

p-Ron β (Tyr 1360): sc-16840

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 185 kDa heterodimer of 35 kDa (α) and 150 kDa (β) disulfide-linked chains. Ron is expressed in several epithelial tissues, granulocytes and monocytes and 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

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3. Wang, M.H., Ronsin, C., Gesnel, M.C., Coupey, L., Skeel, A., Leonard, E.J. and Breathnach, R. 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.
5. Muraoka, R.S., Sun, W.Y., Colbert, M.C., Waltz, S.E., Witte, D.P., Degen, J.L. and Friezner Degen, S.J. 1999. The Ron/STK receptor tyrosine kinase is essential for peri-implantation development in the mouse. *J. Clin. Invest.* 103: 1277-1285.

CHROMOSOMAL LOCATION

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

SOURCE

p-Ron β (Tyr 1360) is available as either goat (sc-16840) or rabbit (sc-16840-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing phosphorylated Tyr 1360 of Ron β of human origin.

STORAGE

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

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-16840 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Ron β (Tyr 1360) is recommended for detection of Tyr 1360 phosphorylated Ron β of 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).

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 p-Ron α chain: 35 kDa.

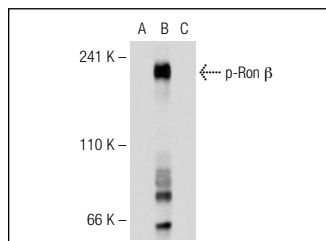
Molecular Weight of p-Ron β chain: 150 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



p-Ron β (Tyr 1360)-R: sc-16840-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.

RESEARCH USE

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