

DESCRIPTION

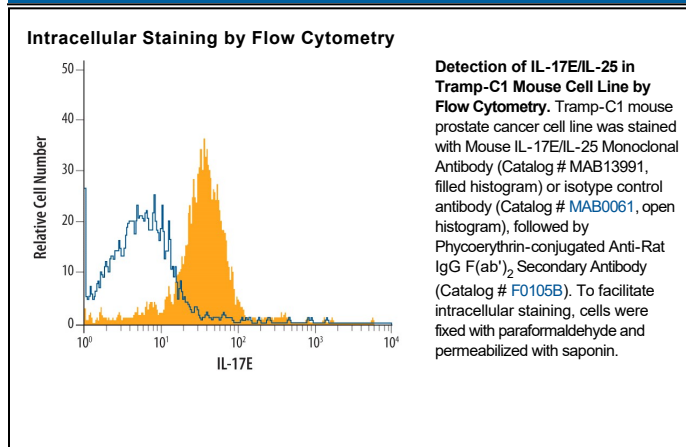
Species Reactivity	Mouse
Specificity	Detects mouse IL-17E/IL-25 in ELISAs. In ELISAs, no cross-reactivity with recombinant human IL-17E, recombinant mouse (rm) IL-17, rmlIL-17B, C, D, or F is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 207702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-17E/IL-25 Val17-Ala169 Accession # NP_542767
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
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Mouse IL-17E/IL-25 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse IL-17E/IL-25 Antibody (Catalog # MAB13991)
ELISA Detection	0.1-0.4 µg/mL	Mouse IL-17E/IL-25 Biotinylated Antibody (Catalog # BAF1399)
Standard		Recombinant Mouse IL-17E/IL-25 (Catalog # 1399-IL)
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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. <ul style="list-style-type: none"> • 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.

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. Ligation 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.