Recombinant ALKB6 protein (His tag)

Catalog Number	540410
Synonyms	Alkylated DNA repair protein alkB homolog 6; Alpha-ketoglutarate-dependent dioxygenase alkB homolog 6; Probable nucleic acid dioxygenase ALKBH6
Species	Human
Expression System	E. coli
Accession	Q3KRA9
Molecular Weight	Predictes a molecular mass of 28.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-238
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-238 aa (Q3KRA9) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant ALKBH6 Fragment (1-238) is a high-purity protein designed for studying the Fe2OG dioxygenase domain of the probable RNA/DNA demethylase ALKBH6. This fragment provides researchers with a targeted tool to investigate nucleic acid oxidative demethylation and damage repair mechanisms. ALKBH6 is a human Fe^{2+}/2-oxoglutarate-dependent dioxygenase involved in oxidative demethylation of nucleic acids, with binding preference for single-stranded DNA and RNA. The protein plays a role in nucleic acid damage repair and is localized in both the cytoplasm and nucleus, suggesting involvement in diverse cellular processes. The full-length protein functions as a probable nucleic acid dioxygenase, contributing to epigenetic regulation and DNA/RNA repair pathways.