



# FTO Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-04298
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	FTO
<b>Protein Name</b>	Alpha-ketoglutarate-dependent dioxygenase FTO
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human FTO. AA range:19-68
<b>Specificity</b>	FTO Polyclonal Antibody detects endogenous levels of FTO protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	FTO; KIAA1752; Alpha-ketoglutarate-dependent dioxygenase FTO; Fat mass and obesity-associated protein
<b>Observed Band</b>	58kD
<b>Cell Pathway</b>	Nucleus . Nucleus speckle . Cytoplasm . Localizes mainly in the nucleus, where it is able to demethylate N(6)-methyladenosine (m6A) and N(6),2'-O-dimethyladenosine cap (m6A(m)) in U6 small nuclear RNA (snRNA), N(1)-methyladenine from tRNAs and internal m6A in mRNAs (PubMed:30197295). In the cytoplasm, mediates demethylation of m6A and m6A(m) in mRNAs and N(1)-methyladenine from tRNAs (PubMed:30197295). .
<b>Tissue Specificity</b>	Ubiquitously expressed, with relatively high expression in adrenal glands and brain; especially in hypothalamus and pituitary (PubMed:17434869, PubMed:17496892). Highly expressed in highly expressed in acute myeloid leukemias (AML) with t(11;11)(q23;23) with KMT2A/MLL1 rearrangements, t(15;17)(q21;q21)/PML-RARA, FLT3-ITD, and/or NPM1 mutations (PubMed:28017614).
<b>Function</b>	function:The precise function of this protein remains to be determined.,polymorphism:At least one intronic variation within the gene predisposes to childhood and adult obesity.,similarity:Belongs to the fto family.,tissue specificity:Ubiquitously expressed, with relatively high expression in adrenal glands and brain; especially in hypothalamus and pituitary.,



**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],

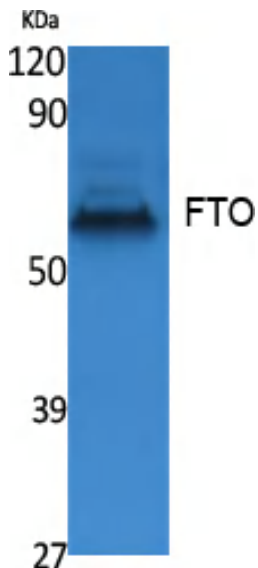
**matters needing attention**

Avoid repeated freezing and thawing!

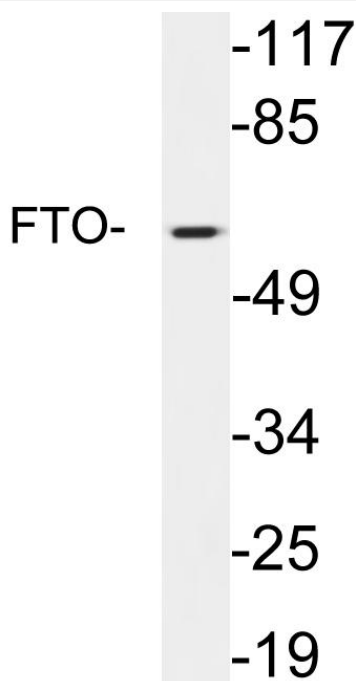
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



Western Blot analysis of extracts from K562 cells, using FTO Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from brain tissue, using FTO antibody.