

## Anti-IL-17 [Antibody 7] Standard Size Ab04237-2.0

**Isotype and Format:** Mouse IgG2a, Lambda

**Clone Number:** Antibody 7

**Alternative Name(s) of Target:** IL17; IL-17A; IL17A; CTLA8; Interleukin-17A; IL-17A; Cytotoxic T-lymphocyte-associated antigen 8; CTLA-8; IL17F; IL-17F; Interleukin-17F; IL-17F; Cytokine ML-1

**UniProt Accession Number of Target Protein:**

**Published Application(s):** crystallization, functional assays, in vivo, SPR, ELISA

**Published Species Reactivity:** Dog, Human, Cynomolgus Monkey

**Immunogen:** The original antibody was produced by immunizing Balb/c mice with purified recombinant human IL-17.

**Specificity:** This antibody is specific for IL-17; it binds residues 74 (Leu), 85 (Tyr), 86 (His), and 87 (Met) of the mature IL-17 sequence. In humans, It has been shown to bind both IL-17A and IL-17F.

**Application Notes:** The  $IC_{50}$  values for this antibody as measured in an HT1080 assay in response to 1 nM human or cynomolgus monkey (cyno) IL-17A were  $0.8 \pm 0.2$  nM and  $4.8 \pm 1.6$  nM, respectively. Partial inhibition was also observed with IL-17F. Further assays showed cross-reactivity with dog IL-17A. This antibody neutralized the synergistic IL-6 response as measured in an altered human HT1080 assay with an  $IC_{50}$  value of  $0.24 \pm 0.05$  nM.  $pA_2 = 9.23$  and  $K_d = 663$  pM were measured when testing the affinity of this antibody for human IL-17A. Further kinetic analysis on recombinant human IL-17A (*E. coli*), cyno IL-17A (*E. coli*), and human IL-17A-Flag-His10 (HEK) yielded a 1:1 Langmuir  $K_D$  and Bivalent Analyte  $K_D$  of 0.195 nM, 0.512 nM, and 0.171 nM, and 2.098 nM, 1.340 nM, and 0.41-1.88 nM, appropriately. The biological activity of this antibody was tested extensively in the air pouch of Balb/c; it effectively inhibited IL-17A-induced IL-6 release and the influx of white blood cells in the air pouch, as reflected by low  $ID_{50}$  values. This antibody exhibited inhibitory effects on the IL-17A/TNF $\alpha$  synergized responses in post-mortem cartilage explants and synovial fibroblasts with the potential to modulate inflammatory and destructive responses induced by the synergistic action of IL-17A and TNF $\alpha$ . X-ray crystallography of the IL-17A bound Fab version of this antibody indicated that it binds residues 74 (Leu), 85 (Tyr), 86 (His), and 87 (Met) of the mature sequence (US8865166).

**Antibody First Published in:** [PMID:](#)

**Note on publication:**

## Product Form

**Size:**

100 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.