

IL-29 (B-21): sc-130787

BACKGROUND

The interleukins (ILs) are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. They are secreted by immune cells (mainly macrophages, B cells or T cells) that regulate a wide range of immune system functions. The specific functions of different interleukins vary from the regulation of inflammatory and immune responses to the regulation of other interleukins. IL-29, also known as interferon- λ 1 (IFN- λ 1) is a class II cytokine that stimulates its response through a heterodimeric receptor composed of IL-10R β and IL-28RA. It is induced by viral infection and exhibits antiviral and antiproliferative activity. In addition, IL-29 may play a role in immunoregulation. It stimulates an identical response as IFN- α but utilizes a different receptor. In addition, IL-29 may be a useful therapeutic agent against chronic viral hepatitis.

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. Interferons, interferon-like cytokines, and their receptors. *Immunol. Rev.* 202: 8-32.
3. Brand, S., et al. 2005. IL-28A and IL-29 mediate antiproliferative and antiviral signals in intestinal epithelial cells and murine CMV infection increases colonic IL-28A expression. *Am. J. Physiol. Gastrointest. Liver Physiol.* 289: G960-968.
4. Siren, J., et al. 2005. IFN- α regulates TLR-dependent gene expression of IFN- α , IFN- β , IL-28 and IL-29. *J. Immunol.* 174: 1932-1937.

CHROMOSOMAL LOCATION

Genetic locus: IL29 (human) mapping to 19q13.2.

SOURCE

IL-29 (B-21) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of IL-29 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IL-29 (B-21) is recommended for detection of IL-29 of 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), 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-29 siRNA (h): sc-62499, IL-29 shRNA Plasmid (h): sc-62499-SH and IL-29 shRNA (h) Lentiviral Particles: sc-62499-V.

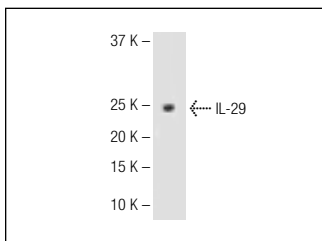
Molecular Weight of IL-29: 22 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

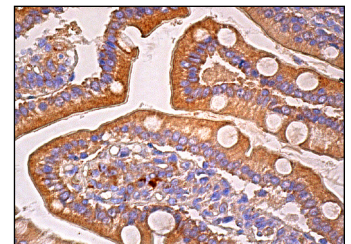
RECOMMENDED SECONDARY REAGENTS

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



IL-29 (B-21): sc-130787. Western blot analysis of IL-29 expression in Jurkat whole cell lysate.



IL-29 (B-21): sc-130787. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

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.
2. Xu, L., et al. 2011. Glioma-derived T cell immunoglobulin- and mucin domain-containing molecule-4 (TIM4) contributes to tumor tolerance. *J. Biol. Chem.* 286: 36694-36699.
3. Fang, J., et al. 2012. Epigenetic changes mediated by microRNA miR29 activate cyclooxygenase 2 and λ -1 interferon production during viral infection. *J. Virol.* 86: 1010-1020.

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.


 MONOS
Satisfaction
Guaranteed

Try **IL-28/29 (H-1): sc-365834**, our highly recommended monoclonal alternative to IL-29 (B-21).