

## Recombinant ALKBH7 protein

**Catalog No:** 81132, 81832

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

**Quantity:** 100, 1000 µg

**Concentration:** 1 µg/µl

**Source:** Human

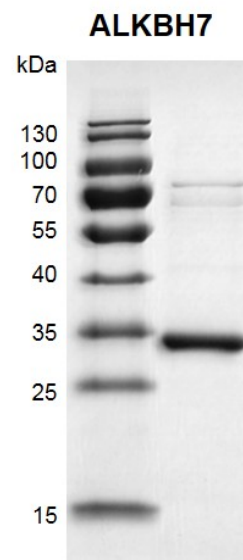
**Buffer Contents:** Recombinant ALKBH7 protein is supplied in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 10% glycerol, and 0.5 mM TCEP.

**Background:** ALKBH7 (Alkylated DNA Repair Protein AlkB Homolog 7), also called as SPATA11 (Spermatogenesis-Associated Protein 11) is a member of ALKBH protein family. It does not display DNA demethylase activity according to recent research, and may function as protein hydroxylase. It has been proved to catalyze auto-hydroxylation at Leu-110 in vitro. ALKBH7 is required to induce programmed necrosis in response to DNA damage caused by cytotoxic alkylating agents. It acts by triggering the collapse of mitochondrial membrane potential and loss of mitochondrial function that leads to energy depletion and cell death. ALKBH7-mediated necrosis is probably required to prevent the accumulation of cells with DNA damage.

**Protein Details:** Full length ALKBH7 protein (accession number NP\_115682.1) was expressed in *E. coli* cells with an N-terminal 6Å~His tag. The molecular weights of ALKBH7 is 28.1 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 ALKBH7 protein gel**  
12.5% SDS-PAGE Coomassie staining  
MW: 37.4 kDa  
Purity: >85%