

Ron β (E-3): sc-74588

BACKGROUND

Receptor protein tyrosine kinases (PTKs) have been classified into different subclasses on the basis of sequence similarity and distinct structural characteristics. The c-Met encoded receptor represents the initial member of one class of receptors characterized by a heterodimeric structure and a cysteine-rich extracellular domain. Ron, also designated macrophage-stimulating protein receptor (MSP receptor), p185-Ron, CD136 antigen or PTK8 represents a second member of this receptor class. The intracellular PTK domains of Ron and Met are highly similar (63% sequence identity) while the extracellular domains are less related (25% sequence identity) and both are rich in cysteine residues. Mature Ron receptor is comprised of a disulfide-linked heterodimer formed from an α chain (Ron α) and a β chain (Ron β). Proteolytic processing results in the separation of the N-terminal Ron α and C-terminal Ron β subunits.

REFERENCES

- Cooper, C.S., et al. 1986. Amplification and overexpression of the Met gene in spontaneously transformed NIH/3T3 mouse fibroblasts. *EMBO J.* 5: 2623-2628.
- Giordano, S., et al. 1988. p145, a protein with associated tyrosine kinase activity in a human gastric carcinoma cell line. *Mol. Cell. Biol.* 8: 3510-3517.
- Pawson, T. and Bernstein, A. 1991. Receptor tyrosine kinases: genetic evidence for their role in *Drosophila* and mouse development. *Trends Genet.* 6: 350-356.
- Bottaro, D.P., et al. 1991. Identification of the hepatocyte growth factor receptor as the c-Met proto-oncogene product. *Science* 251: 802-804.

CHROMOSOMAL LOCATION

Genetic locus: MST1R (human) mapping to 3p21.31.

SOURCE

Ron β (E-3) is a mouse monoclonal antibody raised against amino acids 531-690 of the Ron precursor of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ron β (E-3) is available conjugated to agarose (sc-74588 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74588 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74588 PE), fluorescein (sc-74588 FITC), Alexa Fluor[®] 488 (sc-74588 AF488), Alexa Fluor[®] 546 (sc-74588 AF546), Alexa Fluor[®] 594 (sc-74588 AF594) or Alexa Fluor[®] 647 (sc-74588 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-74588 AF680) or Alexa Fluor[®] 790 (sc-74588 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

Ron β (E-3) is recommended for detection of Ron β of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 Ron siRNA (h): sc-36434, Ron shRNA Plasmid (h): sc-36434-SH and Ron shRNA (h) Lentiviral Particles: sc-36434-V.

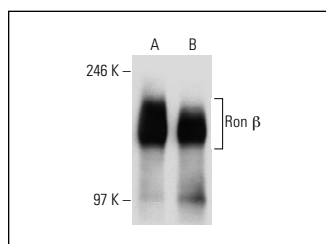
Molecular Weight of Ron β : 150 kDa.

Positive Controls: SW480 cell lysate: sc-2219, T-47D cell lysate: sc-2293 or HCT-116 whole cell lysate: sc-364175.

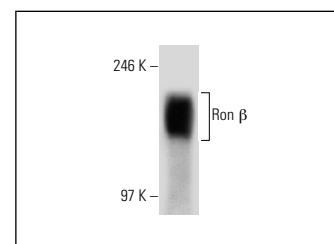
RECOMMENDED SUPPORT REAGENTS

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[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Ron β (E-3): sc-74588. Western blot analysis of Ron β expression in SW480 (A) and T-47D (B) whole cell lysates.



Ron β (E-3): sc-74588. Western blot analysis of Ron β expression in HCT 116 whole cell lysate.

SELECT PRODUCT CITATIONS

- Balmaña, M., et al. 2020. Analysis of the effect of increased α 2,3-sialylation on RTK activation in MKN45 gastric cancer spheroids treated with crizotinib. *Int. J. Mol. Sci.* 21: 722.
- Kato, A., et al. 2021. A potential signaling axis between Ron kinase receptor and hypoxia-inducible factor-1 α in pancreatic cancer. *Mol. Carcinog.* E-published.

STORAGE

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