SANTA CRUZ BIOTECHNOLOGY, INC.

Ron β (E-9): sc-374626

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Cooper, C.S., et al. 1986. Amplification and overexpression of the met gene in spontaneously transformed NIH3T3 mouse fibroblasts. EMBO J. 5: 2623-2628.
2. 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.

CHROMOSOMAL LOCATION

Genetic locus: MST1R (human) mapping to 3p21.31; Mst1r (mouse) mapping to 9 F1.

SOURCE

Ron β (E-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1371-1400 at the C-terminus of Ron β of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ron β (E-9) is available conjugated to agarose (sc-374626 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-374626 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374626 PE), fluorescein (sc-374626 FITC), Alexa Fluor® 488 (sc-374626 AF488), Alexa Fluor® 546 (sc-374626 AF546), Alexa Fluor® 594 (sc-374626 AF594) or Alexa Fluor® 647 (sc-374626 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374626 AF680) or Alexa Fluor® 790 (sc-374626 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374626 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

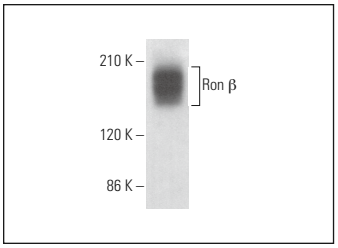
Ron β (E-9) is recommended for detection of Ron β of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ron siRNA (h): sc-36434, Ron siRNA (m): sc-36435, Ron shRNA Plasmid (h): sc-36434-SH, Ron shRNA Plasmid (m): sc-36435-SH, Ron shRNA (h) Lentiviral Particles: sc-36434-V and Ron shRNA (m) Lentiviral Particles: sc-36435-V.

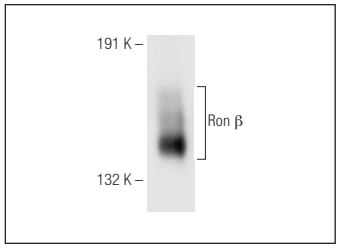
Molecular Weight of Ron β: 150 kDa.

Positive Controls: SW480 cell lysate: sc-2219, A-431 whole cell lysate: sc-2201 or ZR-75-1 cell lysate: sc-2241.

DATA



Ron β (E-9): sc-374626. Western blot analysis of Ron β expression in A-431 whole cell lysate.



Ron β (E-9): sc-374626. Western blot analysis of Ron β expression in ZR-75-1 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Chakedis, J., et al. 2016. A novel protein isoform of the Ron tyrosine kinase receptor transforms human pancreatic duct epithelial cells. Oncogene 35: 3249-3259.
2. Jeong, B.C., et al. 2020. Macrophage-stimulating protein enhances osteoblastic differentiation via the recepteur d'origine nantais receptor and extracellular signal-regulated kinase signaling pathway. J. Bone Metab. 27: 267-279.
3. Wang, L., et al. 2020. Multi-kinase targeted therapy as a promising treatment strategy for ovarian tumors expressing sfRon receptor. Genes Cancer 11: 106-121.
4. Huang, L., et al. 2021. Ron expression mediates lipopolysaccharide-mediated dendritic cell maturation via March-I. Front. Cell. Infect. Microbiol. 10: 606340.
5. Bourn, J.R., et al. 2021. Tumor cell intrinsic Ron signaling suppresses innate immune responses in breast cancer through inhibition of IRAK4 signaling. Cancer Lett. 503: 75-90.

RESEARCH USE

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