

## Anti-Alpha-ketoglutarate-dependent dioxygenase FTO [5-2H10] Standard Size Ab02550-2.0

**Isotype and Format:** Mouse IgG2a, Kappa

**Clone Number:** 5-2H10

**Alternative Name(s) of Target:** FTO; Fat mass and obesity-associated protein; U6 small nuclear RNA (2'-O-methyladenosine-N(6)-)-demethylase FTO; U6 small nuclear RNA N(6)-methyladenosine-demethylase FTO; mRNA (2'-O-methyladenosine-N(6)-)-demethylase FTO; m6A(m)-demethylase FTO; mRNA N(6)-methyladenosine demethylase FTO; tRNA N1-methyl adenine demethylase FTO

**UniProt Accession Number of Target Protein:** Q9C0B1

**Published Application(s):** ICC, WB

**Published Species Reactivity:** Rat, Human, Mouse

**Immunogen:** This antigen was raised by immunizing a BALB/c mouse with the alpha-ketoglutarate-dependent dioxygenase FTO antigen.

**Specificity:** This antibody is specific for the alpha-ketoglutarate-dependent dioxygenase FTO. This protein is a RNA demethylase that mediates oxidative demethylation of different RNA species, such as mRNAs, tRNAs and snRNAs, and acts as a regulator of fat mass, adipogenesis and energy homeostasis. Specifically demethylates N6-methyladenosine (m6A) RNA, the most prevalent internal modification of messenger RNA (mRNA) in higher eukaryotes.

**Application Notes:** This antibody was used to assess the expression of the FTO protein in cell line 3T3-L1. The method used was a western blot (Jiao et al, 2016; pmid:26907332). Immunocytochemistry with this antibody was used for examination of FTO expression in HOC313, MDA-MB-231, SAS, HeLa, 293FT, and MKN45 cells. The experiment was preformed on normal cells and FTO knock-out cells (Hirayama et al, 2020; pmid:32268083).

**Antibody First Published in:** Jiao et al. The Fto Gene Regulates the Proliferation and Differentiation of Pre-Adipocytes in Vitro Nutrients. 2016 Feb 19;8(2):102. [PMID:26907332](#)

**Note on publication:** The potential role of Fto gene on the proliferation and differentiation of pre-adipocytes was investigated.

### Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:**

PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.