Human IL-17 RE
Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 934832

Catalog Number: FAB8358N

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-17 RE in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 934832
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human IL-17 RE Met1-His454 Accession # Q8NFR9
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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
Flow Cytometry	0.25-1 µg/10^6 cells	HEK293 human embryonic kidney cell line transfected with human IL-17 RE

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

Interleukin-17 Receptor E (IL-17 RE) is an approximately 70 kDa (predicted) transmembrane protein in the family of IL-17 receptors. IL-17 RE is required for mediating the pro-inflammatory and homeostatic actions of IL-17C in the skin and mucosa (1, 2). Mature human IL-17 RE consists of a 431 amino acid (aa) extracellular domain, a 21 aa transmembrane segment, and a 192 aa cytoplasmic domain with one SEFIR/TIR domain (3). Within aa 115-454, human IL-17 RE shares 79% aa sequence identity with mouse and rat IL-17 RE. Alternative splicing of human IL-17 RE generates additional isoforms with a 116 aa N-terminal deletion and/or substitution and truncation in the ECD following aa 268 or aa 433. IL-17 RE is expressed on keratinocytes, mucosal epithelial cells, Th17 cells, and γ/δ T cells (4, 5). It associates with the widely expressed IL-17 RA to form a heterodimeric receptor for IL-17C (4-6). IL-17C binds to IL-17 RE with high affinity and to IL-17 RA with low affinity (4, 5). IL-17C expression is induced by inflammatory stimulation in colon and airway epithelial cells, keratinocytes, $CD4^+$ T cells, macrophages, and dendritic cells (4, 6, 7-9). It is up-regulated in various chronic inflammatory diseases including psoriasis, cystic fibrosis, and chronic obstructive pulmonary disease (COPD) (7, 8, 10). IL-17 RE is reciprocally down-regulated in psoriatic lesions (10). The interaction of IL-17C with IL-17 RE promotes mucosal immunity through the induction of anti-bacterial peptides and pro-inflammatory cytokines and chemokines (4, 6, 8, 9). IL-17C action supports the integrity of the colon epithelium following infection induced damage (4, 6, 11) but also contributes to psoriatic skin thickening and the progression of arthritis (4, 8, 9). IL-17C is additionally up-regulated in Th17 cell dependent autoimmunity (5). In this setting, it exacerbates disease severity by inducing Th17 cell production of IL-17A, IL-17F, IL-22, CCR6, and CCL20 (5). The up-regulation of IL-17 RE in hepatocellular carcinoma is associated with poor prognosis (12).

References:

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