

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-17E/IL-25 in ELISAs. In ELISAs, no cross-reactivity with recombinant human IL-17E, recombinant mouse (rm) IL-17, rmlL-17B, C, D, or F is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 207702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-17E/IL-25 Val17-Ala169 Accession # NP_542767
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	Tramp-C1 mouse prostate cancer cell line fixed with paraformaldehyde and permeabilized with saponin

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

The Interleukin 17 (IL-17) family proteins, comprising six members (IL-17, IL-17B through IL-17F), are secreted, structurally related proteins that share a conserved cysteine-knot fold near the C-terminus, but have considerable sequence divergence at the N-terminus. With the exception of IL-17B, which exists as a non-covalently linked dimer, all IL-17 family members are disulfide-linked dimers. IL-17 family proteins are pro-inflammatory cytokines that induce local cytokine production and are involved in the regulation of immune functions (1, 2).

Mouse IL-17E cDNA encodes a 169 amino acid residues (aa) precursor protein with a putative 16 aa signal peptide (5). Mature mouse IL-17E shares 76% and 91% amino sequence (aa) identity with mature human and rat IL-17E, respectively. Mouse IL-17E also shares from 24-32% sequence identity with the other mouse IL-17 family members. IL-17E expression was detected at very low levels by PCR in various peripheral tissues including brain, kidney, lung, prostate, testis, adrenal gland spinal cord, and trachea. IL-17E binds and activates IL-17 B Receptor (IL-17B R) (alternatively known as IL-17 Rh1, IL-17E R, and EVI27) (3, 4), which is expressed in kidney and liver, and at lower levels in brain, testis and other endocrine tissues. The expression of IL-17B R is up regulated under inflammatory conditions. Ligand of IL-17E to IL-17 RB induces activation of nuclear factor kappa-B and stimulates the production of the pro-inflammatory cytokine IL-8 (3). IL-17 has also been found to promote the expression of the prototypical Th2 genes (4, 5).

References:

1. Aggarwal, S. and A.L. Gurney (2002) *J. Leukoc. Biol.* **71**:1.
2. Moseley, T.A. *et al.* (2003) *Cytokine & Growth Factor Rev.* **14**:155.
3. Lee, J. *et al.* (2001) *J. Biol. Chem.* **276**:1660.
4. Hurst, S.D. *et al.* (2002) *J. Immunol.* **169**:443.
5. Pan, G. *et al.* (2001) *J. Immunol.* **167**:6569.

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.