



# ALKB3 Monoclonal Antibody

Catalog No	YP-mAb-06551
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	ALKBH3 ABH3 DEPC1
Protein Name	Alpha-ketoglutarate-dependent dioxygenase alkB homolog 3 (EC 1.14.11.-) (Alkylated DNA repair protein alkB homolog 3) (DEPC-1) (Prostate cancer antigen 1)
Immunogen	Synthesized peptide derived from human protein . at AA range: 110-190
Specificity	ALKB3 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	31kD
Cell Pathway	Nucleus . Cytoplasm . Colocalizes with ASCC2 and ASCC3 in nuclear foci when cells have been exposed to alkylating agents that cause DNA damage (PubMed:29144457). Predominantly localizes to the nucleus. .
Tissue Specificity	Ubiquitous. Detected in heart, pancreas, skeletal muscle, thymus, testis, ovary, spleen, prostate, small intestine, peripheral blood leukocytes, urinary bladder and colon.
Function	cofactor: Binds 1 Fe(2+) ion per subunit.,enzyme regulation: Activated by ascorbate.,function: Dioxygenase that repairs alkylated DNA containing 1-methyladenine and 3-methylcytosine by oxidative demethylation. Has a strong preference for single-stranded DNA. May also act on RNA. Requires molecular oxygen, alpha-ketoglutarate and iron.,similarity: Belongs to the alkB family.,tissue specificity: Detected in heart, pancreas, skeletal muscle, thymus, testis, ovary, spleen, prostate, small intestine, peripheral blood leukocytes, urinary bladder and colon.,
Background	The Escherichia coli AlkB protein protects against the cytotoxicity of methylating agents by repair of the specific DNA lesions generated in single-stranded DNA. ALKBH2 (MIM 610602) and ALKBH3 are E. coli AlkB homologs that catalyze the



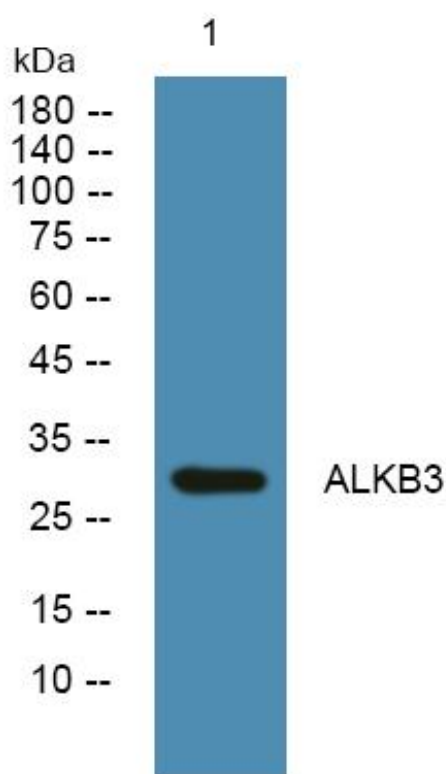
removal of 1-methyladenine and 3-methylcytosine (Duncan et al., 2002 [PubMed 12486230]).[supplied by OMIM, Mar 2008],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**

Western Blot analysis of various cells using ALKB3 Monoclonal Antibody