

p-Ron β (Tyr 1238/ Tyr 1239)-R: sc-22193-R

BACKGROUND

Ron, also designated STK in mice, is a transmembrane receptor tyrosine kinase that is a member of the Met family and displays 63% homology with Met. The gene encoding human Ron maps to chromosome 3p21 and is expressed as a glycosylated precursor, which is cleaved to produce a heterodimer of α and β disulfide-linked chains. Ron is expressed in several epithelial tissues, granulocytes and monocytes, and it is the membrane bound receptor for macrophage-stimulating protein (MSP), a multifunctional factor that regulates cell adhesion, motility, growth and survival. Binding of MSP to Ron stimulates tyrosine phosphorylation on Tyr 1238 and Tyr 1239. This phosphorylation leads to a upregulation of Ron catalytic activity and subsequent activation of downstream signaling molecules. In addition, Ron contains putative autophosphorylation sites on Tyr 1353 and Tyr 1360. Ron is thought to play a role in early embryonic development and in the inflammatory response.

REFERENCES

1. Ronsin, C., et al. 1993. A novel putative receptor protein tyrosine kinase of the Met family. *Oncogene* 8: 1195-1202.
2. Gaudino, G., et al. 1994. Ron is a heterodimeric tyrosine kinase receptor activated by the HGF homologue MSP. *EMBO J.* 13: 3524-3532.
3. Wang, M.H., et al. 1994. Identification of the Ron gene product as the receptor for the human macrophage stimulating protein. *Science* 266: 117-119.
4. Tamagnone, L. and Comoglio, P.M. 1997. Control of invasive growth by hepatocyte growth factor (HGF) and related scatter factors. *Cytokine Growth Factor Rev.* 8: 129-142.

CHROMOSOMAL LOCATION

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

SOURCE

p-Ron β (Tyr 1238/ Tyr 1239)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Tyr 1238 and Tyr 1239 of Ron β of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-22193 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

p-Ron β (Tyr 1238/ Tyr 1239)-R is recommended for detection of Tyr 1238 and Tyr 1239 dually phosphorylated Ron β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

p-Ron β (Tyr 1238/Tyr 1239)-R is also recommended for detection of correspondingly phosphorylated Tyr on Ron β in additional species, including equine, canine, bovine, porcine and avian.

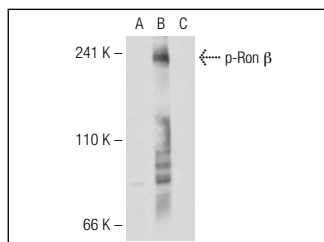
Suitable for use as control antibody for Ron siRNA (h): sc-36434, Ron siRNA (m): sc-36435, Ron shRNA Plasmid (h): sc-36434-SH, Ron shRNA Plasmid (m): sc-36435-SH, Ron shRNA (h) Lentiviral Particles: sc-36434-V and Ron shRNA (m) Lentiviral Particles: sc-36435-V.

Molecular Weight of p-Ron α chain: 35 kDa.

Molecular Weight of p-Ron β chain: 150 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or A-431 + pervanadate cell lysate: sc-24654.

DATA



p-Ron β (Tyr 1238/Tyr 1239)-R: sc-22193-R. Western blot analysis of Ron β phosphorylation in untreated (A), pervanadate treated (B) and pervanadate and lambda protein phosphatase treated (C) A-431 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Hsu, P.Y., et al. 2006. Collaboration of Ron and epidermal growth factor receptor in human bladder carcinogenesis. *J. Urol.* 176: 2262-2267.
2. Jiang, W.G., et al. 2010. The prostate transglutaminase, TGase-4, coordinates with the HGFL/MSP-RON system in stimulating the migration of prostate cancer cells. *Int. J. Oncol.* 37: 413-418.

PROTOCOLS

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