

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-20 R β in direct ELISAs and Western blots. In direct ELISAs, approximately 60% cross-reactivity with recombinant mouse IL-20 R β is observed and less than 2% cross-reactivity with recombinant human (rh) IL-20 R α , rhIL-10 R β , rhIFN- γ R1, and rhIFN- γ R2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-20 R β Asp30-Ala230 Accession # Q6UXL0
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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
Western Blot	0.1 μ g/mL	Recombinant Human IL-20 R β Fc Chimera (Catalog # 1788-IR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IL-20 receptor beta (IL-20 R β), also known as IL-20 R2, is a 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). Human IL-20 R β consists of a 204 aa extracellular domain (ECD) with two fibronectin type III domains, a 21 aa transmembrane segment, and a 57 aa cytoplasmic domain (2). Within the ECD, human IL-20 R β shares 81% aa sequence identity with mouse IL-20 R β . It shares 15%-28% aa sequence identity with the human 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. Strong IL-20 R β expression is normally restricted to skin and testis (3). IL-20 R β is also expressed in psoriatic skin, 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.

References:

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