

Technical Data Sheet

Recombinant Human IL-7

Product Information

Material Number:	554608
Size:	5 µg
Storage Buffer:	Lyophilized in an aqueous buffered solution containing BSA.

Description

Interleukin-7 (IL-7) is a potent lymphoid cell growth factor which affects pre-B, pro-B, and early T cells. It will also affect mature T cells in combination with other factors, such as IL-2. It is encoded by a protein of 152 amino acid residues. Human IL-7 migrates as a protein of 17 kDa when analyzed by SDS-PAGE.

Formulation and Purity: The recombinant human IL-7 is > 95% pure as determined by SDS-PAGE and an absorbance assay based on the Beers-Lambert law. Endotoxin level is ≤ 0.1 ng per µg of human IL-7, as measured in a chromogenic LAL assay. Recombinant human IL-7 is supplied lyophilized from a solution comprised of 0.22 µm sterile-filtered PBS and containing 50 µg bovine serum albumin per µg of cytokine.

Preparation and Storage

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Store product at -80°C prior to reconstitution, or for long term storage of lyophilized product or reconstituted stock solutions. The product can be reconstituted in sterile neutral buffer containing carrier protein such as human or bovine albumin, aliquoted and stored at -80°C. For in vitro biological assay use, we recommend carrier-protein concentrations of 0.5 - 1 mg/ml. For use as an ELISA standard we recommend carrier-protein concentrations of 5 - 10 mg/ml. NOTE: Failure to add carrier protein or store at indicated temperatures may result in a loss of activity. The product should not be diluted to less than 25 µg/ml for long term storage.

Application Notes

Application

ELISA Standard	Routinely Tested
Bioassay	Reported

Recommended Assay Procedure:

ELISA Standard: This recombinant human IL-7 is useful as a quantitative standard for measuring human IL-7 protein levels in an IL-7 specific sandwich ELISA with the purified BVD10-40F6 antibody (Cat. No. 554493) as a capture antibody and the biotinylated BVD10-11C10 (Cat. No. 554494) as the detection antibody. To obtain linear standard curves, doubling dilutions of this human IL-7 standard from ~2,000 to 15 pg/ml should be included in each ELISA plate. For specific methodology, please visit the protocols section or chapter on ELISA in the Immune Function Handbook, both of which are posted on our website, wwwbdbioscience.com.

Representative Biological Activity: This product has been reported to have biological activity with an ED50 in the range of 0.2 -0.5ng/ml. Please note that this application is not routinely tested at BD Biosciences.

Note: Carrier proteins should be pre-screened for possible effects in an appropriate experimental system. Carrier proteins may effect experimental results due to toxicity, high endotoxin levels or possible blocking activities.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554493	Purified Rat Anti-Human IL-7	0.5 mg	BVD10-40F6
554494	Biotin Rat Anti-Human IL-7	0.5 mg	BVD10-11C10

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

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References

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