

ALKBH5 recombinant protein

Recombinant ALKBH5 protein

CATALOG # AAA59767	HOST Baculovirus
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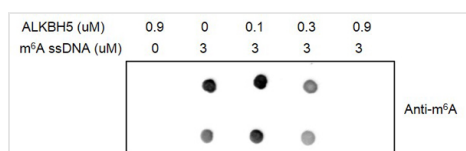
PRODUCT SYNONYMS

ALKBH5; Recombinant ALKBH5 protein; AlkB Homolog 5; RNA Demethylase; Alpha-Ketoglutarate-Dependent Dioxygenase AlkB Homolog 5; OFOXD1; ABH5; ALKBH5 recombinant protein

PRODUCT SPECIFICATIONS

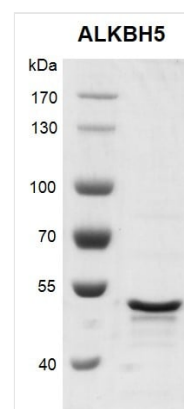
Host	Baculovirus
Form/Format	Recombinant ALKBH5 protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant ALKBH5 protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling. 3uM m6A ssDNA oligos (DNA sequence: 5'-GTTGCCTGTTTCGTGTTGG/m6A/ CTTGCCTGT-3') were incubated with ALKBH5 protein in reaction buffer including 50mM HEPES-NaOH pH 7.5, 100uM 2-oxoglutarate, 100uM ascorbate, 50uM (NH4)2Fe(SO4)2·6H2O and 1mM TCEP for 2 hours at room temperature. Dot-Blot with m6A antibody was used for activity detection.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



DB (Dot Blot)

Dot blot for Recombinant ALKBH5 protein activity. 3 uM m6A ssDNA oligos (sequence: 5'-GTTGCCTGTTTCGTGTTGG/m6A/CTTGCCTGT-3') were incubated with different concentrations of ALKBH5 proteins in a 30 ul reaction system including 50 mM HEPES-NaOH pH 7.5, 100 uM 2-oxoglutarate, 100 uM ascorbate, 50 ?M (NH4)2Fe(SO4)2·6H2O and 1 mM TCEP for 2 hours at room temperature. Then each reaction was concentrated to a final volume of 10 ul. 1 ul of each reaction was spotted onto a positively charged nylon membrane and products were detected by Dot blot assay with m6A antibody .



SDS-PAGE

Recombinant ALKBH5 protein gel Recombinant ALKBH5 was run on a 10% SDS-PAGE gel stained with Coomassie Blue. MW: 45.5 kDa Purity: > 90%

ADDITIONAL INFORMATION

Related Product Information for ALKBH5 recombinant protein	Short Description: Recombinant ALKBH5 protein was expressed in a baculovirus expression system as the full-length protein (accession number NP_060228.3) with an N-terminal DYKDDDDK-Tag. The molecular weight of ALKBH5 is 45.5 kDa. Recombinant ALKBH5 protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling. Background: N6-methylated adenine (m6A) is prevalent in nearly all RNA types and can be found in all organisms from bacteria to humans. It preferentially appears around stop codons and within long internal exons in mammalian messenger RNAs. m6A plays an important role in the efficiency of mRNA splicing, processing, translation efficiency, editing and mRNA stability. m6A also appears in other RNA molecules, such as primary miRNA (pri-miRNAs). ALKBH5 (AlkB Homolog 5, RNA Demethylase, also known as OFOX1, ABH5) specifically demethylates m6A RNA. ALKBH5 significantly affects mRNA export and RNA metabolism as well as the assembly of mRNA processing factors in nuclear speckles via demethylation activity.
Product Categories/Family for ALKBH5 recombinant protein	Recombinant Proteins; DNA Damage; Transcription

NCBI AND UNIPROT INFORMATION

NCBI GI #	148539642
NCBI GeneID	54890
NCBI Accession #	NP_060228.3
NCBI GenBank Nucleotide #	NM_017758.3
UniProt Accession #	Q6P6C2; Q9NXD6; B4DVJ4; D3DXC6
Molecular Weight	43,049 Da
NCBI Official Full Name	RNA demethylase ALKBH5
NCBI Official Synonym Full Names	alkB homolog 5, RNA demethylase
NCBI Official Symbol	ALKBH5
NCBI Official Synonym Symbols	ABH5; OFOX1; OFOX1
NCBI Protein Information	RNA demethylase ALKBH5
UniProt Protein Name	RNA demethylase ALKBH5
UniProt Gene Name	ALKBH5
UniProt Synonym Gene Names	ABH5; OFOX1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.