

Anti-IL-17 [Antibody 7] Standard Size Ab04237-2.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted mouse IgG2a Fc Silent™ antibody, based on the original mouse IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG2a, [Fc Silent™](#), 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 (H is), 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 ± 0.2 nM and 4.8 ± 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 ± 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 α 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 α . X-ray crystallography of the IL-17A bound Fab version of this antibody indicated that it binds residues 74 (Leu), 85 (Tyr), 86 (H is), 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.