Datasheet for ABIN7127502

Recombinant anti-FTO antibody

4 Images

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Overview

Quantity:	100 µL
Target:	FTO
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This FTO antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	A synthesized peptide derived from human FTO
Clone:	4G9
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	FTO
Alternative Name:	FTO (FTO Products)
Background:	Background: Dioxygenase that repairs alkylated DNA and RNA by oxidative demethylation. Has

Target Details

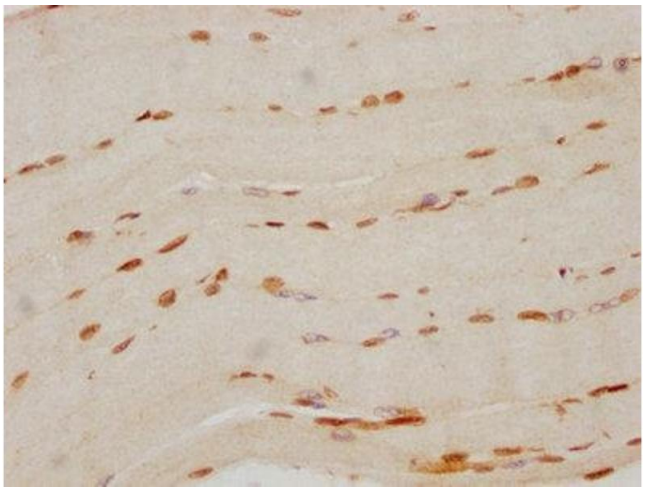
	highest activity towards single-stranded RNA containing 3-methyluracil, followed by single-stranded DNA containing 3-methylthymine. Has low demethylase activity towards single-stranded DNA containing 1-methyladenine or 3-methylcytosine (PubMed:18775698, PubMed:20376003). Specifically demethylates N(6)-methyladenosine (m6A) RNA, the most prevalent internal modification of messenger RNA (mRNA) in higher eukaryotes (PubMed:22002720, PubMed:26458103). Has no activity towards 1-methylguanine. Has no detectable activity towards double-stranded DNA. Requires molecular oxygen, alpha-ketoglutarate and iron. Contributes to the regulation of the global metabolic rate, energy expenditure and energy homeostasis. Contributes to the regulation of body size and body fat accumulation (PubMed:18775698, PubMed:20376003). In particular, it is involved in the regulation of thermogenesis and the control of adipocyte differentiation into brown or white fat cells (PubMed:26287746). Aliases: Alpha-ketoglutarate-dependent dioxygenase FTO, Fat mass and obesity-associated protein, FTO, KIAA1752
UniProt:	Q9C0B1

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200,
Restrictions:	For Research Use only

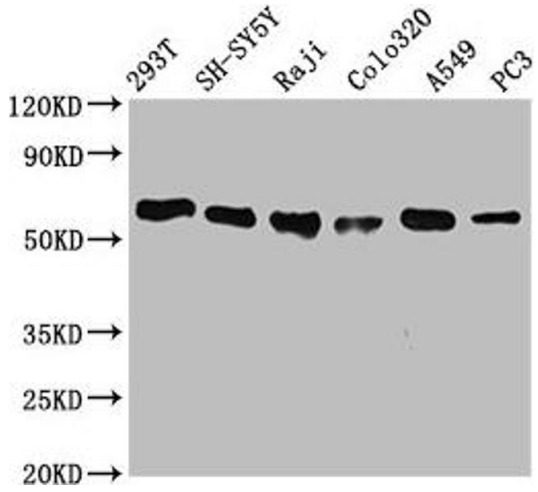
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



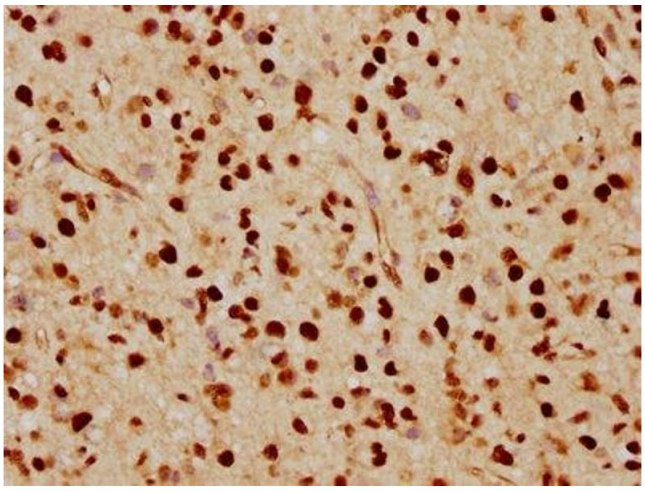
Immunohistochemistry

Image 1. IHC image of ABIN7127502 diluted at 1:70 and staining in paraffin-embedded human skeletal muscle tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Western Blotting

Image 2. Western Blot Positive WB detected in: 293T whole cell lysate, SH-SY5Y whole cell lysate, Raji whole cell lysate, Colo320 whole cell lysate, A549 whole cell lysate, PC3 whole cell lysate All lanes: FTO antibody at 0.7 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 59, 15, 7, 13 KDa Observed band size: 59 KDa



Immunohistochemistry

Image 3. IHC image of ABIN7127502 diluted at 1:70 and staining in paraffin-embedded human glioma cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Please check the product details page for more images. Overall 4 images are available for ABIN7127502.