# SANTA CRUZ BIOTECHNOLOGY, INC.

# Ron α (N-20): sc-14627



# 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 cysteinerich 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  $\alpha$  chain (Ron  $\alpha$ ) and a  $\beta$  chain (Ron  $\beta$ ). Proteolytic processing results in the separation of the N-terminal Ron  $\alpha$  and C-terminal Ron  $\beta$  subunits.

# CHROMOSOMAL LOCATION

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

## SOURCE

Ron  $\alpha$  (N-20) is available as either goat (sc-14627) or rabbit (sc-14627-R) affinity purified polyclonal antibody raised against a peptide mapping near the N-terminus of Ron  $\alpha$  of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-14627 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **RESEARCH USE**

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

#### **APPLICATIONS**

Ron  $\alpha$  (N-20) is recommended for detection of Ron  $\alpha$  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)

Ron  $\alpha$  (N-20) is also recommended for detection of Ron  $\alpha$  in additional species, including equine, bovine and porcine.

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  $\alpha$ : 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: for goat primary antibody (sc-14627): use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), for rabbit primary antibody (sc-14627-R): 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: for goat primary antibody (sc-14627): 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, for rabbit primary antibody (sc-14627-R): use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat antirabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# DATA





Ron  $\alpha$  (N-20): sc-14627. Western blot analysis of Ron  $\alpha$  expression in COLO 320DM (A), SW480 (B), Hep G2 (C), U-937 (D) and RAW 264.7 (E) whole cell lysates and mouse lung tissue extract (F).

Ron (N-20): sc-14627. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

#### SELECT PRODUCT CITATIONS

- Bardella, C., et al. 2004. Truncated RON tyrosine kinase drives tumor cell progression and abrogates cell-cell adhesion through E-cadherin transcriptional repression. Cancer Res. 64: 5154-5161.
- McElwee, K.J., et al. 2004. Macrophage-stimulating protein promotes hair growth *ex vivo* and induces anagen from telogen stage hair follicles *in vivo*. J. Invest. Dermatol. 123: 34-40.

#### **STORAGE**

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

MONOS Satisfation Guaranteed Try Ron  $\alpha$  (C-5): sc-393523 or Ron  $\alpha$  (29): sc-136060, our highly recommended monoclonal alternatives to Ron  $\alpha$  (N-20).