

Anti-IL2R gamma C [3E12] Standard Size Ab01370-8.4

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

Isotype and Format: Rat IgG2b, [Fc Silent™](#), Kappa

Clone Number: 3E12

Alternative Name(s) of Target: CD132; IL2R gamma C; common gamma chain; common y chain; gamma chain; IL-2 receptor gamma chain; Interleukin-2 receptor subunit gamma; Cytokine receptor common subunit gamma; IL2rg; IL-2 receptor subunit gamma; IL-2R subunit gamma; IL-2RG; gammaC; p64

UniProt Accession Number of Target Protein: P34902

Published Application(s): Blocking, IP, FC

Published Species Reactivity: Mouse

Immunogen: This antibody was raised by immunising Lewis rats with transfected rat myeloma cell line YB2/0, expressing murine cytoplasmic-tailless IL-2R common gamma-chain (YB2/0-myt).

Specificity: This conformation-dependent antibody binds to the murine common gamma-chain, shared by the IL-2, IL-4, IL-7, IL-9, IL-15, and IL-21 receptor complexes. It recognises an epitope located in a membrane-proximal portion of the common gamma-chain, near Arg-197 of domain 2. This antibody does not cross-react with COS7 cells transfected with rat common gamma-chain cDNA (Olosz et al, 2002).

Application Notes: This antibody has been used in flow cytometric analysis of common gamma-chain surface expression by IL-7-stimulated T cells (Goh et al, 2017) and COS7 monkey kidney cells (Olosz et al, 2002). This antibody has also been used to immunoprecipitate murine common gamma-chain-containing complexes from COS7 cell extracts (Olosz et al, 2002). Additionally, as this antibody is conformationally sensitive, it has been used to confirm the correct folding of soluble murine common gamma chain mutants (Meißner et al, 2001). This antagonistic antibody is most effective at inhibiting IL-4 bioactivity (Malek et al, 1998). Treatment of recipient mice with this antibody, along with another common gamma-chain-blocking MAb (4G3), significantly prolongs islet allograft survival (Li et al, 2000). Indeed, blocking the common gamma chain with this antibody has been shown to induce apoptotic cell death of BAF-B03 cells and primary anti-CD3 activated T lymphoblasts in vitro, and of alloreactive T cells in vivo (Li et al, 2000).

Antibody First Published in: He et al. Expression and function of the gamma c subunit of the IL-2, IL-4, and IL-7 receptors. Distinct interaction of gamma c in the IL-4 receptor. J Immunol. 1995 Feb 15;154(4):1596-605. [PMID:7530740](#)

Note on publication: Describes the original generation of this antibody, and its use in determining murine common gamma-chain lymphoid cell distribution.

Product Form

Size: 200 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.