

Recombinant human IL2

Catalog No: #AG0001

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Recombinant human IL2
Host Species	HEK293
Purification	> 95% by Tris-Bis PAGE;> 95% by SEC-HPLC
Immunogen Description	Ala21-Thr153
Target Name	IL2
Other Names	Human IL-2, h-IL-2, rh-IL-2, recombinant IL-2, interleukin-2,TCGF
Accession No.	Uniprot:P60568Gene ID:3558
Uniprot	P60568
GeneID	3558
Target Species	human
Calculated MW	15.4 kDa
Tag Info	additional amino acid free
Formulation	0.22 µm filtered solution of PBS, pH 7.4.
Storage	Aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Background

Interleukin-2 (IL-2) is a O-glycosylated, four alpha -helix bundle cytokine that has potent stimulatory activity for antigen-activated T?cells. It is expressed by CD4+ and CD8+ T?cells, gamma P' T?cells, B?cells, dendritic cells, and eosinophils (1-3). Mature human IL-2 shares 56%?and 66%?aa sequence identity with mouse and rat IL-2, respectively. Human and mouse IL-2 exhibit cross-species activity (4). The receptor for IL-2 consists of three subunits that are present on the cell surface in varying preformed complexes (5-7). The 55 kDa IL-2?R alpha is specific for IL-2 and binds with low affinity. The 75?kDa IL-2 R beta, which is also a component of the IL-15 receptor, binds IL-2 with intermediate affinity. The 64?kDa common gamma chain gamma c/IL-2 R gamma, which is shared with the receptors for IL-4, -7, -9, -15, and -21, does not independently interact with IL-2. Upon ligand binding, signal transduction is performed by both IL-2 R beta and gamma c. IL-2 is best known for its autocrine and paracrine?activity on T?cells. It drives resting T?cells to proliferate and induces IL-2 and IL-2 R alpha synthesis (1,?2). It contributes to T?cell homeostasis by promoting the Fas-induced death of na?ve CD4+ T?cells but not activated CD4+ memory lymphocytes (8). IL-2 plays a central role in the expansion and maintenance of regulatory T?cells, although it inhibits the development of Th17 polarized cells (9-11). Thus, IL-2 may be a key cytokine in the natural suppression of autoimmunity (12,?13).

Note: This product is for in vitro research use only