

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects Rat IL-17/IL-17A in direct and capture ELISAs. In direct Elisa, no cross-reactivity with Rat IL17F was observed.
Source	Monoclonal Mouse IgG ₁ Clone # 905515
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant rat IL-17A + rat IL-17F (Met1-Ser150,146L) and (Met1-161) Accession # Q61453
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

ELISA 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

Rat IL-17A/F is an approximately 37 kDa, secreted, disulfide-linked glycosylated heterodimeric protein comprised of two members of the IL-17 family of cytokines, IL-17A and IL-17F (1, 2). Members of this family demonstrate a structural motif termed a cysteine knot that also characterizes a large superfamily of growth factors such as TGF-β (1). 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, 3-5). Mature rat IL-17A and IL-17F share 60% and 59% amino acid sequence identity with human and 61% and 90% with mouse IL-17A and IL-17F, respectively. They also share 50% aa sequence identity with each other (1). IL-17A/F heterodimer and the IL-17A and IL-17F homodimers are produced by IL-23 activated Th17 cells (1, 6-10, 14). The widely expressed receptors IL-17 RA and IL-17 RC form a heterodimer for the binding of IL-17A and IL-17F, as well as the heterodimeric IL-17A/F (6, 11, 12). IL-17A/F is a biologically active protein that induces chemokine production and airway neutrophilia with intermediate potency between IL-17A (most potent) and IL-17F (least potent) (7, 12). It is up-regulated in immune cells during inflammatory arthritis and contributes to disease severity (13).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.