SANTA CRUZ BIOTECHNOLOGY, INC.

Ron α (H-170): sc-20740

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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 NIH/3T3 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.
3. Pawson, T., et al. 1991. Receptor tyrosine kinases: genetic evidence for their role in *Drosophila* and mouse development. Trends Gen. 6: 350-356.
4. Bottaro, D.P., et al. 1991. Identification of the hepatocyte growth factor receptor as the c-Met proto-oncogene product. Science 251: 802-804.
5. Rong, S., et al. 1992. Tumorigenicity of the Met proto-oncogene and the gene for hepatocyte growth factor. Mol. Cell. Biol. 12: 5152-5158.
6. Ronsin, C., et al. 1993. A novel putative receptor protein tyrosine kinase of the met family. Oncogene 8: 1195-1202.

CHROMOSOMAL LOCATION

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

SOURCE

Ron α (H-170) is a rabbit polyclonal antibody raised against amino acids 1-170 mapping at the N-terminus of Ron α 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.

PROTOCOLS

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

APPLICATIONS

Ron α (H-170) is recommended for detection of Ron α of mouse 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) 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 α: 40 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Seiwert, T.Y., et al. 2009. The MET receptor tyrosine kinase is a potential novel therapeutic target for head and neck squamous cell carcinoma. Cancer Res. 69: 3021-3031.

RESEARCH USE

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