

β-TrCP/HOS (F-10): sc-166492

BACKGROUND

β-tranducin repeats containing protein (β-TrCP), 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.

CHROMOSOMAL LOCATION

Genetic locus: BTRC (human) mapping to 10q24.32, FBXW11 (human) mapping to 5q35.1; Btrc (mouse) mapping to 19 C3, Fbxw11 (mouse) mapping to 11 A4.

SOURCE

β-TrCP/HOS (F-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 522-550 at the C-terminus of β-TrCP/HOS 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.

β-TrCP/HOS (F-10) is available conjugated to agarose (sc-166492 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166492 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166492 PE), fluorescein (sc-166492 FITC), Alexa Fluor® 488 (sc-166492 AF488), Alexa Fluor® 546 (sc-166492 AF546), Alexa Fluor® 594 (sc-166492 AF594) or Alexa Fluor® 647 (sc-166492 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166492 AF680) or Alexa Fluor® 790 (sc-166492 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166492 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

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

APPLICATIONS

β-TrCP/HOS (F-10) is recommended for detection of β-TrCP and HOS 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).

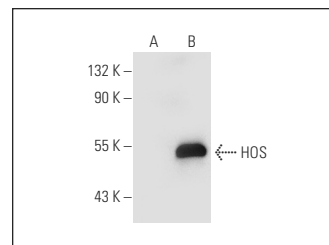
Molecular Weight of β-TrCP/HOS: 60 kDa.

Positive Controls: HOS (h): 293T Lysate: sc-113730 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



β-TrCP/HOS (F-10): sc-166492. Western blot analysis of HOS expression in non-transfected: sc-117752 (A) and human HOS transfected: sc-113730 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Tang, X., et al. 2015. CD166 positively regulates MCAM via inhibition to ubiquitin E3 ligases Smurf1 and β-TrCP through PI3K/AKT and c-Raf/MEK/ERK signaling in Bel-7402 hepatocellular carcinoma cells. *Cell. Signal.* 27: 1694-1702.
- Zhang, Y., et al. 2017. Reciprocal regulation between β-TrCP and Smurf1 suppresses proliferative capacity of liver cancer cells. *J. Cell. Physiol.* 232: 3347-3359.
- Zhang, X., et al. 2017. The essential role of YAP O-GlcNAcylation in high-glucose-stimulated liver tumorigenesis. *Nat. Commun.* 8: 15280.
- Li, J., et al. 2018. Decursin inhibits the growth of Hep G2 hepatocellular carcinoma cells via Hippo/YAP signaling pathway. *Phytother. Res.* 32: 2456-2465.
- Pai, V.C., et al. 2019. ASPM promotes prostate cancer stemness and progression by augmenting Wnt-Dvl-3-β-catenin signaling. *Oncogene* 38: 1340-1353.
- Jung, H.Y., et al. 2019. Apical-basal polarity inhibits epithelial-mesenchymal transition and tumour metastasis by PAR-complex-mediated SNAI1 degradation. *Nat. Cell Biol.* 21: 359-371.
- Hussain, M., et al. 2022. A small-molecule Skp1 inhibitor elicits cell death by p53-dependent mechanism. *iScience* 25: 104591.

STORAGE

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