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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-BH8

FTO Antibody

Overview

Description:	Anti-FTO (RABBIT) Antibody - 600-401-BH8
Item No.:	600-401-BH8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	FTO Antibody, ALKBH9, KIAA1752, Alpha-ketoglutarate-dependent dioxygenase FTO, Fat mass and obesity-associated protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	FTO
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-FTO antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the N-terminus of human FTO.

Purity/Specificity:	Anti-FTO Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with FTO from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9C0B1 • GeneID - 79068 • NCBI - NP_001073901.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-FTO Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 58 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

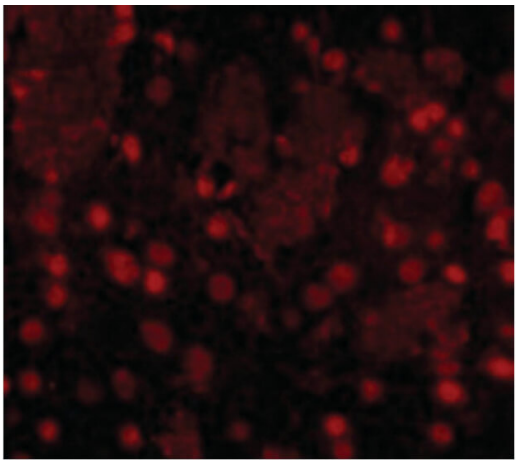
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

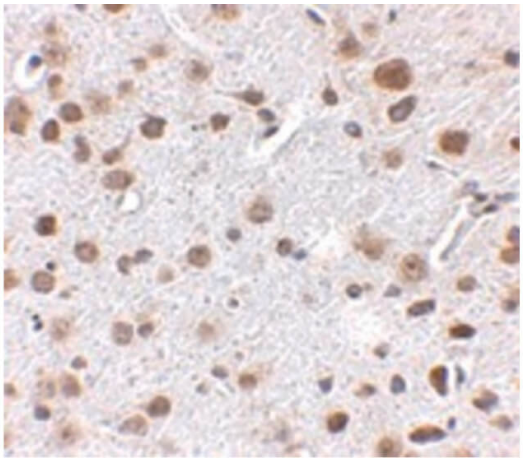
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

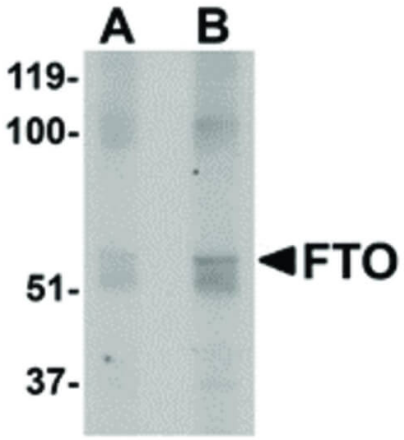
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of FTO antibody. Tissue: Mouse brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: FTO antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: FTO is nuclear. Staining: FTO as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of FTO antibody. Tissue: mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: FTO antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: FTO is nuclear. Staining: FTO as precipitated blue signal with brown nuclear counterstain.



Western Blot

Western Blot of FTO antibody. Lane 1: Human uterus tissue lysate with FTO antibody at 1 µg/mL. Lane 2: Human uterus tissue lysate with FTO antibody at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 58 kDa, 55 kDa for FTO. Other band(s): FTO splice variants and isoforms.

Disclaimer

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