Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
Toll-free: 400 627 9288
Email: service@genomeditech.com

Human IL-2 Protein; His Tag

Product Information

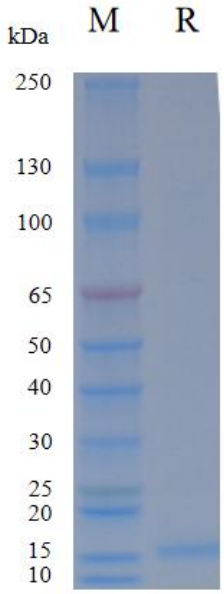
Product Name	Human IL-2 Protein; His Tag
Storage temp	Store at ≤ -70℃, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	**GM-88499RP-100 / 100 μg** **GM-88499RP-1000 / 1 mg**

Protein Information

Alternative Names	IL2, TCGF, lymphokine, Interleukin 2
Source	Human IL-2 Protein; His Tag (GM-88499RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 21 - Thr 153 (Accession # P60568-1). This protein carries a His tag at the N-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/μg, determined by LAL gel clotting assay
Predicted Mol Mass	16.2 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	Interleukin-2 (IL-2), also known as T-cell growth factor (TCGF), is a cytokine mainly produced by activated $CD4^+$ T cells (and also by other immune cells in some contexts). IL-2 acts as a key regulator of immune responses, promoting T cell proliferation, survival, and differentiation, and it is especially important for the maintenance and function of regulatory T cells (Tregs). IL-2 exerts its effects by binding to the IL-2 receptor complex, which is composed of an IL-2Rα (CD25) subunit and the shared IL-2Rβ (CD122) and IL-2Rγ (CD132) subunits. Upon IL-2 binding, the receptor complex brings together and activates the intracellular kinases associated with IL-2Rβ and IL-2Rγ, leading to phosphorylation of downstream signaling molecules. The main pathways include JAK/STAT signaling, where STAT5 is activated and translocates to the nucleus to drive transcription of genes involved in proliferation and survival. In parallel, IL-2 can stimulate PI3K/AKT and MAPK/ERK pathways, supporting metabolic activation and cell-cycle progression. By coordinating these signaling cascades, IL-2 helps determine whether immune cells expand, persist, or differentiate during an immune response.

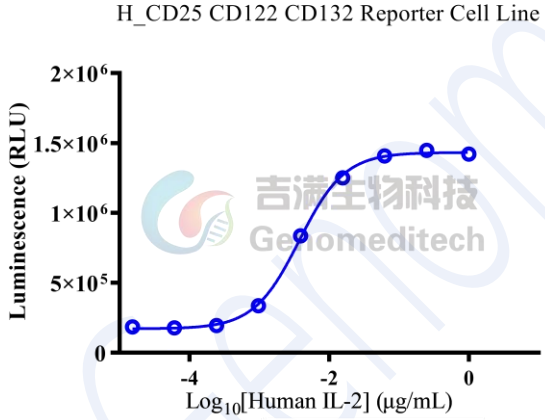
Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
Toll-free: 400 627 9288
Email: service@genomeditech.com

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-CELL BASE



	H_CD25 CD122 CD132 Reporter Cell Line
EC50	0.003740

Human IL-2 Protein; His Tag (Catalog # GM-88499RP) was added into H_CD25 CD122 CD132 Reporter Cell Line (Catalog # GM-C29055) and stimulates related signals.