

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 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

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