

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-17 R in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant mouse IL-17 R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human IL-17 R Leu33-Trp320 Accession # Q96F46
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

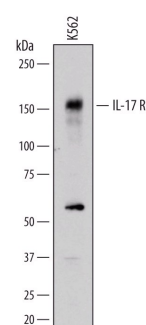
APPLICATIONS

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
Western Blot	0.5 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	K562 human chronic myelogenous leukemia cell line
Neutralization	Measured by its ability to neutralize IL-17-induced IL-6 secretion in normal human dermal fibroblasts. Yao, Z. <i>et al.</i> (1995) <i>Immunity</i> 3:811. The Neutralization Dose (ND ₅₀) is typically 0.1-0.5 µg/mL in the presence of 25 ng/mL Recombinant Human IL-17.	

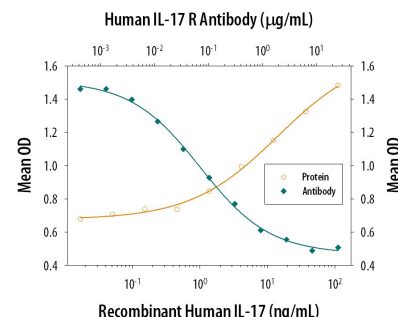
DATA

Western Blot



Detection of Human IL-17 R by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human IL-17 R Antigen Affinity-purified Polyclonal Antibody (Catalog # AF177) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for IL-17 R at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Neutralization



IL-6 secretion Induced by IL-17 and Neutralization by Human IL-17 R Antibody. Recombinant Human IL-17 (Catalog # 317-ILB) stimulates IL-6 secretion in normal human dermal fibroblasts in a dose-dependent manner (orange line), as measured by the Human IL-6 Quantikine ELISA Kit (Catalog # D6050). IL-6 secretion elicited by Recombinant Human IL-17 (25 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Human IL-17 R Antigen Affinity-purified Polyclonal Antibody (Catalog # AF177). The ND₅₀ is typically 0.1-0.5 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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

Interleukin 17 (also known as CTLA-8) is a T cell-expressed pleiotropic cytokine. IL-17 binds to IL-17 receptor (IL-17 R) which shares no homology with any known family of receptors. While the expression of IL-17 is restricted to activated T cells, the IL-17 R mRNA exhibits a broad tissue distribution, and has been detected in virtually all cells and tissues tested. The human IL-17 R gene was localized to chromosome 22. Human IL-17 R is an 866 amino acid (aa) type I membrane glycoprotein with a 293 aa extracellular domain, a 21 aa carboxy-proximal transmembrane domain, and a 525 aa cytoplasmic tail. The aa sequence of human IL-17 R is 69% identical to the mouse IL-17 R. The signaling events of IL-17 includes activation of NF-κB and JNK, and require TNF receptor-associated factors 6 (TRAF6) in the signaling pathway.

References:

1. Yao, Z. *et al.* (1997) *Cytokine* 9:794.
2. Schwander, R. *et al.* (2000) *J. Exp. Med.* 191:1233.