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Human Interleukin-4 Recombinant

Catalog #: 90193-B Lot#: 220722

Description: Recombinant human interleukin-4 (IL-4), also known as B-Cell Growth Factor (BCGF), is a disulfide-linked monomeric protein consisting of 130 amino acid residue subunits and migrates as an approximately 15 kDa protein under reducing and non-reducing conditions.

<u>Source</u>: Optimized DNA sequence encoding human IL-4 mature chain was expressed in *E. coli*.

Formulation: Lyophilized from a 0.2 μm filtered solution containing 2.5% glycine, 0.5% sucrose, 0.01% Tween-80, 5 mM glutamic acid, pH 4.5.

Reconstitution: A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/ml. This solution can then be diluted into other buffers.

Storage: The lyophilized protein is stable for at least 2 years from date of receipt when stored at -20°C. Upon reconstitution, store in working aliquots at 2 - 8°C for up to one month, or at -20°C for up to six months, in the presence of a carrier protein. Avoid repeated freeze/thaw cycles.

<u>Purity</u>: >95%, as determined by SDS-PAGE and HPLC.

Endotoxin Level: Endotoxin level was found to be < 0.1 ng/μg (1 EU/μg), using the LAL gel clot method.

Biological Activity: The ED50, determined by the dose-dependent stimulation of the proliferation of human TF-1 cells, is ≤ 0.1 ng/ml, corresponding to a specific activity of $> 1x \cdot 10^7$ units/mg.

Protein Sequence:

MGLTSQLLPPLFFLLACAGNFVHGHKCD ITLQEIIKTLNSLTEQKTLCTELTVTDIFAA SKNTTEKETFCRAATVLRQFYSHHEKDT RCLGATAQQFHRHKQLIRFLKRLDRNL WGLAGLNSCPVKEANQSTLENFLERL KTIMREKYSK CSS