IL-28/29 (FL-200): sc-66933

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BIOTECHNOLOGY

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BACKGROUND

The interleukins are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. As new cytokines are molecularly characterized, they are assigned an IL number to maintain a standard nomenclature. The interleukins are secreted by immune cells (mainly macrophages, B-cells or T-cells) that regulate a wide range of immune system functions. The functions of different interleukins vary from the regulation of inflammatory and immune responses to the regulation of other interleukins. Induced by viral infection and show antiviral activity, IL-28A, IL-28B and IL-29 are closely related genes that form a cytokine gene cluster on human chromosome region mapped to 19q13.2. IL-28A and IL-28B may play a role in antiviral immunity through up-regulation of MHC class I antigen expression and act as ligands for the het-erodimeric class II cytokine receptor composed of Il-10Rβ and IL-28R.

REFERENCES

1. Sheppard, P., et al. 2003. IL-28, IL-29 and their class II cytokine receptor IL-28R. Nat. Immunol. 4: 63-68.

2. Pestka, S., et al. 2004. IL-10 and related cytokines and receptors. Annu. Rev. Immunol. 22: 929-979.

3. Pestka, S., et al. 2004. Interferons, interferon-like cytokines, and their receptors. Immunol. Rev. 202: 8-32.

4. Bartlett, N.W., et al. 2004. A new member of the interleukin-10 related cytokine family encoded by a poxvirus. J. Gen. Virol. 85: 1401-1412.

5. Donnelly, R.P., et al. 2004. The expanded family of class II cytokines that share the IL-10 receptor-2 (IL-10R2) chain. J. Leukoc. Biol. 76: 314-321.

6. Logsdon, N.J., et al. 2004. The IL-10R2 binding hot spot on IL-22 is located on the N-terminal helix and is dependent on N-linked glycosylation. J. Mol. Biol. 342: 503-514.

CHROMOSOMAL LOCATION

Genetic locus: IFNL2/IFNL3/IFNL1 (human) mapping to 19q13.2.

SOURCE

IL-28/29 (FL-200) is a rabbit polyclonal antibody raised against amino acids 1-200 representing full length IL-28A of human origin.

PRODUCT

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

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 or our catalog for detailed protocols and support products.

APPLICATIONS

IL-28/29 (FL-200) is recommended for detection of IL-28A, IL-28B and IL-29 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of IL-28: 25 kDa.

Molecular Weight of IL-29: 36 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecip-itation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA
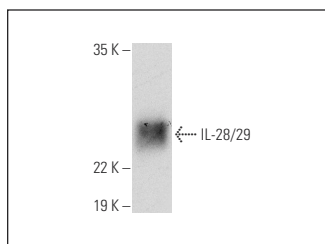
IL-28/29 (FL-200): sc-66933. Western blot analysis of human recombinant IL-28/29.

SELECT PRODUCT CITATIONS

1. He, S., et al. 2010. CD14 cell-derived IL-29 modulates proinflammatory cytokine production in patients with allergic airway inflammation. Allergy 66: 238-246.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **IL-28/29 (H-1): sc-365834**, our highly recommended monoclonal alternative to IL-28/29 (FL-200).