

FTO Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51217

Product Information

Application	WB
Primary Accession	Q9C0B1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58 kDa

Additional Information

Other Names	Alpha-ketoglutarate-dependent dioxygenase FTO, 11411-, Fat mass and obesity-associated protein, FTO, KIAA1752
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human FTO. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Background

Dioxygenase that repairs alkylated DNA and RNA by oxidative demethylation. Has 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. Specifically demethylates N(6)-methyladenosine (m6A) RNA, the most prevalent internal modification of messenger RNA (mRNA) in higher eukaryotes. 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.

References

Nagase T.,et al.DNA Res. 7:347-355(2000).
Martin J.,et al.Nature 432:988-994(2004).
Dina C.,et al.Nat. Genet. 39:724-726(2007).

Frayling T.M.,et al.Science 316:889-894(2007).
Jia G.,et al.FEBS Lett. 582:3313-3319(2008).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.