Mouse IL-17 RD/SEF PE-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 400210

Catalog Number: FAB2276P

100 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL−17 RD/SEF in direct ELISAs.
Source	Monoclonal Rat IgG_{2A} Clone # 400210
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-17 RD/SEF Gly28-Arg299 Accession # Q8JZL1
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
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.

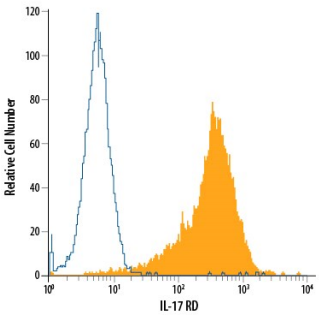
APPLICATIONS

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 RD/SEF in HEK293 Human Cell Line Transfected with Mouse IL-17 RD/SEF by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with mouse IL-17 RD/SEF was stained with Rat Anti-Mouse IL-17 RD/SEF PE-conjugated Monoclonal Antibody (Catalog # FAB2276P, filled histogram) or isotype control antibody (Catalog # IC006P, 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

Interleukin-17 receptor D (IL-17 RD), also known as SEF (similar expression to FGFs), is a type I transmembrane protein that is found in both the cytoplasm and plasma membrane (1–5). The gene for this protein belongs to a synexpression group originally identified in zebrafish and SEF is expressed along with FGF-3, -8, sprouty-2 (SPRY2) and SPRY4 (6, 7). Due to the presence of an alternate start site, there is one transcript that potentially gives rise to two isoforms. The first is a full-length long form and the second an N-terminally truncated form (2, 5). The significance and expression pattern of the short form are uncertain. The membrane–bound long form of mouse IL-17 RD is synthesized as a 738 amino acid (aa) precursor protein with a putative 27 aa signal peptide, a 272 aa extracellular domain, a 20 aa transmembrane segment and a 419 aa cytoplastic domain (5). The extracellular domain contains one Ig-like domain and a fibronectin type III motif. The cytoplasmic domain shares homology with the intracellular domains of IL–17 receptor family members and shows one TIR (Toll/IL-1 Receptor) domain and a putative TRAF6-binding motif (2). Natural IL-17 RD has been shown to form homomultimeric complexes (3). The full-length IL-17 RD isoform is expressed in most adult tissues and during embryonic development (3, 5). Functionally, IL-17 RD has been shown to be an inhibitor of FGF signaling. The molecule's extracellular domain does not seem to be involved. There is an interaction between the intracellular domains of FGF R1/2 and IL-17 RD that blocks ERK dissociation from MEK, thereby interfering with downstream ERK activation of nuclear Elk-1 (8). IL-17 RD has also been reported to interact with TAK1 and induce JNK activation and apoptosis (9). Ligands that interact with the extracellular domain of IL-17 RD have not been identified.

References:

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