

OTUD7B (F-20): sc-102052

BACKGROUND

OTUD7B (OTU domain-containing protein 7B), also known as ZA20D1 or Cezanne, is an 843 amino acid protein that localizes to both the nucleus and the cytoplasm. Expressed in a variety of tissues, including liver, kidney, heart and immature B-cells, OTUD7B functions to hydrolyze branched and linear forms of polyubiquitin, specifically deubiquinating Lys 48- and Lys 63-linked polyubiquitin chains. Via its ability to deubiquitate target proteins, OTUD7B regulates the inflammatory response within the cell and may play a role in cell survival. More specifically, OTUD7B forms a negative feedback loop in pro-inflammatory signaling, thereby suppressing NFκB activity and helping to resolve inflammatory responses. OTUD7B contains one C-terminal A20-type zinc-finger, one OTU domain and one N-terminal TRAF-binding domain through which it conveys its deubiquitinating activity.

REFERENCES

- Heyninck, K. and Beyaert, R. 1999. The cytokine-inducible zinc-finger protein A20 inhibits IL-1-induced NFκB activation at the level of TRAF6. *FEBS Lett.* 442: 147-150.
- Evans, P.C., et al. 2001. Isolation and characterization of two novel A20-like proteins. *Biochem. J.* 357: 617-623.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611748. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Evans, P.C., et al. 2003. A novel type of deubiquitinating enzyme. *J. Biol. Chem.* 278: 23180-23186.
- Evans, P.C., et al. 2004. Zinc-finger protein A20, a regulator of inflammation and cell survival, has deubiquitinating activity. *Biochem. J.* 378: 727-734.
- La Starza, R., et al. 2007. A common 93-kb duplicated DNA sequence at 1q21.2 in acute lymphoblastic leukemia and Burkitt lymphoma. *Cancer Genet. Cytogenet.* 175: 73-76.
- Enesa, K., et al. 2008. NFκB suppression by the deubiquitinating enzyme Cezanne: a novel negative feedback loop in pro-inflammatory signaling. *J. Biol. Chem.* 283: 7036-7045.
- Enesa, K., et al. 2008. Hydrogen peroxide prolongs nuclear localization of NFκB in activated cells by suppressing negative regulatory mechanisms. *J. Biol. Chem.* 283: 18582-18590.

CHROMOSOMAL LOCATION

Genetic locus: OTUD7B (human) mapping to 1q21.2; Otud7b (mouse) mapping to 3 F2.1.

SOURCE

OTUD7B (F-20) is a purified rabbit polyclonal antibody raised against OTUD7B of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

OTUD7B (F-20) is recommended for detection of OTUD7B of mouse, rat, human and dog 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OTUD7B siRNA (h): sc-78957, OTUD7B siRNA (m): sc-151945, OTUD7B shRNA Plasmid (h): sc-78957-SH, OTUD7B shRNA Plasmid (m): sc-151945-SH, OTUD7B shRNA (h) Lentiviral Particles: sc-78957-V and OTUD7B shRNA (m) Lentiviral Particles: sc-151945-V.

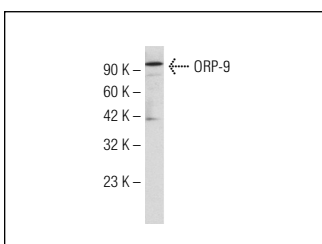
Molecular Weight of OTUD7B: 100 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or Daudi cell lysate: sc-2415.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



OTUD7B (F-20): sc-102052. Western blot analysis of OTUD7B expression in Jurkat whole cell lysate.

STORAGE

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

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **OTUD7B (H-4): sc-514402** or **OTUD7B (A-11): sc-514334**, our highly recommended monoclonal alternatives to OTUD7B (F-20).