

## Recombinant ALKBH8 protein

**Catalog No:** 81197, 81797

**Lot No:** 24718001

**Expressed In:** *E. coli*

**Quantity:** 100, 1000 µg

**Concentration:** 0.2 µg/µl

**Source:** Human

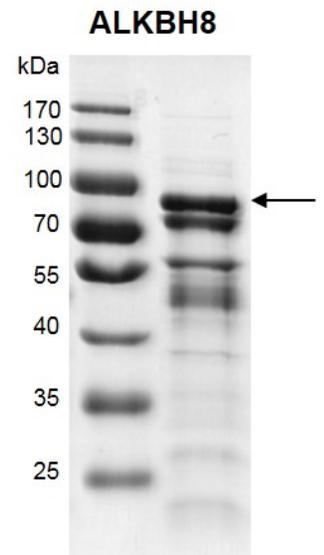
**Buffer Contents:** Recombinant ALKBH8 protein is supplied in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 10% glycerol, and 0.5 mM TCEP.

**Background:** ALKBH8 (AlkB Homolog 8), also called as ABH8 or TRMT9A, is a S-Adenosyl-L-Methionine-dependent tRNA methyltransferase. It catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its methyltransferase domain. It was reported to have a preference for tRNA(Arg) and tRNA(Glu), and does not bind tRNA(Lys). ALKBH8 can bind tRNA and catalyze the iron and alpha-ketoglutarate dependent hydroxylation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its dioxygenase domain, giving rise to 5-(S)-methoxycarbonylhydroxymethyluridine. It is also required for normal survival after DNA damage. ALKBH8 may inhibit apoptosis and promote cell survival and angiogenesis.

**Protein Details:** Full length ALKBH8 protein (accession number NP\_001287939.1) was expressed in *E. coli* cells with an N-terminal 6xHis tag. The molecular weight of ALKBH8 is 77.9 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



**Recombinant ALKBH8 protein gel**  
10% SDS-PAGE Coomassie staining  
MW: 77.9 kDa  
Purity: >48%