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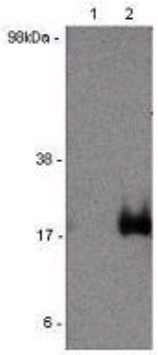
Anti-Human IL-17F Purified

Catalog Number: 14-7479
Also Known As:Interleukin-17F, IL17F
RUO: For Research Use Only



IL-17 producing cells were generated by culturing human PBMC with anti-Human CD3 (cat. 16-0039) and anti-Human CD28 (cat. 16-0289 in the presence of Human IL-23 Recombinant for 3 days, followed by 3 days with IL-23 alone. Day 6 cultures were treated with Brefeldin A alone (1) or PMA and Ionomycin in the presence of Brefeldin A (2) for 16 hours. Cell lysates were run under reducing conditions, immunoblotted with 2 µg/ml of Anti-Human IL-17F Purified and revealed with Anti-Mouse HRP.

Product Information

Contents: Anti-Human IL-17F Purified
REF Catalog Number: 14-7479
Clone: H17F10A7
Concentration: 0.5 mg/ml
Host/Isotype: Mouse IgG1
Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The monoclonal antibody H17F10A7 reacts with human IL-17F, a member of the IL-17 family of pro-inflammatory cytokines. Like IL-17A, IL-17F is a disulfide-linked, homodimeric glycoprotein. The IL-17F homodimer includes a classical cysteine knot motif, which is found also in the TGF-ß, BMP, and NGF superfamilies. The presence of the cysteine knot motif suggested the possibility of a heterodimeric structure, as was reported for TGF-ß and inhibin/activin. Recent reports confirm that co-expression of IL-17F and IL-17A in HEK293 cells results in the formation of biologically active IL-17F/IL-17A heterodimers, in addition to the IL-17F homodimers and IL-17A homodimers. Moreover, activated human CD4+ T cells were found to produce the IL-17A/F heterodimer, along with the corresponding homodimers. In comparing the relative potency of IL-17A, IL-17F, and IL-17A/F, all three were found to induce GRO-a secretion; IL-17A was most potent, followed by IL-17A/F heterodimer, then IL-17F (100fold lower than IL-17A). These heterodimers can be detected by immunoprecipitation with eBio64CAP17 anti-IL-17A monoclonal antibody followed by immunoblot with H17F10A7.

Applications Reported

This H17F10A7 antibody has been reported for use in immunoblotting (WB).

Applications Tested

This H17F10A7 antibody has been tested at 1-2ug/ml by western blot analysis of cultured, activated Th17 cells, where it detects a band of approximately 18kDa.

It is recommended that H17F10A7 be used under reducing conditions only.

References

Wright, J.F., et al. 2007. Identification of an IL-17F/17A heterodimer in activated human CD4+ T cells. JBC. 282: 13447-13455.

Chang, S.H., et al. 2007. A novel heterodimeric cytokine consisting of IL-17 and IL-17F regulates inflammatory responses. Cell Res. Advance online publication. 24 April 2007. doi: 10.1038.

Chen Z, Tato CM, Muul L, Laurence A, O'shea JJ. Distinct regulation of interleukin-17 in human T helper lymphocytes. Arthritis Rheum. 2007 Sep;56(9):2936-46.

Related Products

14-4714 Mouse IgG1 K Isotype Control Purified