

Recombinant Cynomolgus IL2 Protein, His-tagged

Cat. No. IL2-616C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus IL2 Protein (1-154 aa) with His tag was expressed in HEK293.
Species	Cynomolgus
Source	HEK293
ProteinLength	1-154 aa
Description	Cytokine produced by activated CD4-positive helper T-cells and to a lesser extend activated CD8-positive T-cells and natural killer (NK) cells that plays pivotal roles in the immune response and tolerance. Binds to a receptor complex composed of either the high-affinity trimeric IL-2R (IL2RA/CD25, IL2RB/CD122 and IL2RG/CD132) or the low-affinity dimeric IL-2R (IL2RB and IL2RG). Interaction with the receptor leads to oligomerization and conformation changes in the IL-2R subunits resulting in downstream signaling starting with phosphorylation of JAK1 and JAK3. In turn, JAK1 and JAK3 phosphorylate the receptor to form a docking site leading to the phosphorylation of several substrates including STAT5. This process leads to activation of several pathways including STAT, phosphoinositide-3-kinase/PI3K and mitogen-activated protein kinase/MAPK pathways. Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well. Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production. Plays a pivotal role in regulating the adaptive immune system by controlling the survival and proliferation of regulatory T-cells, which are required for the maintenance of immune tolerance.

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Moreover, participates in the differentiation and homeostasis of effector T-cell subsets, including Th1, Th2, Th17 as well as memory CD8-positive T-cells.

Form	PBS, pH 7.4
Molecular Mass	18.5 kDa
AASequence	MYRMQLLSICIALSLALVTNSAPTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPKLTR MLTFKFYMPKKATELRHLQCLEEELKPLEEVLNLAQSKSFHLRDTKDLISNINVIVLEL KGSETTLMCEYADETATIVEFLNRWITFCQSIISTLTTHHHHHH
Purity	>90% by SDS-PAGE
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Concentration	0.84 mg/mL

GENE INFORMATION

Gene Name	IL2 interleukin 2 [<i>Macaca mulatta</i> (Rhesus monkey)]
Official Symbol	IL2
Synonyms	IL2; interleukin 2; interleukin-2; TCGF; T-cell growth factor; IL-2
Gene ID	708017
mRNA Refseq	NM_001047130
Protein Refseq	NP_001040595

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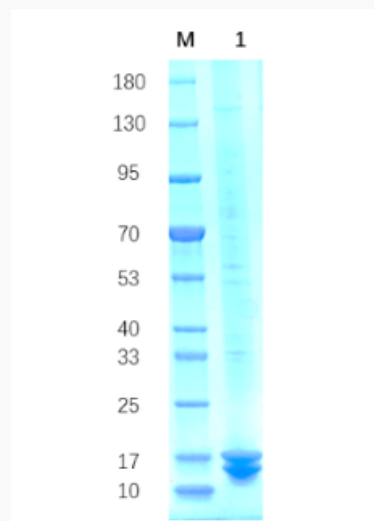
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UniProt ID

P68291

SDS-PAGE



Reducing 12% SDS-PAGE analysis profile of purified IL2 (CBB stained)

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