Recombinant IL6 protein (His tag)

Catalog Number	542024
Synonyms	IL-6; B-cell stimulatory factor 2; BSF-2; CTL differentiation factor; CDF; Hybridoma growth factor; Interferon beta-2; IFN-beta-2
Species	Human
Expression System	E. coli
Accession	P05231
Molecular Weight	Predictes a molecular mass of 21.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	44-212
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 44-212 aa (P05231) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Interleukin-6 (IL-6) Fragment (aa 44-212) is a high-quality, soluble protein designed for structural and biochemical research. This 169-amino acid fragment retains key functional properties of IL-6, making it ideal for studying cytokine signaling, immune responses, and metabolic regulation in controlled experimental settings. Interleukin-6 (IL-6) is a multifunctional cytokine with critical roles in immunity, tissue regeneration, and metabolism. It functions by binding to IL-6R and associating with IL6ST/gp130 to initiate intracellular signaling pathways, including classic, trans-, and cluster signaling. IL-6 is a potent inducer of the acute phase response, essential for B-cell differentiation into antibody-secreting cells, and pivotal in CD4+ T cell subset differentiation, particularly in Th17 and T follicular helper cell development. It also contributes to bone homeostasis, angiogenesis, metabolic control, liver regeneration, and iron metabolism regulation through HAMP/hepcidin expression. The full-length protein is naturally secreted, supporting its role as a circulating cytokine and myokine involved in systemic physiological and pathological processes.