

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	<i>E. coli</i> -derived recombinant rat IL-17F Ala27-Ala161 Accession # NP_001015011
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin-17F (also IL-17) 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).

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