

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-13 R $\alpha$ 2 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant mouse IL-13 R $\alpha$ 2 is observed and less than 1% cross-reactivity with recombinant human IL-13 R $\alpha$ 1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human IL-13 R $\alpha$ 2 Cys22-Leu342 Accession # Q14627
<b>Conjugate</b>	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *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.

<b>CyTOF-ready</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Blockade of Receptor-ligand Interaction</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Flow Cytometry</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	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 R $\alpha$ , IL-13 R $\alpha^1$  or NR4, is now referred to as IL-13 R $\alpha$ 1. The high affinity IL-13 binding protein, previously also designated IL-13 R or IL-13 R $\alpha^2$ , is now referred to as IL-13 R $\alpha$ 2. Human IL-13 R $\alpha$ 2 was originally cloned from the Caki-1 human renal carcinoma cell line. The IL-13 R $\alpha$ 2 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 R $\alpha$ 2 share 59% aa sequence identity. The extracellular domain of IL-13 R $\alpha$ 2 is also closely related to that of IL-13 R $\alpha$ 1. However, the 17 aa residue cytoplasmic domain of IL-13 R $\alpha$ 2 is much shorter than that of IL-13 R $\alpha$ 1, suggesting that the two receptors are functionally distinct. IL-13 R $\alpha$ 1 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 R $\alpha$ 2 in IL-13 signaling remains to be elucidated. The amino-terminal 27 aa residues of the human and mouse IL-13 R $\alpha$ 2 are nearly identical to that of a soluble mouse IL-13 binding protein purified from mouse serum and urine.

#### PRODUCT SPECIFIC NOTICES

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