

# Ron $\beta$ (A-8): sc-74587

## 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  $\alpha$  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.

## REFERENCES

- 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.
- 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.
- Pawson, T., et al. 1991. Receptor tyrosine kinases: genetic evidence for their role in *Drosophila* and mouse development. *Trends Gen* 6: 350-356.
- Bottaro, D.P., et al. 1991. Identification of the hepatocyte growth factor receptor as the c-Met proto-oncogene product. *Science* 251: 802-804.
- Rong, S., et al. 1992. Tumorigenicity of the Met proto-oncogene and the gene for hepatocyte growth factor. *Mol. Cell. Biol.* 12: 5152-5158.
- Ronsin, C., et al. 1993. A novel putative receptor protein tyrosine kinase of the Met family. *Oncogene* 8: 1195-1202.
- 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.
- Gaudino, G., et al. 1994. Ron is a heterodimeric tyrosine kinase receptor activated by the HGF homologue MSP. *EMBO J.* 13: 3524-3532.
- Wang, M.H., et al. 1997. Macrophage stimulating protein (MSP) binds to its receptor via the MSP  $\beta$  chain. *J. Biol. Chem.* 272: 16999-17004.

## CHROMOSOMAL LOCATION

Genetic locus: MST1R (human) mapping to 3p21.31.

## SOURCE

Ron  $\beta$  (A-8) is a mouse monoclonal antibody raised against amino acids 531-690 of the Ron precursor of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Ron  $\beta$  (A-8) is recommended for detection of Ron  $\beta$  of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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.

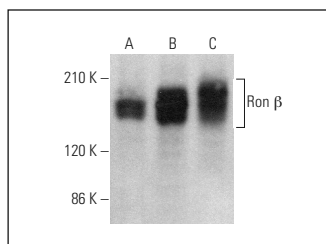
Molecular Weight of Ron  $\beta$ : 150 kDa.

Positive Controls: SW480 cell lysate: sc-2219, T-47D cell lysate: sc-2293 or A-431 whole cell lysate: sc-2201.

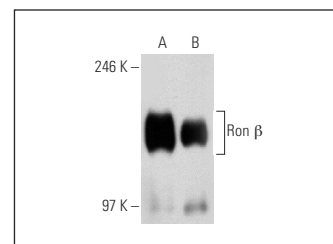
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Ron  $\beta$  (A-8): sc-74587. Western blot analysis of Ron  $\beta$  expression in SW480 (A), COLO 205 (B) and A-431 (C) whole cell lysates.



Ron  $\beta$  (A-8): sc-74587. Western blot analysis of Ron  $\beta$  expression in SW480 (A) and T-47D (B) whole cell lysates.

## 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.



See **Ron  $\beta$  (E-3): sc-74588** for Ron  $\beta$  antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.