Data Sheet (Cat.No.TMAY-03091)

TargetMol

Anti-IL-2 R gamma/CD132 Antibody (3J53)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Mouse
Conjugation:	Unconjugated
Clone:	3J53
Purification:	Protein A

Applications

Verified Activity:	1. Immunofluorescence staining of mouse IL2RG in mouse splenocytes. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with rabbit anti-mouse IL2RG monoclonal antibody (1:60) at 4°C overnight. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-rabbit IgG secondary antibody (green). 2. Flow cytometric analysis of Mouse IL2RG(CD132) expression on BABL/c splenocytes. Cells were stained with purified anti-Mouse IL2RG(CD132), then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.
Application:	ELISA(Cap),FCM,ICC/IF
Recommended	ICC-IF: 1:20-1:100; FCM: 1:25-1:100; ELISA(Cap): 1:250-1:2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Mouse CD132 / IL2RG Protein (TMPY-01837)
Antigen Species:	Mouse
Synonyms:	γC;P64;IMD4;IL-2 R γ/CD132;SCIDX;IL-2 R gamma;CIDX;SCIDX1;IL2RG;gammaC;IL-2 R γ;CD132

Research Background

The common gamma chain (γc) (or CD132), also known as interleukin-2 receptor subunit gamma or IL2RG, is a member of the type I cytokine receptor family expressed on most lymphocyte (white blood cell) populations, and its gene is found on the X-chromosome of mammals. The common gamma chain (γc) (or IL2RG), is a cytokine receptor subunit that is common to the receptor complexes for at least six different interleukin receptors: IL-2, IL-4, IL-7, IL-9, IL-15, and the interleukin-21 receptor. It is a component of multiple cytokine receptors that are essential for lymphocyte development and function. X-linked severe combined immunodeficiency (X-SCID) is a rare and potentially fatal disease caused by mutations of IL2RG, the gene encoding IL2RG. IL2RG was demonstrated to be a component of the IL-4 receptor based on chemical cross-linking data, the ability of IL2RG to augment IL-4 binding affinity. The observation that IL-2R gamma is a functional component of the IL-4 receptor, together with the finding that IL-2R gamma associates with the IL-7 receptor, begins to elucidate why a deficiency of this common gamma chain (gamma c) has a profound effect on lymphoid function and development, as seen in X-linked severe

combined immunodeficiency.