



# Rat Anti-Mouse CD132 (common $\gamma$ chain) Monoclonal antibody, clone 3E12 (CABT-L4508)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

The 3E12 monoclonal antibody reacts with mouse CD132 also known as the common gamma chain and IL-2 receptor gamma chain. CD132 is a 64-70 kDa type I transmembrane glycoprotein belonging to the Ig superfamily. It is expressed by a wide range of cells including T and B lymphocytes, NK cells, monocytes, and granulocytes. CD132 is an essential subunit of the receptor complexes for at least six different interleukin receptors: IL-2, IL-4, IL-7, IL-9, IL-15 and IL-21 receptors. Ligand binding induces tyrosine phosphorylation and initiates signaling through the JAK/STAT pathway. The 3E12 antibody has been reported to block the bioactivity of IL-4, IL-9, and IL-15 and inhibit the ligand/receptor binding of IL-4 and IL-7.

|                           |   |
|---------------------------|---|
| <b>Target</b>             | Mouse CD132 (common $\gamma$ chain)                                 |
| <b>Immunogen</b>          | Rat myeloma YB2/0 transfected with mouse cytoplasmic-tailless CD132 |
| <b>Isotype</b>            | IgG2b   |
| <b>Source/Host</b>        | Rat   |
| <b>Species Reactivity</b> | Mouse   |
| <b>Clone</b>              | 3E12  |
| <b>Purification</b>       | Protein G purified.<br>Purity>95%. Determined by SDS-PAGE           |
| <b>Conjugate</b>          | Functional Grade  |
| <b>Applications</b>       | in vivo $\gamma$ c blockade, FuncS, IP, FC                          |

|                         |   |
|-------------------------|---|
| <b>Molecular Weight</b> | 150 kDa   |
| <b>Format</b>           | 0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility   |
| <b>Concentration</b>    | Lot specific  |
| <b>Size</b>             | 5 mg  |
| <b>Buffer</b>           | PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]<br><br>Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay<br>Related dilution buffer: CABT-LB04 |
| <b>Preservative</b>     | None  |
| <b>Storage</b>          | The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.   |
| <b>Ship</b>             | Wet ice   |

## BACKGROUND

|                     |   |
|---------------------|---|
| <b>Introduction</b> | Common subunit for the receptors for a variety of interleukins.   |
| <b>Keywords</b>     | IL2RG;interleukin 2 receptor, gamma;P64;CIDX;IMD4;CD132;SCIDX;IL-2RG;SCIDX1;cytokine receptor common subunit gamma;gammaC;CD132 antigen;IL-2R subunit gamma;IL-2 receptor subunit gamma;common cytokine receptor gamma chain; |

## GENE INFORMATION

|                        |   |
|------------------------|---|
| <b>Official Symbol</b> | interleukin 2 receptor, gamma   |
| <b>Synonyms</b>        | IL2RG; interleukin 2 receptor, gamma; P64; CIDX; IMD4; CD132; SCIDX; IL-2RG; SCIDX1; cytokine receptor common subunit gamma; gammaC; CD132 antigen; IL-2R subunit gamma; IL-2 receptor subunit gamma; common cytokine receptor gamma chain; |
| <b>References</b>      | Li, X. C., et al. (2001). "IL-15 and IL-2: a matter of life and death for T cells in vivo." Nat Med 7(1): 114-118. PubMed;  |