

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-11 R α in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with rmIL-11 R α or recombinant human IL-6 R α is observed. In Western blots, 25% cross-reactivity with recombinant mouse (rm) IL-11 R α is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 473143
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-11 R α Cys26-Val363 Accession # Q14626
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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

Human interleukin 11 receptor alpha (IL-11 R α) is 150 kDa type I transmembrane protein in the hematopoietin cytokine receptor family that was cloned on the basis of its conserved WSXWS motif. IL-11 R α cDNA encodes a 422 amino acid (aa) residue precursor type I membrane protein, containing a signal peptide followed by extracellular (ECD), transmembrane and cytoplasmic domains. The extracellular region which is closely related to that of IL-6 R α and CNTF R α contains an immunoglobulin-like domain and two fibronectin-type III-like domains. Within the ECD, human IL-11 R α shares 85% and 83% aa sequence identity with mouse and rat IL-11 R α , respectively (1-3). Alternate splicing generates an isoform of human IL-11 R α which lacks the cytoplasmic domain. By itself, IL-11 R α binds IL-11 with low affinity. IL-11 R α , together with gp130, forms a functional high-affinity receptor complex for IL-11. The expression of IL-11 R α has been detected in all adult tissues examined (lung, stomach, intestine), during embryonic development and in totipotent and differentiating embryonic stem cells. Recombinant soluble IL-11 R α has been shown to mediate IL-11 responsiveness in cells expressing the gp130 molecule. In cells expressing transmembrane IL-11 R α and gp130, soluble IL-11 R α has been shown to act as an IL-11 antagonist (3-6).

PRODUCT SPECIFIC NOTICES

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