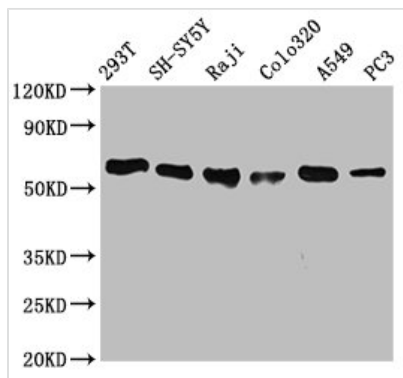




FTO Recombinant Monoclonal Antibody

| | |
|----------------------------|---|
| Product Code | CSB-RA880154A0HU |
| Abbreviation | Alpha-ketoglutarate-dependent dioxygenase FTO |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | Q9C0B1 |
| Immunogen | A synthesized peptide derived from human FTO |
| Species Reactivity | Human |
| Tested Applications | ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200 |
| Relevance | 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 (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). |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Alias | Alpha-ketoglutarate-dependent dioxygenase FTO, Fat mass and obesity-associated protein, FTO, KIAA1752 |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Neuroscience |
| Target Names | FTO |
| Clone No. | 4G9 |
| Image | |



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

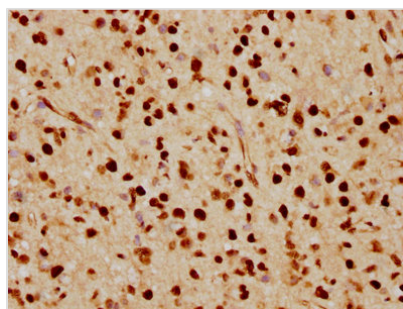
All lanes: FTO antibody at 0.7µg/ml

Secondary

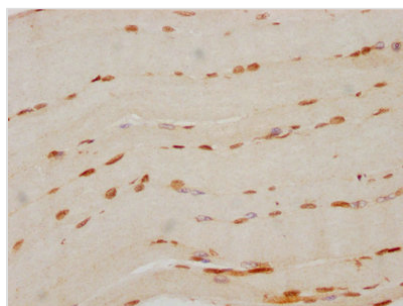
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 59, 15, 7, 13 KDa

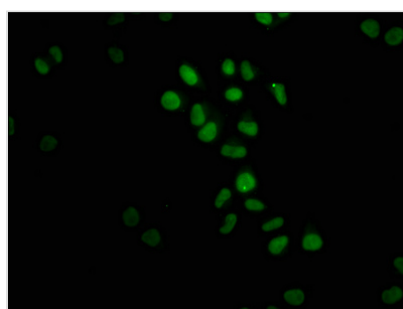
Observed band size: 59 KDa



IHC image of CSB-RA880154A0HU diluted at 1:70 and staining in paraffin-embedded human glioma cancer performed on a Leica Bond™ 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 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA880154A0HU diluted at 1:70 and staining in paraffin-embedded human skeletal muscle tissue performed on a Leica Bond™ 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 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of Hela cells with CSB-RA880154A0HU at 1:23, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Usage

For Research Use Only. Not for use in diagnostic or therapeutic procedures.