



Product Data Sheet: Recombinant Human IL-2, Tag free

Product details	
Product Name	: Recombinant Human IL-2, Tag free
Product Part Number	: IL2-111
Description	Interleukin 2 (IL-2) is a monomeric cytokine that was originally identified as a T cell growth factor. It binds to heterotrimeric receptors consisting of CD25, CD122, and CD132. Upon binding, it activates JAK3-, STAT5-, and AKT-dependent signaling pathways, which results in cellular proliferation and survival. Recombinant human IL-2 is produced to aid in various research and therapeutic applications.
Synonyms	T cell growth factor (TCGF)
Sequence	<div style="border: 1px solid black; padding: 2px; display: inline-block; background-color: #e0e0e0;">IL-2 (Q0GK43)</div> * <p>*There is a short 6 amino acid overhang post-cleavage. Sequence : Full sequence available upon request. Total Aminoacid: 139aa . Calculated MW : 16.1 kDa</p>
Formulation	Lyophilized protein from solution in 50 mM Tris-HCl pH 7.4, 150 mM NaCl
Purity & Identity	≥90% pure, verified by SDS-PAGE. Identity verified by Western blot. Data available upon request.
Safety	Endotoxin: <1 EU/μg . Mycoplasma: Negative
Protein Content	Concentration verified by total protein assay
Biological Activity	Determined by SPR. Human IL-2RB&IL-2RA&IL-2RG, Fc tag captured by Protein A immobilized on a carboxymethyl dextran chip can bind Human IL-2, Tag Free with a consistent affinity constant relative to an external reference standard control.
Application	Research Use Only. Not for diagnostic or therapeutic applications.



Storage & Handling

Products are lyophilized and shipped at ambient temperature. Please follow the storage and handling instructions below after receiving the product.

Storage	Upon arrival, store the lyophilized protein at -20°C.
Reconstitution	Gently tap down the vial to ensure that all lyophilisate is collected at the bottom of the vial. Reconstitute the product in sterile water to 500 µg/mL by gently pipetting the solution down the sides of the vial. Avoid vigorous shaking that can cause foaming and protein denaturation. Keep on ice. Aliquot and store at < -70°C for up to 3 months. Avoid repeated freeze-thaw cycles.
Recommendation	As an additional precaution, after adding reconstituted products to media, filter-sterilize before use in cell culture.

Frequently Asked Questions

- Why can't I see a pellet in the vial?**
 Lyophilized powder may not be visible for many reasons including, but not limited to, dislodged powder being stuck on the cap or lack of carrier proteins that make the product difficult to see. Please tap or centrifuge the vial to bring all the material down to the bottom and reconstitute the product as outlined above.
- Are there any stability concerns with freeze thawing?**
 Repeated freeze thawing is not recommended, as this may damage the protein products resulting in reduced functionality. After reconstitution, please aliquot into suitable sizes for one time use and freeze.
- Can I add BSA as a carrier?**
 Yes. Adding a carrier protein like Bovine Serum Albumin (BSA 0.1%) enhances protein stability, increases shelf-life, and allows the recombinant protein to be stored at a more dilute concentration.
- Is this protein bioactive?**
 Yes, this protein was tested for activity on its cognate receptor via SPR.



References

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End of Product Data sheet

