

## Datasheet for ABIN3094579

# PIWIL3 Protein (AA 1-882) (Strep Tag)



Go to Product page

_						
	V	$\triangle$	r۱	/1	$\triangle$	Λ/
	' V '		ΙV			v v

Quantity:	250 μg	
Target:	PIWIL3	
Protein Characteristics:	AA 1-882	
Origin:	Human	
Source:	Cell-free protein synthesis (CFPS)	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This PIWIL3 protein is labelled with Strep Tag.	
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)	

Brand:	AliCE®
Sequence:	MPGRARTRAR GRARRRESYQ QEAPGGPRAP GSATTQEPPQ LQSTPRPLQE EVPVVRPLQP
	RAARGGAGGG AQSQGVKEPG PEAGLHTAPL QERRIGGVFQ DLVVNTRQDM KHVKDSKTGS
	EGTVVQLLAN HFRVISRPQW VAYKYNVDYK PDIEDGNLRT ILLDQHRRKF GERHIFDGNS
	LLLSRPLKER RVEWLSTTKD KNIVKITVEF SKELTPTSPD CLRYYNILFR RTFKLLDFEQ
	VGRNYYTKKK AIQLYRHGTS LEIWLGYVTS VLQYENSITL CADVSHKLLR IETAYDFIKR
	TSAQAQTGNI REEVTNKLIG SIVLTKYNNK TYRVDDIDWK QNPEDTFNKS DGSKITYIDY
	YRQQHKEIVT VKKQPLLVSQ GRWKKGLTGT QREPILLIPQ LCHMTGLTDE ICKDYSIVKE
	LAKHTRLSPR RRHHTLKEFI NTLQDNKKVR ELLQLWDLKF DTNFLSVPGR VLKNANIVQG
	RRMVKANSQG DWSREIRELP LLNAMPLHSW LILYSRSSHR EAMSLKGHLQ SVTAPMGITM
	KPAEMIEVDG DANSYIDTLR KYTRPTLQMG MSCLLVFKVI CILPNDDKRR YDSIKRYLCT
	KCPIPSQCVV KKTLEKVQAR TIVTKIAQQM NCKMGGALWK VETDVQRTMF VGIDCFHDIV

NRQKSIAGFV ASTNAELTKW YSQCVIQKTG EELVKELEIC LKAALDVWCK NESSMPHSVI VYRDGVGDGQ LQALLDHEAK KMSTYLKTIS PNNFTLAFIV VKKRINTRFF LKHGSNFQNP PPGTVIDVEL TRNEWYDFFI VSQSVQDGTV TPTHYNVIYD TIGLSPDTVQ RLTYCLCHMY YNLPGIIRVP APCHYAHKLA YLVGQSIHQE PNRSLSTRLF YL

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.

### **Product Details**

Product Details		
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:	PIWIL3	
Alternative Name:	PIWIL3 (PIWIL3 Products)	
Background:	Piwi-like protein 3,FUNCTION: May play a role during spermatogenesis by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and govern the methylation and subsequent repression of transposons. Directly binds piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements. Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation (By similarity). {ECO:0000250 UniProtKB:Q9JMB7}.	
Molecular Weight:	101.1 kDa	
UniProt:	Q7Z3Z3	
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	

### **Application Details**

	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!
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