

Datasheet for ABIN7552143
ALKBH3 Protein (AA 1-286) (His tag)



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Overview

Quantity:	1 mg
Target:	ALKBH3
Protein Characteristics:	AA 1-286
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALKBH3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ALKBH3 Protein expressed in mammalian cells.
Sequence:	MEEKRRRARV QGAWAAPVKS QAIAQPATTA KSHLHQKPGQ TWKNKEHHLS DREFVFKEPQ QVVRRAPEPR VIDREGVYEI SLSPTGVS RV CLYPGFVDVK EADWILEQLC QDVPWKQRTG IREITYQQP RLTAWYGELP YTYSRITMEP NPHWHPVLR T LKNRIEENTG HTFN SLLCNL YRNEKDSVDW HSDDEPSLGR CPIIASLSFG ATRTFEMRKK PPPEENG DYT YVERVKIPLD HGTLLIMEGA TQADWQHRVP KEYHSREPRV NLTFR TVYPD PRGAPW Sequence without tag. The proposed Purification-Tag is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	ALKBH3
Alternative Name:	ALKBH3 (ALKBH3 Products)
Background:	Alpha-ketoglutarate-dependent dioxygenase alkB homolog 3 (EC 1.14.11.33) (EC 1.14.11.54) (Alkylated DNA repair protein alkB homolog 3) (hABH3) (DEPC-1) (Prostate cancer antigen 1),FUNCTION: Dioxygenase that mediates demethylation of DNA and RNA containing 1-methyladenosine (m1A) (PubMed:12486230, PubMed:12594517, PubMed:16174769, PubMed:26863196, PubMed:26863410). Repairs alkylated DNA containing 1-methyladenosine (m1A) and 3-methylcytosine (m3C) by oxidative demethylation (PubMed:12486230, PubMed:12594517, PubMed:16174769, PubMed:25944111). Has a strong preference for single-stranded DNA (PubMed:12486230, PubMed:12594517, PubMed:16174769, PubMed:20714506). Able to process alkylated m3C within double-stranded regions via its interaction with ASCC3, which promotes DNA unwinding to generate single-stranded substrate needed for ALKBH3 (PubMed:22055184). Can repair exocyclic 3,N4-ethenocytosine adducts in single-stranded DNA (PubMed:25797601). Also acts on RNA (PubMed:12594517, PubMed:16174769, PubMed:26863196, PubMed:26863410, PubMed:16858410). Demethylates N(1)-methyladenosine (m1A) RNA, an epigenetic internal modification of messenger RNAs

Target Details

(mRNAs) highly enriched within 5'-untranslated regions (UTRs) and in the vicinity of start codons (PubMed:26863196, PubMed:26863410). Requires molecular oxygen, alpha-ketoglutarate and iron (PubMed:22055184, PubMed:16858410).

{ECO:0000269|PubMed:12486230, ECO:0000269|PubMed:12594517, ECO:0000269|PubMed:16174769, ECO:0000269|PubMed:16858410, ECO:0000269|PubMed:22055184, ECO:0000269|PubMed:25797601, ECO:0000269|PubMed:25944111, ECO:0000269|PubMed:26863196, ECO:0000269|PubMed:26863410}.

Molecular Weight: 33.4 kDa

UniProt: [Q96Q83](#)

Pathways: [DNA Damage Repair](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months