Human IL-20 Rα Antibody

Monoclonal Mouse IgG_1 Clone # 173707

Catalog Number: MAB11761

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-20 Rα in direct ELISAs and Western blots. In direct ELISAs and Western blots, 100% cross-reactivity with recombinant mouse (rm) IL-20 Rα is observed and no cross-reactivity with rmIFN-α/β R2, recombinant human (rh) IFN-γ R1, rhIFN-γ R2, rhIL-10 Rβ, or rhIL-20 Rβ is observed.
Source	Monoclonal Mouse IgG_1 Clone # 173707
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-20 Rα Val30-Lys250 Accession # Q9UHF4
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry

IL-20 Rα in Human Skin.
IL-20 Rα was detected in immersion fixed paraffin-embedded sections of human skin using 8 µg/mL Mouse Anti-Human IL-20 Rα Monoclonal Antibody (Catalog # MAB11761) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counter-stained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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.

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BACKGROUND

IL-20 receptor alpha (IL-20 Rα), also named IL-20 R1, CRF2-8, and ZCYTOR7, belongs to the class II cytokine receptor family, which includes 12 members. These receptors are characterized by the patterns of conserved amino acid (aa) residues in their extracellular domains, which are composed of tandem fibronectin type III domains (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).

The gene for human IL-20 Rα is mapped to chromosome 6 and encodes a 553 aa glycoprotein with a 29 aa signal peptide, a 221 aa extracellular domain, a 24 aa transmembrane region and a 279 aa intracellular domain (2). IL-20 Rα is widely expressed and is detected at high levels in multiple tissues including skin, testis, heart, placenta, salivary gland and prostate gland (1). The expression of IL-20 Rα, together with that of IL-20 Rβ, is upregulated in psoriatic skin lesions on keratinocytes, immune cells, and endothelial cells (1, 2).

IL-20 Rα heterodimerizes with IL-20 Rβ to form the functional receptor that mediates IL-19, IL-20 and IL-24 signals (3, 4). IL-20 Rα also heterodimerizes with IL-10 Rβ to form the functional receptor complex for IL-26 (5). Binding of these IL-10 family class II cytokines to their functional receptors induces activation of the JAK-STAT signal transduction pathway. At low ligand concentrations, STAT3 has been shown to be the predominant STAT proteins activated through either complexes (3-5).

References:

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