

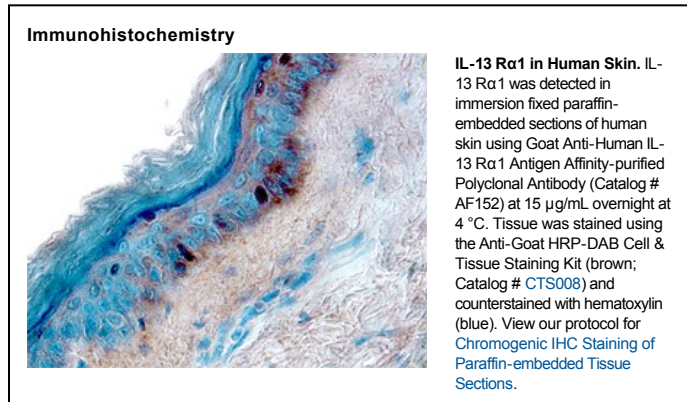
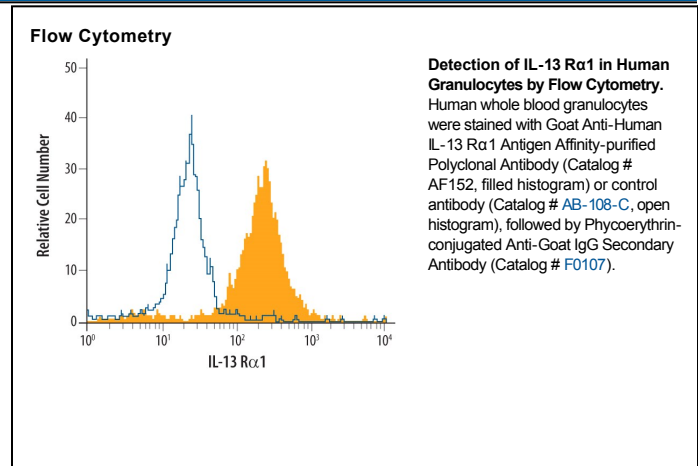
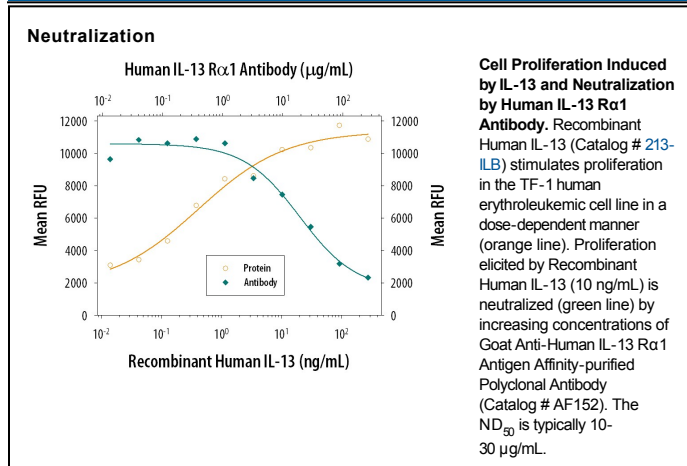
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human IL-13 R α 1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) IL-13 R α 2, recombinant mouse IL-13 R α 1, rhIL-5 R α , rhIL-5 R β , rhIL-4 R, and rhIL-9 R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-13 R α 1 Ala27-Thr343 (Thr130Ile) Accession # Q5JSL4
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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
Western Blot	0.1 μ g/mL	Recombinant Human IL-13 R α 1 Fc Chimera (Catalog # 146-IR)
Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
Immunohistochemistry	5-15 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Neutralization	Measured by its ability to neutralize IL-13-induced proliferation in the TF-1 human erythroleukemic cell line. Kitamura, T. <i>et al.</i> (1989) <i>J. Cell Physiol.</i> 140 :323. The Neutralization Dose (ND ₅₀) is typically 10-30 μ g/mL in the presence of 10 ng/mL Recombinant Human IL-13.	

DATA



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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Two type 1 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 R α , IL-13 R α' or NR4, is now referred to as IL-13 R α 1. The high-affinity IL-13 binding protein, previously also designated IL-13 R or IL-13 R α' , is now referred to as IL-13 R α 2. The human IL-13 R α 1 was originally cloned based on sequence homology to the mouse IL-13 R α 1. The IL-13 R α 1 cDNA encodes a 427 amino acid (aa) residue precursor protein with a putative 21 aa residue signal peptide, a 324 aa residue extracellular domain, a 23 aa residue transmembrane region and a 59 aa residue cytoplasmic tail. Human and mouse IL-13 R α 1 share 76% aa sequence identity. The extracellular domain of IL-13 R α 1 is also closely related to that of IL-13 R α 2. IL-13 R α 1 has been shown to combine with the IL-4 R α to form a high-affinity receptor complex capable of transducing an IL-13-dependent proliferative signal. The role of IL-13 R α 2 in IL-13 signaling remains to be elucidated.

References:

1. Caput, D. *et al.* (1996) J. Biol. Chem. **271**:16921.
2. Donaldson, D.D. *et al.* (1998) J. Immunol. **161**:2317.
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.