Mouse IL-17 RC Fluorescein-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB2270F
100 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-17 RC in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human IL-17 RC is observed and less than 5% cross-reactivity with recombinant mouse (rm) IL-17 RD and rmIL-17B R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-17 RC Leu21-Trp465 Accession # AAH04759
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied 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.

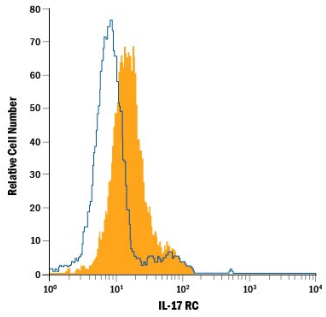
APPLICATIONS

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
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of IL-17 RC in RAW 264.7 Mouse Cell Line by Flow Cytometry. RAW 264.7 mouse monocyte/macrophage cell line was stained with Goat Anti-Mouse IL-17 RC Fluorescein-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB2270F, filled histogram) or isotype control antibody (Catalog # IC108F, open histogram). View our protocol for Staining Membrane-associated Proteins.

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.

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BACKGROUND

IL-17 receptor C (IL-17 RC; also known as IL-17 RL) is an 85-110 kDa member of the IL-17 receptor family. This is one of five families, termed IL-17 RA, B, C, D and E, that comprise the cytokine receptor superfamily (1-6). Not all receptors appear to bind known members of the IL-17 cytokine family. IL-17 RA is reported to bind IL-17A, while IL-17 RB is reported to bind IL-17B and IL-17E (2, 4). Mouse IL-17 RC is a type I transmembrane glycoprotein that is expressed on a variety of nonhematopoietic cell types. Full-length IL-17 RC is synthesized as a 674 amino acid (aa) precursor. It contains a 21 aa signal sequence, a 419 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 213 aa cytoplasmic region. There are multiple potential N-linked glycosylation sites in the ECD and potential phosphorylation sites in the cytoplasmic tail. Four mouse variants have been identified that have been designated mIL-17 RC (7). The isoform expressed here as an R&D Systems product is an unusual 567 aa form (8). Its precursor contains a 20 aa signal sequence, a 444 aa extracellular region, a 20 aa transmembrane segment and an 83 aa cytoplasmic tail. When compared to the full length mouse IL-17 RC form, this expressed isoform's extracellular region shows absolute aa identity, save for an additional 24 aa insert. In the cytoplasmic region, it is highly divergent and shows virtually no aa identity (8-9). The extracellular region of mouse IL-17 RC shows about 70% aa identity to the equivalent region in human IL-17 RC isoform # 3. IL-17 RC is the cognate receptor for IL-17F (7). In humans, IL-17 RC binds IL−17A with similar affinity, and with IL-17 RA, it forms a definitive receptor for both IL-17A and IL-17F (7). The stoichiometry is unclear; it may form a heterodimer with IL-17 RA, or a heterotrimer with a preexisting IL-17 RA homodimer (4, 7, 10, 11). The heteromeric nature of the receptor may be important given that the predominant form of the IL-17 cytokine is now considered to be an IL-17A:IL-17F heterodimer (4).

References:

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