

β-TrCP (H-85): sc-33213

BACKGROUND

β-TrCP (β-transducin repeats containing protein), also designated E3RS1kB or FWD1, and HOS (homologous to Slimb) are F-box proteins that function as substrate recognition subunits of ubiquitin ligases. HOS and β-TrCP differ in their amino-terminal regions, but exhibit high homology within the F-box and WD40 repeat-containing regions. β-TrCP mediates ubiquitin/proteasome-dependent degradation of CD4 and ubiquitination of various proteins including IκB and β-catenin. HOS has also been shown to regulate the degradation of IκB and β-catenin in a similar manner.

REFERENCES

- Hatakeyama, S., et al. 1990. Ubiquitin-dependent degradation of IκB-α is mediated by a ubiquitin ligase Skp1/Cul 1/F-box protein FWD1. *Proc. Natl. Acad. Sci. USA* 96: 3859-3863.
- Margottin, F., et al. 1998. A novel human WD protein, h-β-TrCP, that interacts with HIV-1 Vpu connects CD4 to the ER degradation pathway through an F-box motif. *Mol. Cell* 1: 565-574.

CHROMOSOMAL LOCATION

Genetic locus: BTRC (human) mapping to 10q24.32; Btrc (mouse) mapping to 19 C3.

SOURCE

β-TrCP (H-85) is a rabbit polyclonal antibody raised against amino acids 26-110 mapping near the N-terminus of β-TrCP of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

β-TrCP (H-85) is recommended for detection of β-TrCP isoforms 1 and 2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

β-TrCP (H-85) is also recommended for detection of β-TrCP isoforms 1 and 2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for β-TrCP siRNA (h): sc-37178, β-TrCP siRNA (m): sc-37179, β-TrCP shRNA Plasmid (h): sc-37178-SH, β-TrCP shRNA Plasmid (m): sc-37179-SH, β-TrCP shRNA (h) Lentiviral Particles: sc-37178-V and β-TrCP shRNA (m) Lentiviral Particles: sc-37179-V.

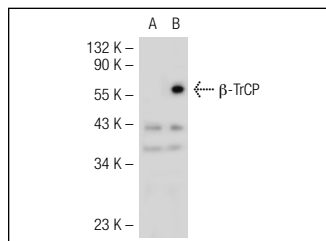
Molecular Weight of β-TrCP: 60 kDa.

Positive Controls: β-TrCP (m): 293T Lysate: sc-124272.

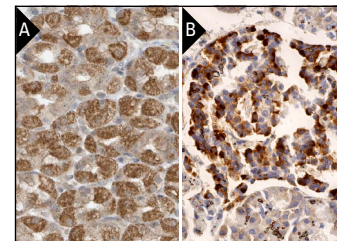
STORAGE

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

DATA



β-TrCP (H-85): sc-33213. Western blot analysis of β-TrCP expression in non-transfected: sc-117752 (A) and mouse β-TrCP transfected: sc-124272 (B) 293T whole cell lysates.



β-TrCP (H-85): sc-33213. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans (B).

SELECT PRODUCT CITATIONS

- Viñas-Castells, R., et al. 2010. The hypoxia-controlled FBXL14 ubiquitin ligase targets SNAIL1 for proteasome degradation. *J. Biol. Chem.* 285: 3794-3805.
- Liu, W.H. and Chang, L.S. 2011. Fas/FasL-dependent and -independent activation of caspase-8 in doxorubicin-treated human breast cancer MCF-7 cells: ADAM10 down-regulation activates Fas/FasL signaling pathway. *Int. J. Biochem. Cell Biol.* 43: 1708-1719.
- Liu, W.H. and Chang, L.S. 2012. Suppression of Akt/Foxp3-mediated miR-183 expression blocks Sp1-mediated ADAM17 expression and TNFα-mediated NFκB activation in piceatannol-treated human leukemia U937 cells. *Biochem. Pharmacol.* 84: 670-680.
- Rojo, A.I., et al. 2014. The PTEN/NRF2 Axis promotes human carcinogenesis. *Antioxid. Redox Signal.* 21: 2498-2514.

PROTOCOLS

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



Try **β-TrCP/HOS (F-10): sc-166492** or **β-TrCP (C-6): sc-390629**, our highly recommended monoclonal alternatives to β-TrCP (H-85).