

Product Data Sheet

Biotin anti-human/mouse IL-21

Catalog # / Size: 514303 / 50 µg
Clone: 7H20-I19-M3
Isotype: Mouse IgG1, κ
Immunogen: Recombinant full length human IL-21
Reactivity: Human, **Cross-Reactivity:** Mouse* - weak affinity
Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Final antibody concentration is 0.5 mg/ml.
Concentration: 0.5 mg/ml
Storage: Upon receipt, store frozen at 4°C.



Applications:

Applications: WB - *Quality tested*
 IF - *Validated*

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

Description: Interleukin 21 (IL-21) is a potent immunomodulatory cytokine mainly produced by NKT and CD4+ T-cells, particularly the inflammatory Th17 subset and has pleiotropic effects on both innate and adaptive immune responses. These actions include positive effects such as enhancing proliferation of NK cells and cytotoxic T cells, and inhibitory effects on the antigen-presenting function of dendritic cells. It can also be proapoptotic for B cells and NK cells. Recent studies have shown that IL-21 is also an autocrine cytokine that potently induces T(H)17 differentiation and suppresses Foxp3 expression, and serves as a target for treating inflammatory diseases.

Antigen References: 1. Nurieva R, *et al.* 2007. *Nature* 448:416.
 2. Parrish-Novak J, *et al.* 2002. *J. Leukocyte Biol.* 72:856.
 3. Dumoutier L, *et al.* 2000. *Proc. Natl. Acad. Sci. USA* 97:10144.
 4. Asao H, *et al.* 2001. *J. Immunol.* 167:1.
 5. Parrish-Novak J, *et al.* 2000. *Nature* 408:57.

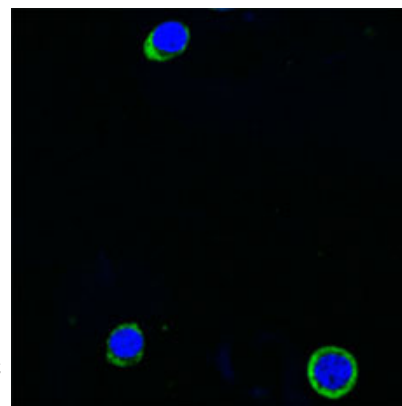
Related Products:

Product
 Biotin Mouse IgG1, κ Isotype Ctrl
 Cell Staining Buffer
 RBC Lysis Buffer (10X)
 HRP Streptavidin

Clone
 MOPC-21

Application
 FC, ICFC
 FC, ICC, ICFC
 FC, ICFC
 ELISA,
 ELISPOT,
 IHC, WB

Recombinant Human IL-21 (lane 1) and Mouse IL-21 (lane 2) were resolved by electrophoresis, transferred to nitrocellulose, and probed with biotin anti-HU/MU IL-21 antibody (clone 7H20-I19-M3). Proteins were visualized using a Streptavidin conjugated to HRP and chemiluminescence detection.



Human PBMCs, stimulated with 1 µg/ml of LPS for 8 h and treated with Brefeldin A during the last 4 h, were prepared by cytopsin, fixed and permeabilized on a slide and then treated with endogenous biotin blocking kit (Vector labs). Slides were stained with anti-human IL-21 biotin (clone 7H20-I19-M3) and DyLight™ 649 streptavidin (green) and counterstained with DAPI (blue). Images were acquired with an Olympus FV10i confocal microscope. Images courtesy of Teresa Rodriguez, Darius Schneider, and Matthias von Herrath, LaJolla Institute for Allergy and Immunology.



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