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Rabbit Anti-IL-2R gamma antibody

SL2545R

Product Name:	IL-2R gamma
Chinese Name:	白介素2受体γ链抗体
Alias:	IL2 Receptor gamma; IL2R gamma; IL 2R gamma; IL-2R gamma; IL-2 receptor gamma precursor; IL2 Receptor gamma; CD132; CD 132; common cytokine receptor gamma chain; Gamma C; gamma(c); IL-2R gamma chain; IL2RG; IMD4; interleukin 2 receptor, gamma; P64; SCIDX; SCIDX1; Cytokine receptor common subunit gamma; Gamma C; gammaC; IL-2 receptor subunit gamma; IL-2R subunit gamma; IL-2RG; IL2RG_HUMAN; Interleukin-2 receptor subunit gamma; p64; SCIDX; SCIDX1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,
Applications:	ELISA=1:500-1000Flow-Cyt=1μg /test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IL-2R gamma:51-150/369<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Interleukin 2 (IL2) receptor gamma chain (IL5212R gamma) is a cell surface glycoprotein expressed by a variety of leukocytes including T cells, B cells, NK cells,

monocytes, macrophages, and neutrophils. IL2R gamma is also known as CD132, common cytokine receptor gamma chain, and gamma c. IL2R gamma forms complexes with other cell surface proteins including CD25 (IL2R alpha), CD122 (IL2R beta), CD124 (IL4R alpha), CD127 (IL7R), and others. IL2R gamma complexed with other cell surface proteins forms receptors for the cytokines IL2, IL4, IL7, IL9, and IL15. Acting through the IL2R gamma containing complexes, these cytokines regulate lymphocyte development and activation. Chemical cross linking experiments reveal that IL2R gamma is able to bind cytokines only when complexed with these other cell surface proteins.
In addition to interacting with other cell surface glycoproteins, IL2R gamma associates with several cytoplasmic tyrosine kinases including JAK3 (Janus Kinase 3), JAK1, Syc, and Lyc. Cytokine binding to the IL2R gamma containing receptor complexes activates these tyrosine kinases. Once activated, these tyrosine kinases phosphorylate their associated receptors, creating docking sites for signaling molecules such as PI 3 kinase. The activated tyrosine kinases also phosphorylate downstream regulators including STAT3 (Signal Transducer and Activator of Transcription 3), STAT5, and STAT6.
The various cytokines that bind to IL2R gamma containing receptor complexes exert their effects through unique repertoires of cytoplasmic signaling molecules. IL2, IL7, and IL9 exert their effects through cascades, which activate STAT3 and STAT5, while IL4 activates STAT6. IL2 and IL15 exert their effects through cascades, which activate the MAP kinase cascade. IL7 exerts its effects through a cascade that results in VDJ immunoglobulin gene rearrangement. Mutation of IL2R gamma has been determined to be the cause of severe X-linked combined immunodeficiency (X SCID), a disease that is characterized by the absence of T cells and NK cells.

Function:
Common subunit for the receptors for a variety of interleukins.

Subunit:
The gamma subunit is common to the IL2, IL4, IL7, IL15, IL21 and probably also the IL13 receptors. Interacts with SHB upon interleukin stimulation. Interacts with HTLV-1 accessory protein p12I.

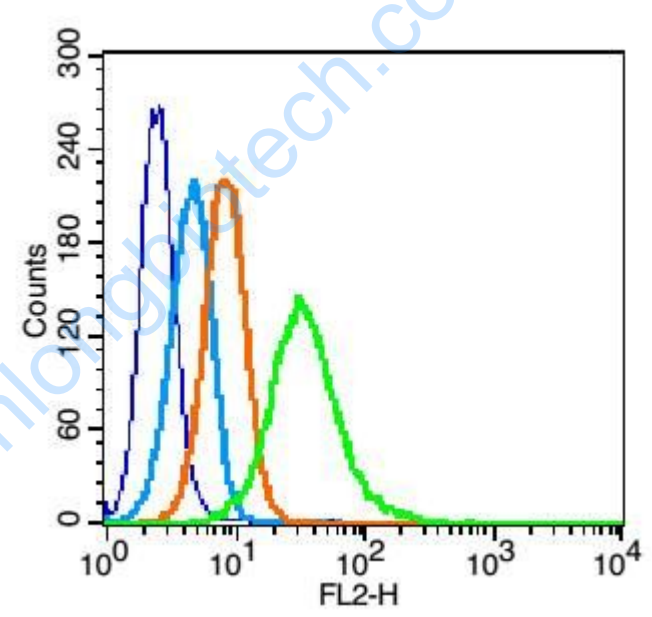
Subcellular Location:
Membrane; Single-pass type I membrane protein.

Similarity:
Contains 1 fibronectin type-III domain.

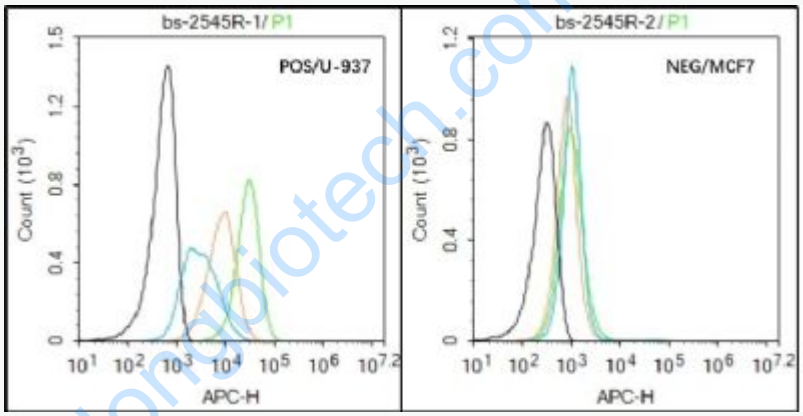
SWISS:
P31785

Gene ID:
3561

Database links:

	Entrez Gene: 3561 Human Omim: 308380 Human SwissProt: P31785 Human Unigene: 84 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Blank control: U937(blue). Primary Antibody: Rabbit Anti-IL-2R,gamma antibody(SL2545R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange) ,used under the same conditions. Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol

The cells were fixed with 2% paraformaldehyde (10 min).Primary antibody (SL2545R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.



Black line : Positive blank control (U937); Negative blank control (MCF7)

Green line : Primary Antibody (Rabbit Anti-2R gamma antibody (SL2545R))

Orange line：Isotype Control Antibody (Rabbit IgG) .

Blue line : Secondary Antibody (Goat anti-rabbit IgG-AF647)

U937（Positive）and MCF7（Negative control）cells (black) were incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with 2R gamma Antibody(SL2545R)at 1:50 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed by secondary antibody(blue) incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and

	isotype control (orange).