm⁻¹, at 280 nm measured in water.

Ext. coefficient 63425

Abs 0.1% (=1 g/l) 0.904, assuming all pairs of Cys residues form cystines

Ext. coefficient 62800

Abs 0.1% (=1 g/l) 0.895, 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 37.29

This classifies the protein as stable.

Aliphatic index: 105.86

Grand average of hydropathicity (GRAVY): 0.016

TLR5s

Number of amino acids: 626

Molecular weight: 70264.83

Theoretical pI: 6.60

Amino acid composition

Ala (A)	18	2.9%
Arg (R)	24	3.8%
Asn (N)	50	8.0%
Asp (D)	35	5.6%
Cys (C)	11	1.8%
Gln (Q)	26	4.2%
Glu (E)	23	3.7%
Gly (G)	38	6.1%
His (H)	21	3.4%
Ile (I)	31	5.0%
Leu (L)	110	17.6%
Lys (K)	30	4.8%
Met (M)	11	1.8%
Phe (F)	34	5.4%
Pro (P)	24	3.8%
Ser (S)	61	9.7%
Thr (T)	27	4.3%
Trp (W)	6	1.0%
Tyr (Y)	11	1.8%
Val (V)	35	5.6%
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): 58

Total number of positively charged residues (Arg + Lys): 54

Atomic composition:

Carbon	C	3156
Hydrogen	H	4992
Nitrogen	N	852
Oxygen	O	918
Sulfur	S	22

Formula: $C_{3156}H_{4992}N_{852}O_{918}S_{22}$

Total number of atoms: 9940

Extinction coefficients:

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

Ext. coefficient 50015

Abs 0.1% (=1 g/l) 0.712, assuming all pairs of Cys residues form cystines

Ext. coefficient 49390

Abs 0.1% (=1 g/l) 0.703, 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 39.75

This classifies the protein as stable.

Aliphatic index: 106.93

Grand average of hydropathicity (GRAVY): -0.035