

ALKBH8 (P-16): sc-101882

BACKGROUND

ALKBH8 (alkylated DNA repair protein AlkB homolog 8) is a 664 amino acid protein that is encoded by a gene located on chromosome 11. ALKBH8 contains one RRM (RNA recognition motif) domain and belongs to the AlkB family of proteins. ALKBH8 is one of many homologs of the *Escherichia coli* protein AlkB. AlkB functions to protect DNA and RNA against damage from environmental methylating compounds by directly reversing 1-methyladenine (1-meA) and 3-methylcytosine (3-meC) cytotoxic alkylation lesions in DNA and RNA. The enzyme acts by oxidative demethylation, utilizing ferrous iron and α -ketoglutarate as cofactors, 2-oxoglutarate as a co-substrate and molecular oxygen as the oxidizing agent. Three isoforms exist for ALKBH8 due to alternative splicing of the gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ALKBH8 (human) mapping to 11q22.3.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

ALKBH8 (P-16) is a purified rabbit polyclonal antibody raised against ALKBH8 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ALKBH8 (P-16) is recommended for detection of ALKBH8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ALKBH8 siRNA (h): sc-96576, ALKBH8 shRNA Plasmid (h): sc-96576-SH and ALKBH8 shRNA (h) Lentiviral Particles: sc-96576-V.

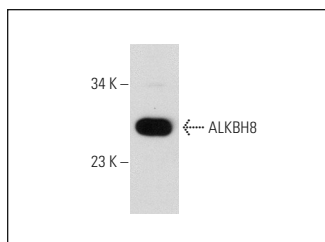
Molecular Weight of ALKBH8 isoforms 1-3: 75/27/26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ALKBH8 (P-16): sc-101882. Western blot analysis of ALKBH8 expression in Jurkat whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.