

FTO recombinant protein

Recombinant FTO protein

CATALOG #
AAA59756

HOST
Baculovirus

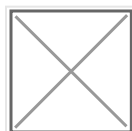
PRODUCT SYNONYMS

FTO; Recombinant FTO protein; Fat Mass And Obesity Associated; AlkB Homolog 9; Alpha-Ketoglutarate-Dependent Dioxygenase; FTO recombinant protein

PRODUCT SPECIFICATIONS

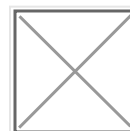
Host	Baculovirus
Form/Format	Recombinant FTO protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant FTO protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling. Activity Assay: 3uM m6A ssDNA oligos (DNA sequence: 5'-GTTGCCTGTTTCGTGTTGG/m6A/ CTTGCCTGT-3') were incubated with FTO protein in reaction buffer including 50mM HEPES-NaOH pH 7.5, 100uM 2-oxoglutarate, 100uM ascorbate, 50uM (NH4)2Fe(SO4)2·6H2O and 1mM TCEP for 2 hours at room temperature. Reaction products were spotted onto positively charged nylon membrane and detected with m6A antibody (Dot Blot)
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



DB (Dot Blot)

Dot blot for Recombinant FTO protein activity 1 ?M m6A ssDNA oligos (sequence: 5'-GTTGCCTGTTTCGTGTTGG/m6A/CTTGCCTGT-3') were incubated with different concentrations of FTO in reaction buffer including 25 mM Tris-HCl pH 7.5, 100 ?M 2-oxoglutarate, 100 ?M ascorbate, 50 ?M (NH4)2Fe(SO4)2·6H2O and 1 mM TCEP for 2 hr at room temperature. The 20 ?l reactions were concentrated to 5 ?l. 1 ?l of products were spotted onto positively charged nylon membrane, then detected with m6A antibody . Dot blot was used for activity detection.



SDS-PAGE

Recombinant FTO protein gel Recombinant FTO was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 60.4 kDa Purity: > 92%

ADDITIONAL INFORMATION

Related Product Information for FTO recombinant protein	Short Description: Recombinant FTO protein was expressed in a baculovirus expression system as the full-length protein (accession number XP_011521615.1) with an N-terminal DYKDDDDK-Tag. The molecular weight of FTO is 60.4 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. It can also be used for analysis of DNA repair, RNA repair, metabolism, energy and body fat homeostasis. Background: FTO (Alpha-Ketoglutarate Dependent Dioxygenase, also known as GDFD, ALKBH9, BMIQ14) is a nuclear protein of the AlkB related non-haem iron and 2-oxoglutarate-dependent oxygenase superfamily. FTO specifically demethylates m6A RNA. FTO plays an important role in the regulation of the global metabolic rate, energy expenditure and energy homeostasis. It is involved in the regulation of thermogenesis and the control of adipocyte differentiation into brown or white fat cells.
Product Categories/Family for FTO recombinant protein	Recombinant Proteins; DNA Damage

NCBI AND UNIPROT INFORMATION

Molecular Weight	Molecular weight of FTO is 60.4kDa
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/fto-recombinant-protein-baculovirus/59756>