

IL-25 (G-20): sc-22148

BACKGROUND

The interleukins are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. Cytokines are small, soluble proteins with pleiotropic effects on a variety of cell types. Cytokines have a regulatory function over the immune system and mediate aspects of inflammatory response. IL-25 (also called SF20/IL-25) is a secreted bone marrow stroma-derived growth factor cytokine that is derived from Th2 T-cells. IL-25 belongs to the IL-17 cytokine family and is capable of amplifying allergic type inflammatory responses by its actions on other cell types. IL-25 binds to mouse thymic shared antigen-1 and supports lymphoid cell proliferation. Infusion of mice with IL-25 induces IL-4, IL-5, and IL-13 gene expression. IL-25 induced mice also develop epithelial cell hyperplasia, increased mucus secretion, and airway hyperreactivity, suggesting that IL-25 may be an important mediator of allergic disease via production of IL-4, IL-5, IL-13 and eotaxin.

REFERENCES

1. Okamura, H., et al. 1995. Cloning of a new cytokine that induces IFN- γ production by T cells. *Nature* 378: 88-91.
2. Cohen, M.C., et al. 1996. Cytokine function: a study in biologic diversity. *Am. J. Clin. Pathol.* 105: 589-598.
3. Tulin, E.E., et al. 2001. SF20/IL-25, a novel bone marrow stroma-derived growth factor that binds to mouse thymic shared antigen-1 and supports lymphoid cell proliferation. *J. Immunol.* 167: 6338-6347.
4. Fort, M.M., et al. 2001. IL-25 induces IL-4, IL-5, and IL-13 and Th2-associated pathologies *in vivo*. *Immunity* 15: 985-995.
5. Hurst, S.D., et al. 2002. New IL-17 family members promote Th1 or Th2 responses in the lung: *in vivo* function of the novel cytokine IL-25. *J. Immunol.* 169: 443-453.

CHROMOSOMAL LOCATION

Genetic locus: C19orf10 (human) mapping to 19p13.3; D17Wsu104e (mouse) mapping to 17 D.

SOURCE

IL-25 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IL-25 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-22148 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

IL-25 (G-20) is recommended for detection of IL-25 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

IL-25 (G-20) is also recommended for detection of IL-25 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for IL-25 siRNA (h): sc-105567, IL-25 siRNA (m): sc-39666, IL-25 shRNA Plasmid (h): sc-105567-SH, IL-25 shRNA Plasmid (m): sc-39666-SH, IL-25 shRNA (h) Lentiviral Particles: sc-105567-V and IL-25 shRNA (m) Lentiviral Particles: sc-39666-V.

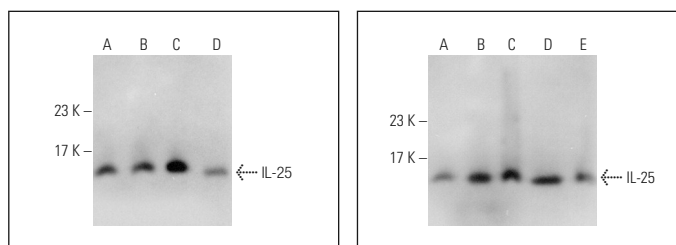
Molecular Weight of IL-25: 18 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, K-562 whole cell lysate: sc-2203 or JAR cell lysate: sc-2276.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-25 (G-20): sc-22148. Western blot analysis of IL-25 expression in K-562 (A), JAR (B), PC-3 (C) and PC-12 (D) whole cell lysates.

IL-25 (G-20): sc-22148. Western blot analysis of IL-25 expression in MCF7 (A), U-251 MG (B), COLO 320DM (C), HeLa (D) and Jurkat (E) whole cell lysates.

PROTOCOLS

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