

Product Name: KO-Validated FTO Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00080**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 58.3kDa

Antigen Information

Gene Name	FTO FTO; FTO Alpha-Ketoglutarate Dependent Dioxygenase; KIAA1752; ALKBH9; U6 Small Nuclear RNA (2'-O-Methyladenosine-N(6)-)-Demethylase FTO; U6 Small Nuclear RNA N(6)-Methyladenosine-Demethylase FTO; MRNA (2'-O-Methyladenosine-N(6)-)-Demethylase FTO; Alpha-Ketoglutarate-Dependent Dioxygenase FTO; Intragenic FTO Exon 9 Containing
Alternative Names	Transcript; MRNA N(6)-Methyladenosine Demethylase FTO; Fat Mass And Obesity-Associated Protein; TRNA N1-Methyl Adenine Demethylase FTO; Fat Mass And Obesity Associated; M6A(M)-Demethylase FTO; AlkB Homolog 9; MGC5149; IFEX9; FTO, Alpha-Ketoglutarate; Dependent Dioxygenase; Alpha-Ketoglutarate-Dependent Dioxygenase; EC 1.14.11.53; EC 1.14.11.-; BMIQ14; GDFD
Gene ID	79068.0

SwissProt ID Q9C0B1

Immunogen A synthesized peptide derived from human FTO

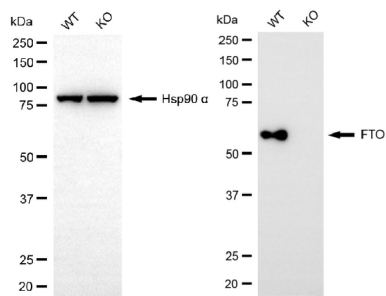
Background

This gene is a nuclear protein of the AlkB related non-haem iron and 2-oxoglutarate-dependent oxygenase superfamily but the exact physiological function of this gene is not known. Other non-heme iron enzymes function to reverse alkylated DNA and RNA damage by oxidative demethylation. Studies in mice and humans indicate a role in nervous and cardiovascular systems and a strong association with body mass index, obesity risk, and type 2 diabetes. [provided by RefSeq, Jul 2011]

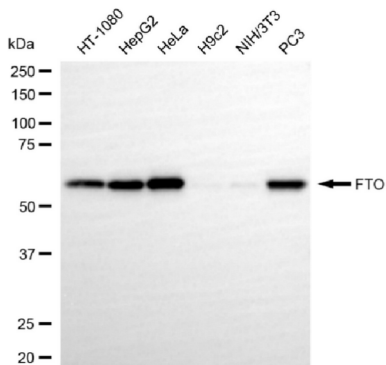
Research Area

Neuroscience, Cardiovascular, Metabolism

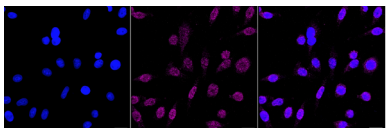
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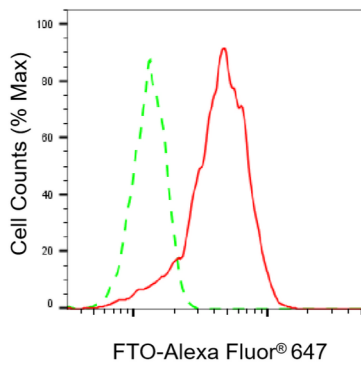
Western blotting analysis using FTO antibody (KVA00080). FTO expression in wild-type (WT) and FTO knockout (KO) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with FTO antibody (KVA00080, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using FTO antibody (KVA00080). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with FTO antibody (KVA00080, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with FTO antibody (KVA00080, 1:1,000). Nuclei were stained blue with DAPI; FTO was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Low. Scale bar: 20 µm.



Flow cytometric analysis of FTO expression in HepG2 cells using FTO antibody (KVA00080, 1:2,000). Green, isotype control; red, FTO.