

Anti- IL-5 Monoclonal Antibody
Catalog # ABO15026**Specification**

Anti- IL-5 Monoclonal Antibody - Product Information

Application	WB
Primary Accession	P05113
Host	Rat
Isotype	Rat IgG1, κ
Reactivity	Mouse
Clonality	Monoclonal
Format	Lyophilized

Description

Anti- IL-5 Monoclonal Antibody . Tested in WB applications. This antibody reacts with Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500 μ g/ml.

Anti- IL-5 Monoclonal Antibody - Additional Information

Gene ID 3567

Other Names

Interleukin-5, IL-5, B-cell differentiation factor I, Eosinophil differentiation factor, T-cell replacing factor, TRF, IL5

Calculated MW

15 kDa KDa

Application Details

Western blot, 0.25-0.5 μ g/ml, Mouse

Protein Name

Interleukin-5

Contents

PBS, pH 7.0. Contains no stabilizers or preservatives

Immunogen

Mouse partially-purified T cell clone supernatant

Purification

Immunogen affinity purified.

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti- IL-5 Monoclonal Antibody - Protein Information

Name IL5

Function

Homodimeric cytokine expressed predominantly by T-lymphocytes and NK cells that plays an important role in the survival, differentiation, and chemotaxis of eosinophils (PubMed:2653458, PubMed:9010276). Also acts on activated and resting B-cells to induce immunoglobulin production, growth, and differentiation (By similarity). Mechanistically, exerts its biological effects through a receptor composed of IL5RA subunit and the cytokine receptor common subunit beta/CSF2RB (PubMed:1495999, PubMed:22528658). Binding to the receptor leads to activation of various kinases including LYN, SYK and JAK2 and thereby propagates signals through the RAS-MAPK and JAK-STAT5 pathways respectively (PubMed:7613138).

Cellular Location

Secreted.

Tissue Location

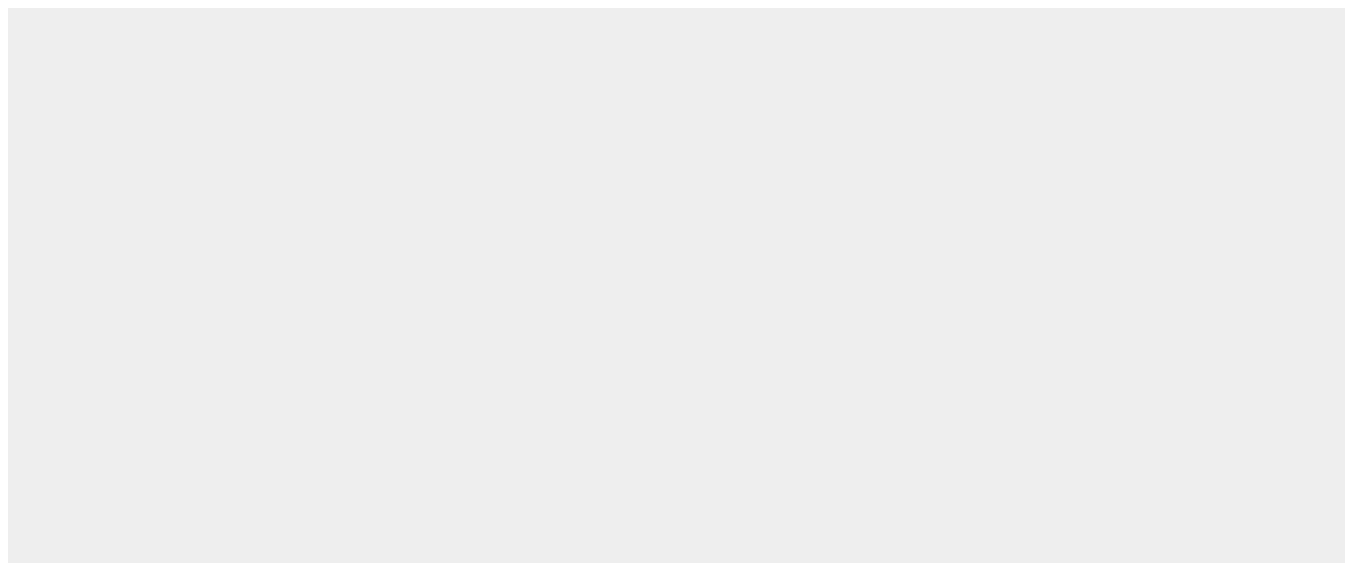
Present in peripheral blood mononuclear cells.

Anti- IL-5 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti- IL-5 Monoclonal Antibody - Images



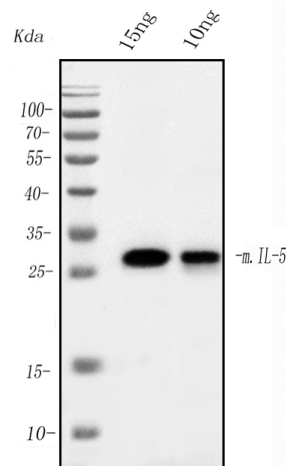


Figure 1. Western blot analysis of IL-5 using anti-IL-5 antibody (M01086).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

Lane 1: recombinant mouse IL-5 Gamma protein 15ng,

Lane 2: recombinant mouse IL-5 Gamma protein 10ng.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rat anti-IL-5 antigen affinity purified monoclonal antibody (Catalog # M01086) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rat IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.

Anti- IL-5 Monoclonal Antibody - Background

This gene encodes a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. The encoded cytokine plays a major role in the regulation of eosinophil formation, maturation, recruitment and survival. The increased production of this cytokine may be related to pathogenesis of eosinophil-dependent inflammatory diseases. This cytokine functions by binding to its receptor, which is a heterodimer, whose beta subunit is shared with the receptors for interleukine 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene is located on chromosome 5 within a cytokine gene cluster which includes interleukin 4 (IL4), interleukin 13 (IL13), and CSF2. This gene, IL4, and IL13 may be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31. [provided by RefSeq, Jul 2013]