# Human IL-20 Rα PE-conjugated Antibody

Monoclonal Mouse $IgG_1$ Clone # 173714

Catalog Number: FAB11762P

100 TESTS

## DESCRIPTION

| | |
|---|---|
| **Species Reactivity** | Human |
| **Specificity** | Detects human IL-20 Rα in direct ELISAs and Western blots. In Western blots, approximately 5–15% cross–reactivity with recombinant human (rh) IFN-γ R2, rhIL-10 R, rhIL-10 Rβ, rhIL-20 Rβ, and rhIL-22 BP is observed and no cross-reactivity with rhIFN-γ RI, recombinant mouse IL–20 Rα, or rhIL–22 R is observed. |
| **Source** | Monoclonal Mouse $IgG_1$ Clone # 173714 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | Mouse myeloma cell line NS0-derived recombinant human IL-20 Rα<br>Val30-Lys250<br>Accession # Q9UHF4 |
| **Conjugate** | Phycoerythrin<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 565-605 nm |
| **Formulation** | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*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. |

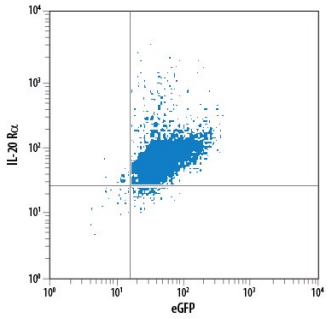
## APPLICATIONS

**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 µL/$10^6$ cells | See Below |

## DATA

### Flow Cytometry




**Detection of IL-20 Rα in BaF3 Mouse Cell Line Transfected with Human IL-20 Rα and eGFP by Flow Cytometry.** BaF3 mouse pro-B cell line transfected with human IL-20 Rα and eGFP was stained with Mouse Anti-Human IL-20 Rα PE-conjugated Monoclonal Antibody (Catalog # FAB11762P). Quadrant markers were set based on control antibody staining (Catalog # IC002P). View our protocol for Staining Membrane-associated Proteins.

## PREPARATION AND STORAGE

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| **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.**<br>• 12 months from date of receipt, 2 to 8 °C as supplied. |

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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:**

1. Kotenko, S.V. (2003) Cytokine & Growth Factor Reviews **13**:223.
2. Xie, M.H. *et al.* (2000) J. Biol. Chem. **275**:31335.
3. Dumoutier, L. *et al.* (2001) J. Immunol. **167**:3534.
4. Parrish-Novak, J. *et al.* (2002) J. Biol. Chem. **277**:47517s.
5. Sheikh. F. *et al.* (2004) J. Immunol. **172**:2006.