

# Datasheet for ABIN3134954 SETD8 Protein (AA 1-349) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	SETD8
Protein Characteristics:	AA 1-349
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SETD8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## **Product Details**

Product Details	
Brand:	AliCE®
Sequence:	MARGRKMCKP RAVEAAAAAV AATAPGPEMV EQRGPGRPRS DGENVFAGQS KIYAYMSPNK
	CSAMRSPLQE ENSVAHHEVK CPGKPLAGIY RKREEKRNTG NVIRSAVKSD EQKSKDTRRG
	PLAPFPNQKS EAAEPPKTPP PSCDSTNVAV AKQALKKSLK GKQAPRKKSQ GKTQQNRKLT
	DFYPVRRSSR KSKAELQSEE RKKNELIESG KEEGMKIDLI DGKGRGVIAT KQFSRGDFVV
	EYHGDLIEIT DAKKREALYV QDPSTGCYMY YFQYLSKTYC VDATQETNRL GRLINHSKCG
	NCQTKLHDID GVPHLILIAS RDIAAGEELL YDYGDRSKAS IEAYPWLKH
	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:	SETD8

# Target Details

Alternative Name:	Kmt5a (SETD8 Products)
Background:	N-lysine methyltransferase KMT5A (EC 2.1.1) (H4-K20-HMTase KMT5A) (Histone-lysine N-
	methyltransferase KMT5A) (EC 2.1.1.361) (Lysine-specific methylase 5A) (PR/SET domain-
	containing protein 07) (PR-Set7) (PR/SET07) (SET domain-containing protein 8),FUNCTION:
	Protein-lysine N-methyltransferase that monomethylates both histones and non-histone
	proteins. Specifically monomethylates 'Lys-20' of histone H4 (H4K20me1). H4K20me1 is
	enriched during mitosis and represents a specific tag for epigenetic transcriptional repression
	Mainly functions in euchromatin regions, thereby playing a central role in the silencing of
	euchromatic genes. Required for cell proliferation, probably by contributing to the maintenance
	of proper higher-order structure of DNA during mitosis. Involved in chromosome condensation
	and proper cytokinesis. Nucleosomes are preferred as substrate compared to free histones.
	Mediates monomethylation of p53/TP53 at 'Lys-382', leading to repress p53/TP53-target
	genes. Plays a negative role in TGF-beta response regulation and a positive role in cell
	migration. {ECO:0000250 UniProtKB:Q9NQR1}.
Molecular Weight:	38.8 kDa
JniProt:	Q2YDW7
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!
Restrictions:	For Research Use only
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# 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