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RON Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1210a

Product Information

Application	WB, E
Primary Accession	Q04912
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1B5A9
Isotype	IgG1
Calculated MW	152241
Description	RON (MST1R): macrophage stimulating 1 receptor (c-met-related tyrosine kinase). RON is a receptor tyrosine kinase that is translated as a single polypeptide and then proteolytically cleaved to yield a mature heterodimer consisting of an extracellular 35 kDa α chain disulfide-linked to a membrane-spanning 150 kDa β chain.
Immunogen	Purified recombinant fragment of human RON (aa210-320) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	4486
Other Names	Macrophage-stimulating protein receptor, MSP receptor, 2.7.10.1, CDw136, Protein-tyrosine kinase 8, p185-Ron, CD136, Macrophage-stimulating protein receptor alpha chain, Macrophage-stimulating protein receptor beta chain, MST1R, PTK8, RON
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. 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.

References

1. Clin Cancer Res. 2005 Mar 15;11(6):2222-8. 2. Am J Respir Cell Mol Biol. 2006 Jan;34(1):15-27. 3. Carcinogenesis. 2008 Mar;29(3):552-9.

Images

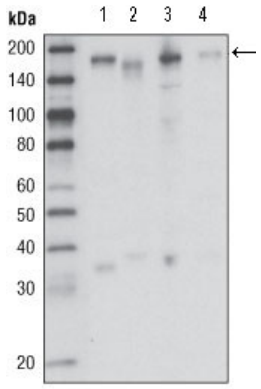


Figure 1: Western blot analysis using RON mouse mAb against HCC827 (1), HT-29 (2), HCT-116 (3) and BxPC-3 (4) cell lysate.

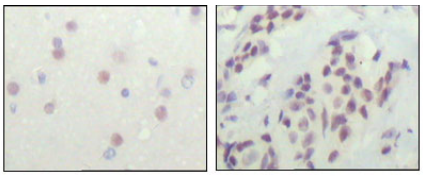


Figure 2: Immunohistochemical analysis of paraffin-embedded human cerebra (left) and breast carcinoma tissue (right), showing nuclear location with DAB staining using NCOR1 mouse mAb.

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