

OTUD1 (S-20): sc-243700

BACKGROUND

OTUD1 (ovarian tumor domain-containing protein 1), also known as DUBA7, is a 481 amino acid protein that contains one OTU domain. Like other deubiquitinating enzymes, OTUD1 is a protease that specifically cleaves ubiquitin linkages. The gene that encodes OTUD1 consists of over 3,000 bases and maps to human chromosome 10p12.2. Spanning almost 135 million base pairs and encoding nearly 1,200 genes, chromosome 10 makes up approximately 4.5% of the human genome. Several protein-coding genes, including those that encode chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, Cockayne syndrome, multiple endocrine neoplasia type 2 and porphyria. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10.

REFERENCES

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3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
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6. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. *Am. J. Surg. Pathol.* 32: 1258-1264.
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CHROMOSOMAL LOCATION

Genetic locus: OTUD1 (human) mapping to 10p12.2; Otud1 (mouse) mapping to 2 A3.

SOURCE

OTUD1 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OTUD1 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243700 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OTUD1 (S-20) is recommended for detection of OTUD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

OTUD1 (S-20) is also recommended for detection of OTUD1 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for OTUD1 siRNA (h): sc-90395, OTUD1 siRNA (m): sc-151939, OTUD1 shRNA Plasmid (h): sc-90395-SH, OTUD1 shRNA Plasmid (m): sc-151939-SH, OTUD1 shRNA (h) Lentiviral Particles: sc-90395-V and OTUD1 shRNA (m) Lentiviral Particles: sc-151939-V.

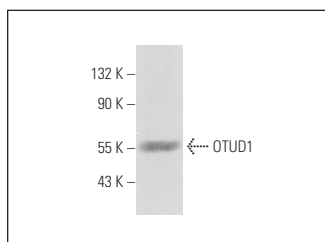
Molecular Weight of OTUD1: 51 kDa.

Positive Controls: mouse liver tissue extract: sc-2256.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



OTUD1 (S-20): sc-243700. Western blot analysis of OTUD1 expression in mouse liver tissue extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.