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 deubiquinate 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


CHROMOSOMAL LOCATION

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

SOURCE

OTUD7B (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 769-788 near the C-terminus of OTUD7B of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-514402 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

OTUD7B (H-4) is recommended for detection of OTUD7B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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 and Lentiviral Particles: sc-78957-V and OTUD7B shRNA (m) Lentiviral Particles: sc-151945-V.

Molecular Weight of OTUD7B: 100 kDa.

Positive Controls: OTUD7B (h): 293T Lysate: sc-370269, RT-4 whole cell lysate: sc-364257 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Mounting Medium: sc-359850.

DATA

OTUD7B (H-4): sc-514402. Western blot analysis of OTUD7B expression in non-transfected 293T: sc-117752 (A), human OTUD7B transfected 293T: sc-370269 (B), Jurkat (C), MDA-MB-435 (D), RT-4 (E) and Hep G2 (F) whole cell lysates.

OTUD7B (H-4): sc-514402. Western blot analysis of OTUD7B expression in HEK293 (A), c4 (B), AT3B-1 (C) and F9 (D) whole cell lysates.

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.