Cytokine Receptor Common Subunit Gamma (IL2RG) ELISA Kit for Human

PRODUCT OVERVIEW

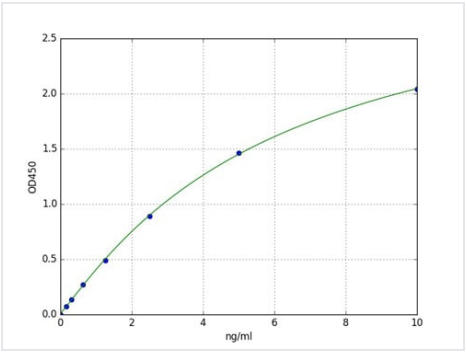
Product Name	Cytokine receptor common subunit gamma (IL2RG), ELISA Kit
Full Product Name	Human Cytokine receptor common subunit gamma ELISA Kit
Product Gene Name	IL2RG elisa kit
Product Synonym Names	IL2RG/p64/Interleukin-2 receptor subunit gamma (IL-2 receptor subunit gamma/IL-2R subunit gamma/IL-2RG)/gammaC/CD132/IL-2 R gamma/IL2RG/CD132/CD132 antigen/CIDX/combined immunodeficiency; X-linked/common cytokine receptor gamma chain/common gamma-chain/cytokine receptor common subunit gamma/gamma (c)/IL-2 receptor subunit gamma/IL-2R subunit gamma/IL-2RG/IMD4/interleukin 2 receptor; gamma/Interleukin-2 receptor subunit gamma/P64/p64/SCIDX/SCIDX1/severe combined immunodeficiency
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.156-10ng/ml
Sensitivity	0.094ng/ml
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Molecular Weight	20,088 Da
OMIM	300400
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for IL2RG elisa kit	Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology anti-Human IL2RG antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-Human IL2RG antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human IL2RG amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of Human IL2RG can be calculated.
Other Notes	Small volumes of IL2RG elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for IL2RG purchase	MBS762946 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytokine receptor common subunit gamma (IL2RG) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing IL2RG. The ELISA analytical biochemical technique of the MBS762946 kit is based on IL2RG antibody-IL2RG antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect IL2RG antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, IL2RG. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

Typical Data & Standard Curve

Results of a typical standard run of a Human IL2RG ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	0.156	0.313	0.625	1.25	2.5	5	10
Y	OD450	0.036	0.192	0.319	0.529	0.947	1.279	1.683	1.749

Typical Testing Data of IL2RG elisa kit



Typical Standard Curve of IL2RG elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL2RG. It may not necessarily be applicable to this product.

NCBI GI #	4557882
NCBI GeneID	3561
NCBI Accession #	NP_000197.1
UniProt Secondary Accession #	Q5FC12
UniProt Related Accession #	P31785
GenBank Nucleotide #	NM_000206.2
NCBI Official Full Name	cytokine receptor common subunit gamma
NCBI Official Synonym Full Names	interleukin 2 receptor subunit gamma
NCBI Official Symbol	IL2RG
NCBI Official Synonym Symbols	P64; CIDX; IMD4; CD132; SCIDX; IL-2RG; SCIDX1
UniProt Protein Name	Cytokine receptor common subunit gamma
UniProt Synonym Protein Names	Interleukin-2 receptor subunit gamma; IL-2 receptor subunit gamma; IL-2R subunit gamma; IL-2RG; gammaC; p64; CD_antigen: CD132
Protein Family	Cytokine receptor
UniProt Gene Name	IL2RG
UniProt Synonym Gene Names	IL-2 receptor subunit gamma; IL-2R subunit gamma; IL-2RG
UniProt Entry Name	IL2RG_HUMAN
NCBI Protein Information	cytokine receptor common subunit gamma
NCBI Summary for IL2RG	The protein encoded by this gene is an important signaling component of many interleukin receptors, including those of interleukin -2, -4, -7 and -21, and is thus referred to as the common gamma chain. Mutations in this gene cause X-linked severe combined immunodeficiency (XSCID), as well as X-linked combined immunodeficiency (XCID), a less severe immunodeficiency disorder. [provided by RefSeq, Mar 2010]

UniProt Comments for IL2RG	IL2RG: Common subunit for the receptors for a variety of interleukins. Defects in IL2RG are the cause of severe combined immunodeficiency X-linked T-cell-negative/B-cell-positive/NK-cell- negative (XSCID); also known as agammaglobulinemia Swiss type. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell- mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development. Defects in IL2RG are the cause of X-linked combined immunodeficiency (XCID). XCID is a less severe form of X-linked immunodeficiency with a less severe degree of deficiency in cellular and humoral immunity than that seen in XSCID. Belongs to the type I cytokine receptor family. Type 5 subfamily. Protein type: Membrane protein, integral; Receptor, cytokine Chromosomal Location of Human Ortholog: Xq13.1 Cellular Component: external side of plasma membrane; integral to plasma membrane; intracellular; membrane; plasma membrane Molecular Function: interleukin-2 binding; interleukin-2 receptor activity; interleukin-4 receptor activity; interleukin-7 binding; interleukin-7 receptor activity; protein binding Biological Process: activation of MAPKK activity; axon guidance; epidermal growth factor receptor signaling pathway; fibroblast growth factor receptor signaling pathway; immune response; innate immune response; insulin receptor signaling pathway; MAPKKK cascade; nerve growth factor receptor signaling pathway; Ras protein signal transduction; signal transduction; small GTPase mediated signal transduction; vascular endothelial growth factor receptor signaling pathway; viral reproduction Disease: Combined Immunodeficiency, X-linked; Severe Combined Immunodeficiency, X-linked
Research Articles on IL2RG	**1.** Targeting the binding interface on a shared receptor subunit of a cytokine family enables the inhibition of multiple member cytokines with selectable target spectrum.
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