

## Datasheet for ABIN3136068

# ALKBH8 Protein (AA 1-664) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	ALKBH8
Protein Characteristics:	AA 1-664
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALKBH8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MNINHKGVLK LTKMEKKFLR KQSKARHVLL KHEGIQAVSY PTQSLVIANG GLGNGVSRKQ
	LLLTLEKCGP VEALLMPPNK PYAFVIFQTI EESKKAYFTL NGKEIIDDLG QKIFLYLNFV
	EKAQWKNMGL EALPPGLLVV EEIISSEEEK KLLESVNWTE DTGNQNFQRS LKHRRVKHFG
	YEFHYESNTV DKDKPLPGGL PEVCSSILEK LLKEGYIKHK PDQLTINQYE PGHGIPAHID
	THSAFEDEII SLSLGSAIVM DFKHPEGVTV QVMLPRRSLL VMTGESRYLW THGITPRKFD
	TVQASEQFKG GIITSDIGDL TLSKRGMRTS FTFRKVRRMP CNCSYSSVCD RQRKATPPSL
	TESSKEALEL EQKHVHQVYN EIASHFSSTR HSPWPRIVEF LKALPSGSIV ADIGCGNGKY
	LGINKDLYMI GCDRSQNLVD ICRERQFQAL VCDALAVPVR SGSCDACISI AVIHHFATAE
	RRVEALQELA RLLRPGGQAL IYVWAMEQEY KNQKSKYLRG KRISQGDKDE LNSATSTEEF
	LVNQTPEGVN EDPALSVNSS SITKEEEYKS RKVPNSELPI HINRTCFHSQ DVLVPWHLKR
	NPGKDKAIEP SGVAGCPDPS PVFHRYYHVF CDGELEASCQ AVGDVSILQS YYDQGNWCVV LQKV

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).

custom-made

Alkbh8 (ALKBH8 Products)

Alkylated DNA repair protein alkB homolog 8 (Probable alpha-ketoglutarate-dependent dioxygenase ABH8) (S-adenosyl-L-methionine-dependent tRNA methyltransferase ABH8) (tRNA (carboxymethyluridine(34)-5-0)-methyltransferase ABH8) (EC 2.1.1.229), FUNCTION: Catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its methyltransferase domain (PubMed:20123966). Catalyzes the last step in the formation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in target tRNA (PubMed:20123966). Has a preference for tRNA(Arg) and tRNA(Glu), and does not bind tRNA(Lys) (By similarity). Binds tRNA and catalyzes the iron and alpha-ketoglutarate dependent hydroxylation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its dioxygenase domain, giving rise to 5-(S)-methoxycarbonylhydroxymethyluridine, has a preference for tRNA(Gly) (PubMed:20583019). Required for normal survival after DNA damage (By similarity). May inhibit apoptosis and promote cell survival and angiogenesis (By similarity). {ECO:0000250|UniProtKB:Q96BT7, ECO:0000269|PubMed:20123966, ECO:0000269|PubMed:20583019}.

Molecular Weight: 74.8 kDa

UniProt: Q80Y20

# **Application Details**

Comment:

**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.

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> > 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

# **Application Details**

	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
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