

OTUD4 (F-20): sc-79664

BACKGROUND

OTUD4 (OTU domain containing 4), also known as HIN1, DUBA6 or HSHIN1, is a 1,114 amino acid protein that exists as 2 alternatively spliced isoforms, the shorter of which is found specifically in HIV-1 infected cells. Encoded by a gene that maps to human chromosome 4, OTUD4 is expressed at high levels in lung, ovary, testis, liver, heart skeletal muscle, kidney and brain, with lower levels present in pancreas and spleen. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes, one of which is the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

- Raineri, I. and Senn, H.P. 1992. HIV-1 promotor insertion revealed by selective detection of chimeric provirus-host gene transcripts. *Nucleic Acids Res.* 20: 6261-6266.
- Kikuno, R., et al. 1999. Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 6: 197-205.
- Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
- Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. *Curr. Top. Dev. Biol.* 75: 25-71.
- Versteegh, F.G., et al. 2007. EvC Working Party. Growth hormone analysis and treatment in Ellis-van Creveld syndrome. *Am. J. Med. Genet. A* 143: 2113-2121.
- Doherty, E.S., et al. 2007. Muenke syndrome (FGFR3-related craniosynostosis): Expansion of the phenotype and review of the literature. *Am. J. Med. Genet. A* 143: 3204-3215.
- Stack, E.C., et al. 2007. Neuroprotective effects of synaptic modulation in Huntington's disease R6/2 mice. *J. Neurosci.* 27: 12908-12915.
- Online Mendelian Inheritance in Man, OMIM[™]. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611744. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: OTUD4 (human) mapping to 4q31.21; Otud4 (mouse) mapping to 8 C2.

SOURCE

OTUD4 (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OTUD4 of human origin.

STORAGE

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

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-79664 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OTUD4 (F-20) is recommended for detection of OTUD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

OTUD4 (F-20) is also recommended for detection of OTUD4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for OTUD4 siRNA (h): sc-76020, OTUD4 siRNA (m): sc-76021, OTUD4 shRNA Plasmid (h): sc-76020-SH, OTUD4 shRNA Plasmid (m): sc-76021-SH, OTUD4 shRNA (h) Lentiviral Particles: sc-76020-V and OTUD4 shRNA (m) Lentiviral Particles: sc-76021-V.

Molecular Weight of OTUD4: 124 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.