



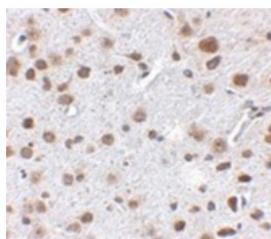
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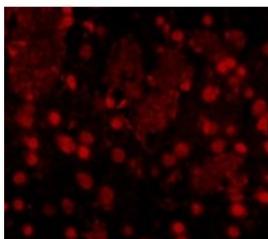
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FTO Antibody

CATALOG NUMBER: 5137



Western blot analysis of FTO in human uterus tissue lysate with FTO antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of FTO in mouse brain tissue with FTO antibody at 2.5 ug/mL.

Specifications

SPECIES REACTIVITY:	Human
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Rat: (100%), Mouse: (100%)
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	FTO antibody can be used for detection of FTO by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1317 - Human Uterus Tissue Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 57 kDa Observed: 55 kDa
IMMUNOGEN:	FTO antibody was raised against a 15 amino acid synthetic peptide from near the amino terminus of human FTO. The immunogen is located within the first 50 amino acids of FTO.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	FTO Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	FTO Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	FTO antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal

ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	FTO Antibody: ALKBH9, KIAA1752, Alpha-ketoglutarate-dependent dioxygenase FTO, Fat mass and obesity-associated protein
ACCESSION NO.:	Q9C0B1
PROTEIN GI NO.:	148841515
OFFICIAL SYMBOL:	FTO
GENE ID:	79068

Background

BACKGROUND:	FTO Antibody: Rising obesity rates are rapidly becoming a growing health concern in the developing world. The fat mass and obesity associated gene (FTO) is the first gene discovered to contribute to common forms of human obesity. FTO is a member of the non-heme dioxygenase superfamily, encoding a 2-oxoglutarate-dependent nucleic acid demethylase whose mRNA is widely expressed, especially in neurons of feeding-related nuclei of the brain. FTO mRNA in the arcuate nucleus in mice is up-regulated by feeding and down-regulated during fasting, although the opposite pattern has been observed in rats. At least four isoforms of FTO are known to exist.
REFERENCES:	<p>1) Scuteri A, Sanna S, Chen W-M, et al. Genome-wide association scan shows genetic variants in the FTO gene are associated with obesity-related traits. <i>PLoS Genet.</i>2007; 3:e115.</p> <p>2) Gerken T, Girard CA, Tung YCL, et al. The obesity-associated FTO gene encodes a 2-oxoglutarate-dependent nucleic acid demethylase. <i>Science</i>2007; 318:1469-72.</p> <p>3) Fredriksson R, Hagglund M, Olszewski PK, et al. The obesity gene, FTO, is of ancient origin, upregulated during food deprivation and expressed in neurons of feeding-related nuclei of the brain. <i>Endocrinology</i>2008; 149:2062-71.</p> <p>4) Stratigopoulos G, Padilla S, Leduc CA, et al. Regulation of FTO/FTM gene expression in mice and humans. <i>Am. J. Physiol. Regul. Integr. Comp. Physiol.</i>2008; 294:R1185-96.</p>

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January 12, 2018