

ALKBH1 antibody

Product Information

Catalog No.:	FNab00311
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

Background

Dioxygenase that acts as a DNA demethylase(PubMed:18603530). Requires molecular oxygen, alpha-ketoglutarate and iron(PubMed:18603530). Specifically demethylates DNA methylated on the 6th position of adenine(N(6)-methyladenosine) DNA. N(6)-methyladenosine(m6A) DNA is present at some L1 elements in embryonic stem cells and probably promotes their silencing(By similarity). Also able to repair alkylated single-stranded DNA and RNA containing 3-methylcytosine by oxidative demethylation, but with low activity(PubMed:18603530). Also has DNA lyase activity and introduces double-stranded breaks at abasic sites: cleaves both single-stranded DNA and double-stranded DNA at abasic sites, with the greatest activity towards double-stranded DNA with two abasic sites(PubMed:19959401). DNA lyase activity does not require alpha-ketoglutarate and iron and leads to the formation of an irreversible covalent protein-DNA adduct with the 5' DNA product(PubMed:19959401, PubMed:23577621). DNA lyase activity is not required during base excision repair and class switch recombination of the immunoglobulin heavy chain during B lymphocyte activation. May play a role in placental trophoblast lineage differentiation(By similarity).

Immunogen information

Immunogen:	alkB, alkylation repair homolog 1(E. coli)
Synonyms:	Nucleic acid dioxygenase ALKBH1 Alkylated DNA repair protein alkB homolog 1 Alpha-ketoglutarate-dependent dioxygenase ABH1 DNA 6mA demethylase DNA N6-methyl adenine demethylase ALKBH1 DNA lyase ABH1 DNA oxidative demethylase

ALKBH1|mRNA N(3)-methylcytidine
demethylase|ALKBH1|ABH|ABH1|ALKBH

Observed MW: 44 kDa

Uniprot ID : Q13686

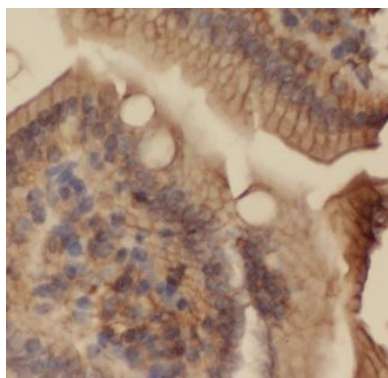
Application

Reactivity: Human, Mouse, Rat

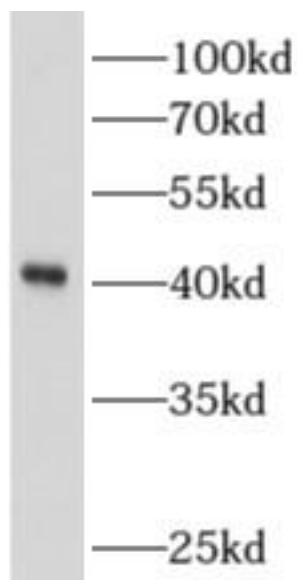
Tested Application: ELISA, WB, IHC

Recommended dilution: WB: 1:200-1:2000; IHC: 1:20-1:200

Image:



Immunohistochemistry of paraffin-embedded human colon tissue slide using FNab00311(ALKBH1 Antibody) at dilution of 1:50



human placenta tissue were subjected to SDS PAGE followed by western blot with FNab00311(ALKBH1 antibody) at dilution of 1:500