

Datasheet for ABIN3095910

TLK1 Protein (AA 1-766) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	TLK1
Protein Characteristics:	AA 1-766
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TLK1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MSVQSSSGSL EGPPSWSQLS TSPTPGSAAA ARSLNHTPP SGRPREGAMD ELHSLDPRRQ</p> <p>ELLEARFTGV ASGSTGSTGS CSVGAKASTN NESSNHSFGS LGSLSDKESE TPEKKQSESS</p> <p>RGRKRKAENQ NESSQGKSGR GRGHKISDYF EYQGGNGSSP VRGIPPAIRS PQNSHSHSTP</p> <p>SSSVRPNSPS PTALAFGDHP IVQPKQLSFK IIQDTLMLK LAALESNKIQ DLEKKEGRID</p> <p>DLLRANCDLR RQIDEQQKLL EKYKERLNKC ISMSKLLIE KSTQEKLSR EKSMQDRLRL</p> <p>GHFTTVRHGA SFTEQWTDGF AFQNLVKQQE WVNQQREDIE RQRKLLAKRK PPTANNSQAP</p> <p>STNSEPKQRK NKAINGAEND PFVRPNLPQL LTLAEYHEQE EIFKLRLGHL KKEEAEIQAE</p> <p>LERLERVRNL HIRELKRINN EDNSQFKDHP TLNERYLLLH LLGRGGFSEV YKAFDLYEQR</p> <p>YAAVKIHQLN KSWRDEKKEN YHKHACREYR IHKELDHPRI VKLYDYFSLD TDTFCTVLEY</p> <p>CEGNDLDFYL KQHKLMSEKE ARSIVMQIVN ALRYLNEIKP PIIHYDLKPG NILLVDGTAC</p> <p>GEIKITDFGL SKIMDDDSYG VDGMDLTSQG AGTYWYLPPE CFVVGKEPPK ISNKVDVWSV</p>

GVIFFQCLYG RKPFGHNQSQ QDILQENTIL KATEVQFPVK PVSSEAKAF IRRCLAYRKE
DRFDVHQLAN DPYLLPHMRR SNSSGNLHMA GLTASPTPPS SSIITY

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: TLK1

Alternative Name: TLK1 ([TLK1 Products](#))

Background: Serine/threonine-protein kinase tousled-like 1 (EC 2.7.11.1) (PKU-beta) (Tousled-like kinase 1),FUNCTION: Rapidly and transiently inhibited by phosphorylation following the generation of DNA double-stranded breaks during S-phase. This is cell cycle checkpoint and ATM-pathway dependent and appears to regulate processes involved in chromatin assembly. Isoform 3 phosphorylates and enhances the stability of the t-SNARE SNAP23, augmenting its assembly with syntaxin. Isoform 3 protects the cells from the ionizing radiation by facilitating the repair of DSBs. In vitro, phosphorylates histone H3 at 'Ser-10'. {ECO:0000269|PubMed:10523312, ECO:0000269|PubMed:10588641, ECO:0000269|PubMed:11314006, ECO:0000269|PubMed:11470414, ECO:0000269|PubMed:12660173, ECO:0000269|PubMed:9427565}.

Molecular Weight: 86.7 kDa

UniProt: [Q9UKI8](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Application Details

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months