SANTA CRUZ BIOTECHNOLOGY, INC.

Ron β (H-160): sc-25781

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., Tempest, P.R., Beckman, M.P., Heldin, C.H. and Brookes, P. 1986. Amplification and overexpression of the Met gene in spontaneously transformed NIH/3T3 mouse fibroblasts. EMBO J. 5: 2623-2628.
2. Giordano, S., Di Renzo, M.F., Ferracini, R., Chiado-Piat, L. and Comoglio, P.M. 1988. p145, a protein with associated tyrosine kinase activity in a human gastric carcinoma cell line. Mol. Cell. Biol. 8: 3510-3517.
3. Pawson, T. and Bernstein, A. 1991. Receptor tyrosine kinases: genetic evidence for their role in *Drosophila* and mouse development. Trends Gen. 6: 350-356.
4. Bottaro, D.P., Rubin, J.S., Faletto, D.L., Chan A.M., Kmiecik, T.E., Vande Wounde, G.F. and Aaronson, S.A. 1991. Identification of the hepatocyte growth factor receptor as the c-Met proto-oncogene product. Science 251: 802-804.
5. Rong, S., Bodescot, M., Blair, D., Dunn, J., Nakamura, T., Mizuno, K., Park, M., Chan, A., Aaronson, S. and Vande Woude, G.F. 1992. Tumorigenicity of the Met proto-oncogene and the gene for hepatocyte growth factor. Mol. Cell. Biol. 12: 5152-5158.

CHROMOSOMAL LOCATION

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

SOURCE

Ron β (H-160) is a rabbit polyclonal antibody raised against amino acids 531-690 of the Ron precursor 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.

STORAGE

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

APPLICATIONS

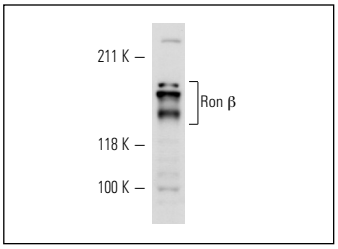
Ron β (H-160) is recommended for detection of Ron β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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).

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

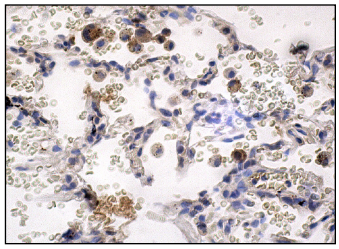
Molecular Weight of Ron β: 150 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, SW480 cell lysate: sc-2219 or Hep G2 cell lysate: sc-2227.

DATA



Ron β (H-160): sc-25781. Western blot analysis of Ron β expression in SW480 whole cell lysate.



Ron β (H-160): sc-25781. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic staining of macrophages.

SELECT PRODUCT CITATIONS

1. Eckerich, C., Schulte, A., Martens, T., Zapf, S., Westphal, M. and Lamszus, K. 2009. RON receptor tyrosine kinase in human gliomas: expression, function, and identification of a novel soluble splice variant. J. Neurochem. 109: 969-980.

RESEARCH USE

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

PROTOCOLS

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