

Recombinant Human IL6 Protein

Catalog No	RP00004	Category	Protein
Description	Recombinant Human IL6 Protein is produced by <i>E. coli</i> expression system. The target protein is expressed with sequence (Pro29-Met212) of human IL6 (Accession #NP_000591.1) fused with an initial Met at the N-terminus and a 6×His tag at the C-terminus.		
Bio-Activity	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED ₅₀ for this effect is 0.75-3 ng/mL. The specific activity of Recombinant Human IL-6 is approximately 0.35 x 10 ⁵ IU/μg.		

Sequence Information

Species	Human	Gene ID	3569
Tags	6×His tag at the C-terminus	Swiss Prot	P05231
Synonyms	BSF-2;BSF2;CDF;HGF;HSF;IFN-beta-2;IFNB2;IL-6		
AA Sequence	PVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGIALRKETCNKSNMCESSKEALAEN NLNLPKMAEKDGCFSQSGFNEETCLVKIITGLLEFEVYLEYLQNRFSSEEQARAVQMSTK VLIQFLQKAKNLDAITTPDPTTNASLLTKLQAQNQWLQDMTTHLILRSFKEFLQSSLRA LRQM		

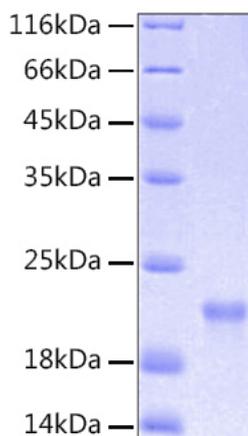
Product information

Source	<i>E. coli</i>
Purity	> 95% by SDS-PAGE.
Endotoxin	< 0.1 EU/μg of the protein by LAL method.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
Reconstitution	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Storage	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Background

Interleukin-6 (IL-6) is a multifunctional α-helical cytokine that regulates cell growth and differentiation of various tissues, which is known particularly for its role in the immune response and acute phase reactions. The encoded protein has been shown to be an endogenous pyrogen capable of inducing fever in people with autoimmune diseases or infections. The protein is primarily produced at sites of acute and chronic inflammation, where it is secreted into the serum and induces a transcriptional inflammatory response through interleukin 6 receptor, alpha. The functioning of this protein is implicated in a wide variety of inflammation-associated disease states, including susceptibility to diabetes mellitus and systemic juvenile rheumatoid arthritis.

SDS-PAGE



Recombinant Human IL6 was determined by SDS-PAGE under reducing conditions with Coomassie Blue, showing a band at 21 kDa.

Bioactivity