

FTO Polyclonal Antibody

Catalog No :	YT5033
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	FTO
Gene Name :	FTO
Protein Name :	Alpha-ketoglutarate-dependent dioxygenase FTO
Human Gene Id :	79068
Human Swiss Prot No :	Q9C0B1
Mouse Gene Id :	26383
Mouse Swiss Prot No :	Q8BGW1
Rat Gene Id :	291905
Rat Swiss Prot No :	Q2A121
Immunogen :	The antiserum was produced against synthesized peptide derived from human FTO. AA range:19-68
Specificity :	FTO Polyclonal Antibody detects endogenous levels of FTO protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 58kD

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],

Function : 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.,

Subcellular Location : 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). .

Expression : 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).

Products Images