

Recombinant Human ALKBH2 protein, His-tagged

Cat. No. ALKBH2-26040TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ALKBH2(1-261aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
Description	Alpha-ketoglutarate-dependent dioxygenase alkB homolog 2, also known ALKBH2, belongs to the ALKB family. Expressed in heart, colon, liver, testis, ovary, prostate and small intestine, ALKBH2 uses iron as a cofactor and functions as a dioxygenase that catalyzes the repair of alkylated DNA and RNA containing 1-methyladenine and 3-meth-ylcytosine. ALKBH2 is functionally activated by ascorbate and requires oxygen and alpha-ketoglutarate for enzymatic activity.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol
Molecular Mass	31.4kDa (281aa), confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSHVLFGKAEADE IFQELEKEVE YFTGALARVQ VFGKWHSVPR KQATYGDAGL TYTFSGLTLS PKPWIPVLER IRDHVSGVTG QTFNFVLINRYKDGCDHIGE HRDDERELAP GSPIASVSFG ACRDFVFRHK DSRGKSPSRR VAVVRLPLAH GSLLMMNHPT NTHWYHSLPV RKKVLAPRVN MDRFLVKGAQ GGLLRKQEEQ EPTGEEPAVL GGDKESTRKR PRREAPGNNGG HSAGPSWRHI RAEGLDCSYT LTFRKILLTK K

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	> 90% by SDS - PAGE
Storage	Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.5 mg/ml (determined by Bradford assay)
GENE INFORMATION	
Gene Name	ALKBH2 alkB, alkylation repair homolog 2 (E. coli) [Homo sapiens]
Official Symbol	ALKBH2
Synonyms	ALKBH2; alkB, alkylation repair homolog 2 (E. coli); alpha-ketoglutarate-dependent dioxygenase alkB homolog 2; ABH2; MGC90512; oxy DC1; 2OG-Fe(II) oxy DC1; alkylated DNA repair protein alkB homolog 2; FLJ99103;
Gene ID	121642
mRNA Refseq	NM_001001655
Protein Refseq	NP_001001655
MIM	610602
UniProt ID	Q6NS38
Chromosome Location	12q24.11
Pathway	ABH2 mediated Reversal of Alkylation Damage, organism-specific biosystem; DNA

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Damage Reversal, organism-specific biosystem; DNA Repair, organism-specific biosystem; Reversal of Alkylation Damage By DNA Dioxygenases, organism-specific biosystem;

Function

DNA-N1-methyladenine dioxygenase activity; cytosine C-5 DNA demethylase activity; cytosine C-5 DNA demethylase activity; ferrous iron binding; metal ion binding; oxidoreductase activity; oxidoreductase activity, acting on single donors with incorporation of molecular oxygen, incorporation of two atoms of oxygen;

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