

# Datasheet for ABIN3075507 WT1 Protein (AA 1-449) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	WT1
Protein Characteristics:	AA 1-449
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This WT1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MGSDVRDLNA LLPAVPSLGG GGGCALPVSG AAQWAPVLDF APPGASAYGS LGGPAPPPAP
	PPPPPPPHS FIKQEPSWGG AEPHEEQCLS AFTVHFSGQF TGTAGACRYG PFGPPPPSQA
	SSGQARMFPN APYLPSCLES QPAIRNQGYS TVTFDGTPSY GHTPSHHAAQ FPNHSFKHED
	PMGQQGSLGE QQYSVPPPVY GCHTPTDSCT GSQALLLRTP YSSDNLYQMT SQLECMTWNQ
	MNLGATLKGV AAGSSSSVKW TEGQSNHSTG YESDNHTTPI LCGAQYRIHT HGVFRGIQDV
	RRVPGVAPTL VRSASETSEK RPFMCAYPGC NKRYFKLSHL QMHSRKHTGE KPYQCDFKDC
	ERRFSRSDQL KRHQRRHTGV KPFQCKTCQR KFSRSDHLKT HTRTHTGKTS EKPFSCRWPS
	CQKKFARSDE LVRHHNMHQR NMTKLQLAL
	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 posttranslational 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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

## **Target Details**

Target:	WT1
Alternative Name:	WT1 (WT1 Products)
Background:	Wilms tumor protein (WT33),FUNCTION: Transcription factor that plays an important role in
	cellular development and cell survival (PubMed:7862533). Recognizes and binds to the DNA
	sequence 5'-GCG(T/G)GGGCG-3' (PubMed:7862533, PubMed:17716689, PubMed:25258363).
	Regulates the expression of numerous target genes, including EPO. Plays an essential role for
	development of the urogenital system. It has a tumor suppressor as well as an oncogenic role
	in tumor formation. Function may be isoform-specific: isoforms lacking the KTS motif may act
	as transcription factors (PubMed:15520190). Isoforms containing the KTS motif may bind
	mRNA and play a role in mRNA metabolism or splicing (PubMed:16934801). Isoform 1 has
	lower affinity for DNA, and can bind RNA (PubMed:19123921).
	{ECO:0000269 PubMed:15520190, ECO:0000269 PubMed:16934801,
	ECO:0000269 PubMed:17716689, ECO:0000269 PubMed:19123921,
	ECO:0000269 PubMed:19416806, ECO:0000269 PubMed:25258363,
	ECO:0000269 PubMed:7862533}.
Molecular Weight:	49.2 kDa
UniProt:	P19544
Pathways:	Tube Formation
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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months