

IL-5 (H-3): sc-8433

BACKGROUND

Interleukin-5, or IL-5, was originally discovered as a soluble T cell-derived factor, called T cell-replacing factor (TRF), that induced T cell-depleted activated B cells to secrete immunoglobulin. Native IL-5 is a disulfide-linked homodimer. IL-5 is initially synthesized as a precursor with a 19 amino acid signal peptide which is cleaved to form a 112 amino acid mature protein. Murine and human IL-5 exhibit 70% sequence identity at the amino acid level. IL-5 exerts its biological activity through the IL-5 receptor (IL-5R), which is composed of at least two chains: an α chain that binds IL-5 with low affinity and a β chain that does not bind IL-5, but together with the IL-5 α chain, constitutes the high affinity IL-5 receptor. The β chain is common to the IL-3, IL-5 and GM-CSF receptors and has been shown to signal through the JAK/Stat pathway.

CHROMOSOMAL LOCATION

Genetic locus: IL5 (human) mapping to 5q31.1.

SOURCE

IL-5 (H-3) is a mouse monoclonal antibody raised against amino acids 20-104 of IL-5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-5 (H-3) is available conjugated to agarose (sc-8433 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8433 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8433 PE), fluorescein (sc-8433 FITC), Alexa Fluor[®] 488 (sc-8433 AF488), Alexa Fluor[®] 546 (sc-8433 AF546), Alexa Fluor[®] 594 (sc-8433 AF594) or Alexa Fluor[®] 647 (sc-8433 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-8433 AF680) or Alexa Fluor[®] 790 (sc-8433 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

IL-5 (H-3) is recommended for detection of IL-5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

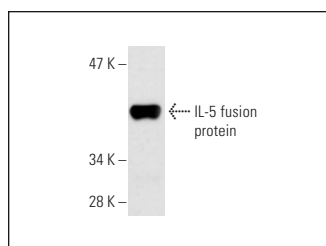
Suitable for use as control antibody for IL-5 siRNA (h): sc-39625, IL-5 shRNA Plasmid (h): sc-39625-SH and IL-5 shRNA (h) Lentiviral Particles: sc-39625-V.

Molecular Weight of IL-5: 15 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



IL-5 (H-3): sc-8433. Western blot analysis of human recombinant IL-5 fusion protein.

SELECT PRODUCT CITATIONS

- Vang, R., et al. 2001. Uterine leiomyomas with eosinophils: a clinicopathologic study of 3 cases. *Int. J. Gynecol. Pathol.* 20: 239-243.
- Kurita, T., et al. 2005. Differential expression of p63 isoforms in female reproductive organs. *Mech. Dev.* 122: 1043-1055.
- Fang, B., et al. 2010. Isolation and characterization of multipotent progenitor cells from the human fetal aorta wall. *Exp. Biol. Med.* 235: 130-138.
- Lui, P.P., et al. 2010. Sustained expression of proteoglycans and collagen type III/type I ratio in a calcified tendinopathy model. *Rheumatology* 49: 231-239.
- Liao, K., et al. 2017. Inhibition of interleukin-5 induced false positive anti-drug antibody responses against mepolizumab through the use of a competitive blocking antibody. *J. Immunol. Methods* 441: 15-23.
- Yang, L., et al. 2019. Comparison of Th1 and Th2 cytokines production in ovine lymph nodes during early pregnancy. *Theriogenology* 123: 177-184.
- Zhang, L., et al. 2019. Modulation of helper T cytokines in thymus during early pregnancy in ewes. *Animals* 9: 245.
- Yang, L., et al. 2019. Differential expression of T helper cytokines in the liver during early pregnancy in sheep. *Anim. Reprod.* 16: 332-339.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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