

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-20 R β in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant human IL-20 R β is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-20 R β Asp14-Asn215 Accession # NP_001032323
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.

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. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

IL-20 receptor beta (IL-20 R β), also known as IL-20 R2, is a type I transmembrane glycoprotein in the class II cytokine receptor family. These receptors are characterized by tandem fibronectin type III domains in their extracellular region and the lack of a WSXWS motif (1). Class II cytokine receptors form heterodimeric signaling receptor complexes that mediate class II cytokine signals. Subunits of the different receptor complexes are shared and serve multiple functions (1). Based on the structure of the human receptor, mouse IL-20 R β should contain a 202 amino acid (aa) extracellular domain (ECD) with two fibronectin type III domains, a 16 aa transmembrane segment, and a 44 aa cytoplasmic domain (2). Within the ECD, mouse IL-20 R β will share 81% aa sequence identity with human IL-20 R β . It shares 18-29% aa sequence identity with the mouse class II cytokine receptors IFN- α R1, IFN- α R2, IFN- γ R1, IFN- γ R2, IL-10 R α , IL-10 R β , IL-20 R α , IL-22BP, IL-22 R α , IL-28 R, and tissue factor. IL-20 R β is generally expressed in psoriatic skin (keratinocytes and select endothelium), rheumatoid arthritis synovial membranes, and hepatocytes of LPS-treated mice, and it contributes to the local inflammatory reaction (3-6). IL-20 R β heterodimerizes with IL-20 R α to form the receptor complex that mediates IL-19, IL-20, and IL-24 signals (3, 7-10). It also heterodimerizes with IL-22 R to form the functional receptor complex for IL-20 and IL-24 (7-9). Binding of these IL-10 family class II cytokines to their receptors induces activation of the JAK-STAT signal transduction pathway.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.