

Anti- IL-5 Monoclonal Antibody

Catalog # ABO15026

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.

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	15238
Application Details	Western blot, 0.25-0.5 μ g/ml, Mouse
Source	Eukaryota
Protein Name	Interleukin-5
Contents	PBS, pH 7.0. Contains no stabilizers or preservatives
Clone Names	Clone: AFIH-9
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.

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.

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]

Images

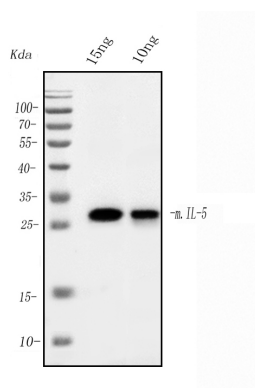


Figure 1. Western blot analysis of IL-5 using anti-IL-5 antibody (M01086).

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.

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