Rat IL-17F Antibody

Monoclonal Mouse IgG_{2B} Clone # 716728

Catalog Number: MAB4437

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat IL-17F in direct ELISAs.
Source	Monoclonal Mouse IgG_{2B} Clone # 716728
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant rat IL-17F Ala19-Ala153 Accession # NP_001015011
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

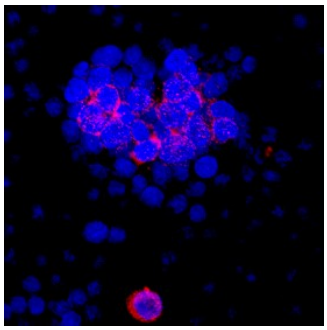
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



IL-17F in Rat Splenocytes. IL-17F was detected in immersion fixed Th17-differentiated rat splenocytes using Mouse Anti-Rat IL-17F Monoclonal Antibody (Catalog # MAB4437) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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BACKGROUND

Interleukin-17F (also ML-1) is a 19 kDa member of the IL-17 family of cytokines. Members of this family are involved in tissue homeostasis and demonstrate a structural motif termed a cysteine knot that characterizes a large superfamily of growth factors. Although most cysteine knot superfamily members use three intrachain disulfide bonds to create a knot, IL-17 family molecules generate the same structural form with only two disulfide links (1, 2, 3, 4). Based on mouse, mature rat IL-17F is 133 amino acids (aa) in length (5, 6). Rat IL-17F is a presumably secreted, 38 kDa glycosylated disulfide-linked homodimer. It is also secreted as a 35 kDa disulfide-linked heterodimer with IL-17/17A (7, 8). The heterodimeric form represents about 30% of secreted IL-17F. Initially, IL-17F was also reported as IL-24. Since that time, the IL-24 designation has been reassigned to MDA-7, a member of the IL-10 family of molecules (note: IL-17E is synonymous with IL-25). Mature rat IL-17F shares 59% and 90% aa sequence identity with mature human and mouse IL-17F, respectively; it also shares 55% aa identity with rat IL-17. Interspecies studies suggest rat IL-17F is produced by activated Th17-type $CD4^+$ T cells, mast cells, basophils and monocytes (1, 3, 9), and is inducible through the interaction of TGF-β, IL-6 and IL-23 (9, 10, 11). Targets for IL-17F include respiratory epithelium, fibroblasts, macrophages and endothelial cells which produce proinflammatory cytokines such as GM-CSF, IL-6, IFN-γ, IP-10, MIP-1α and MCP-1 (2, 6, 12). This activity is found for both homodimeric and heterodimeric forms of IL-17F (7).

References:

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