

Datasheet for ABIN5005333

anti-IL2RG antibody (AA 51-150) (AbBy Fluor® 680)[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	IL2RG
Binding Specificity:	AA 51-150
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IL2RG antibody is conjugated to AbBy Fluor® 680
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human IL-2R gamma
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse,Dog,Cow,Pig
Purification:	Purified by Protein A.

Target Details

Target:	IL2RG
Alternative Name:	IL-2R gamma (IL2RG Products)
Background:	Synonyms: P64, CIDX, IMD4, CD132, SCIDX, IL-2RG, SCIDX1, Cytokine receptor common

Target Details

subunit gamma, Interleukin-2 receptor subunit gamma, IL-2 receptor subunit gamma, IL-2R subunit gamma, gammaC, IL2RG

Background: 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 Lys. 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.

Gene ID:	3561
UniProt:	P31785
Pathways:	JAK-STAT Signaling, Growth Factor Binding

Application Details

Application Notes:	FCM 1:20-100
Restrictions:	For Research Use only

Handling

Format:	Liquid
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Handling

Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months