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-5α chain, constitutes the high affinity IL-5R. 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.

REFERENCES
5. Freeburn, R.W., et al. 1996. The β subunit common to the GM-CSF, IL-3 and IL-5 receptors is highly polymorphic but pathogenic point mutations in patients with acute myeloid leukaemia (AML) are rare. Leukemia 10: 123-129.

CHROMOSOMAL LOCATION
Genetic locus: IL5 (human) mapping to 5q31.1; Il5 (mouse) mapping to 11 B1.3.

SOURCE
IL-5 (H-85) is a rabbit polyclonal antibody raised against amino acids 20-104 of IL-5 of human origin.

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

PRODUCT
Each vial contains 200 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.
Available azide-free for biological studies, sc-7887 L, 200 µg/0.1 ml.

APPLICATIONS
IL-5 (H-85) is recommended for detection of IL-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 siRNA (m): sc-39626; IL-5 shRNA Plasmid (h): sc-39625-SH, IL-5 shRNA Plasmid (m): sc-39626-SH; IL-5 shRNA (h) Lentiviral Particles: sc-39625-V and IL-5 shRNA (m) Lentiviral Particles: sc-39626-V.

Molecular Weight of IL-5: 15 kDa.
Positive Controls: human oral mucosa tissue.

DATA

SELECT PRODUCT CITATIONS

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

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