

### **RON Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7674c

## Specification

# **RON Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>004912</u> Human Rabbit Polyclonal Rabbit IgG 22-51

### **RON Antibody - Additional Information**

### Gene ID 4486

### **Other Names**

Macrophage-stimulating protein receptor, MSP receptor, CDw136, Protein-tyrosine kinase 8, p185-Ron, CD136, Macrophage-stimulating protein receptor alpha chain, Macrophage-stimulating protein receptor beta chain, MST1R, PTK8, RON

#### Target/Specificity

This RON antibody is generated from rabbits immunized with two KLH conjugated synthetic peptides between 22-51 amino and 1370-1400 acids from the N-terminal and C-terminal regions of human RON.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

RON Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **RON Antibody - Protein Information**

Name MST1R

Synonyms PTK8, RON



**Function** Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to MST1 ligand. Regulates many physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces autophosphorylation of RON on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with the PI3-kinase subunit PIK3R1, PLCG1 or the adapter GAB1. Recruitment of these downstream effectors by RON leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLCgamma-PKC. RON signaling activates the wound healing response by promoting epithelial cell migration, proliferation as well as survival at the wound site. Also plays a role in the innate immune response by regulating the migration and phagocytic activity of macrophages. Alternatively, RON can also promote signals such as cell migration and proliferation in response to growth factors other than MST1 ligand.

**Cellular Location** Membrane; Single-pass type I membrane protein.

#### **Tissue Location**

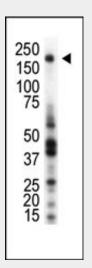
Expressed in colon, skin, lung and bone marrow.

### **RON Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

## **RON Antibody - Images**



Western blot analysis of anti-RON Pab (Cat. #AP7674c) in THP1 cell lysate. RON (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

#### **RON Antibody - Background**



Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

# **RON Antibody - References**

Maggiora, P., et al., Exp. Cell Res. 288(2):382-389 (2003). Santoro, M.M., et al., Dev. Cell 5(2):257-271 (2003). Penengo, L., et al., Oncogene 22(24):3669-3679 (2003). Zhou, Y.Q., et al., Oncogene 22(2):186-197 (2003). Danilkovitch-Miagkova, A., et al., Proc. Natl. Acad. Sci. U.S.A. 100(8):4580-4585 (2003). **RON Antibody - Citations** 

• <u>Transactivation of RON receptor tyrosine kinase by interaction with PDGF receptor beta</u> <u>during steady-state growth of human mesangial cells.</u>