



# Interleukin 3 Receptor alpha (IL-3RA, IL-3R alpha, IL-3R, IL3RAX, IL3RX, IL3RAY, IL3RY, CD123, MGC34174)

## Catalog number

I7663-47A

## Supplier

United States Biological

IL3RA (CD123) is a member of the immunoglobulin superfamily that is expressed on hematopoietic progenitors, basophils, mast cells, and megakaryocytes. This transmembrane glycoprotein can bind IL3 with low affinity but cannot transduce signals without association with additional protein partners. CD123 can complex with either common beta chain (CDw131) or the IL3RB chain to form high affinity heterodimeric IL3 receptors. CDw131 can complex with the Alpha subunits of the mouse IL3R, IL5R and GMCSFR to form high affinity receptors, while the IL3RB subunit is specific for IL3 but binds with low affinity. IL3 binding to the receptor complex can induce proliferation and differentiation of hematopoietic cells. It is present in Hematopoietic progenitors, basophils, mast cells and megakaryocytes.

## Applications

Suitable for use in Flow Cytometry, Western Blot and Immunohistochemistry. Other applications not tested.

## Recommended Dilutions

Flow Cytometry (Intracellular): 1:10-1:1000. Use 1µg to label 1x10<sup>6</sup> cells in 100µl  
Western Blot: 1:100-1:2000. Detects a band at ~70kD  
Immunohistochemistry (Frozen): 1:10-1:500  
Optimal dilutions to be determined by the researcher.

## Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

## Immunogen

IL3R transfected COS cells. Cellular Localization: Type I membrane protein

## Formulation

Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide.

## Purity

Purified by Protein G affinity chromatography.

## Specificity

Recognizes human Interleukin 3 Receptor alpha at ~70kD

## Product Type

Mab

**Source**

human

**Isotype**

IgG1,k

**Grade**

Affinity Purified

**Applications**

FC IHC WB

**Crossreactivity**

Hu

**Storage**

-20°C

**Reference**

Sun Q et al. Monoclonal antibody 7G3 recognizes the N-terminal domain of the human interleukin-3 (IL-3) receptor alpha-chain and functions as a specific IL-3 receptor antagonist. Blood 87:83-92 (1996). <PUBMED:8547680>