Human IL-13 Rα2 Fluorescein-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB614F
100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-13 Rα2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant mouse IL-13 Rα2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL−13 Rα2 Cys22-Leu342 Accession # Q14627
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

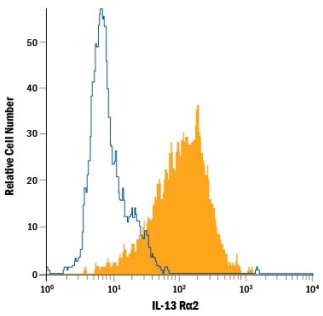
APPLICATIONS

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-13 Rα2 in A375 Human Cell Line by Flow Cytometry. A375 human melanoma cell line was stained with Goat Anti-Human IL-13 Rα2 Fluorescein-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB614F, filled histogram) or isotype control antibody (Catalog # IC108F, open histogram). View our protocol for Staining Membrane-associated Proteins.

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

Two type1 membrane proteins belonging to the Hemopoietin Receptor family have been cloned and shown to bind IL-13 with differing affinities. The lower affinity IL-13 binding protein, previously designated IL-13 Rα, IL-13 Rα' or NR4, is now referred to as IL-13 Rα1. The high affinity IL-13 binding protein, previously also designated IL-13 R or IL-13 Rα', is now referred to as IL-13 Rα2. Human IL-13 Rα2 was originally cloned from the Caki-1 human renal carcinoma cell line. The IL-13 Rα2 cDNA encodes a 380 amino acid (aa) residue precursor protein with a putative 26 aa residue signal peptide, a 317 residue extracellular domain, a 20 aa residue transmembrane region and a 17 aa residue cytoplasmic tail. Human and mouse IL-13 Rα2 share 59% aa sequence identity. The extracellular domain of IL-13 Rα2 is also closely related to that of IL-13 Rα1. However, the 17 aa residue cytoplasmic domain of IL-13 Rα2 is much shorter than that of IL-13 Rα1, suggesting that the two receptors are functionally distinct. IL-13 Rα1 has been shown to combine with the IL-4 R to form a high-affinity receptor complex capable of transducing an IL−13−dependent proliferative signal. The role of IL-13 Rα2 in IL-13 signaling remains to be elucidated. The amino-terminal 27 aa residues of the human and mouse IL−13 Rα2 are nearly identical to that of a soluble mouse IL-13 binding protein purified from mouse serum and urine.

References:

1. Caput, D. *et al.* (1996) J. Biol. Chem. **271**:16921.
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3. Aman, M.J. *et al.* (1996) J. Biol. Chem. **271**:29265.
4. Hilton, D.J. *et al.* (1996) Proc. Natl. Acad. Sci. USA **93**:497.
5. Zhang, J.G. *et al.* (1997) J. Biol. Chem. **272**:9474.