

DESCRIPTION

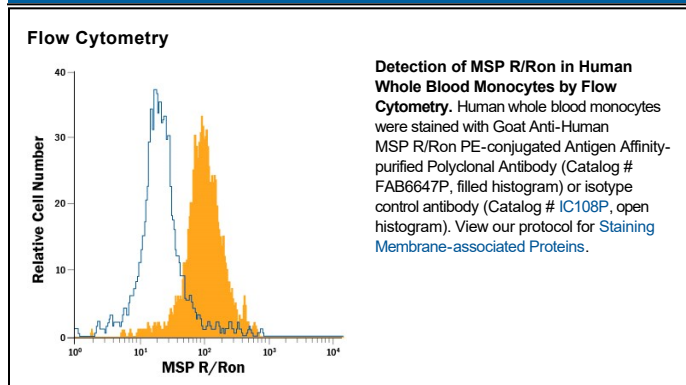
Species Reactivity	Human
Specificity	Detects human MSP R/Ron in direct ELISAs and Western blots. In these formats, approximately 25% cross-reactivity with recombinant mouse MSP R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MSP R/Ron Glu25-Ser956 Accession # Q04912
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μ L/ 10^6 cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

RON (Recepteur d'Origine Nantais [Receptor originating (or discovered) in Nantes (France)]; also known as MSP-R, PTK8 and MST1R) is a 180-190 kDa member of the tyrosine kinase family, protein kinase superfamily of molecules. Human mature RON is a type I transmembrane heterodimeric glycoprotein that arises from the proteolytic cleavage of a single chain proform 1376 amino acids (aa) in length. Posttranslational processing generates a 35-40 kDa a-chain (aa 25-304) coupled to a 145-150 kDa b-chain (aa 310-1400). The chains are disulfide-linked, and the transmembrane segment appears over aa 958-978. Multiple cell types are known to express RON, and these include osteoclasts, TrkA+ dorsal root ganglia neurons, macrophages, keratinized and nonkeratinized stratified squamous epithelium, intestinal Paneth cells, renal proximal tubule and mesangial cells, monocytes, neutrophils and mammary epithelium. On the cell surface, RON serves as a receptor for MSP, a 78-80 kDa soluble molecule related to HGF. Ligand binding initiates homodimerization and receptor signaling. In addition, RON is also known to heterodimerize with multiple integral membrane proteins, either individually or as part of a complex. Proteins identified to date include b1 integrins, c-MET/HGFR, E-Cadherin, the bc-chain for IL-3, EPO-R, EGFR, IGF-1R, Plexins B1 and B3, and CD44v6. RON may also be found intracellularly, where it interacts with either the androgen receptor or EGFR in the cytoplasm, or in the nucleus, where it acts as a transcription factor coupled to HIF-1a and regulates c-Jun, Bcl-2 and c-FLIP expression. There are about a dozen alternative splice forms for RON, some soluble, while others are transmembrane, and either constitutively active or biochemically inert. They hold the potential to interact with full-length RON and impact its signaling capabilities. Reflecting the diverse nature of RON-expressing cells, RON has been found to generate multiple outcomes, including the promotion of epithelial-to-mesenchymal transitions, the maintenance of M2 macrophage phenotypes, and the initiation of keratinocyte proliferation and migration. Over aa 25-956, human and mouse RON share 76% aa sequence identity.