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RON Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7674c

Product Information

Application	WB, E
Primary Accession	Q04912
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	152241
Antigen Region	22-51

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 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
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.

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.

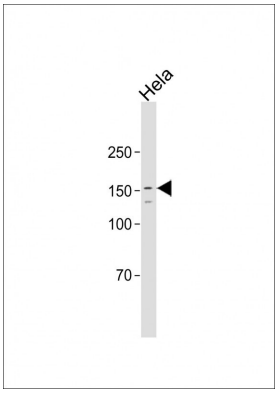
Background

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).

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).

Images



All lanes: Anti-RON Antibody at 1:500 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 152 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.