ATAGENIX LABORATORIES

Catalog Number:ATMP00015HU

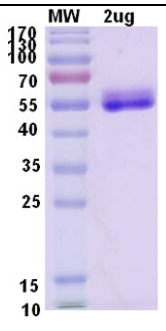
Recombinant Human IL6 protein ,C- Fc tag

Product Details

Summary

English name	Recombinant Human IL6 protein ,C- Fc tag
Purity	>90% as determined by SDS-PAGE
Endotoxin level	<1.0 EU per μg of the protein as determined by the LAL method.
Construction	A DNA sequence encoding the human IL6(Met1~Met212) was fused with the C-terminal Fc tag
Accession #	P05231
Host	Mammalian cells
Species	Homo sapiens (Human)
Predicted Molecular Mass	49.8kDa
Formulation	Supplied as solution form in 1M Tris-HCl, 0.1M Glycine, pH8.0 or lyophilized from 1M Tris-HCl, 0.1M Glycine, pH8.0.
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.
Stability &Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 °C for one week . Store at -20 to -80 °C for twelve months from the date of receipt.
Reconstitution	Reconstitute in sterile water for a stock solution.A copy of datasheet will be provided with the products, please refer to it for details.

SDS-PAGE image



SDS-PAGE Image

Background

Background	Interleukin 6 (IL-6) is also known as HGF, BSF2,HSF, IFNB2 and IL-6, originally

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identified as a B cell differentiation factor, is a multifunctional cytokine that regulates immune responses, hematopoiesis, acute phase responses, and inflammatory reactions.It is secreted by T cells, macrophages , monocytes, fibroblasts,endothelial cells,et.al. to stimulate immune response to trauma, especially burns or other tissue damage leading to inflammation. Interleukin 6 has been shown to interact with interleukin-6 receptor and glycoprotein. IL-6 is relevant to many disease processes such as diabetes,atherosclerosis, depression, Alzheimer's Disease,systemic,lupus erythematosus,prostate cancer and rheumatoid arthritis. Advanced/metastatic cancer patients have higher levels of IL-6 in their blood.Hence there is an interest in developing anti-IL-6 agents as therapy against many of these diseases.

Alternative Names IL6,Interleukin-6,BSF2,HSF,IFNB2

References Spiekermann, Subklewe, Hildebrandt, Humpe, von Bergwelt-Baildon (2020) [COVID-19 from the Perspective of Haematology and Haemostaseology] Deutsche medizinische Wochenschrift (1946) 145(15) 1044-1050

Frontier progress

Infection with SARS-COV-2 leads to a number of pathologies in the hematopoetic system that have significant impact on clinical symptoms and mortality. There are 3 stages of infection: (1) early upper respiratory tract infection with fever and lymphopenia (2) pulmonary phase and (3) hyperinflammatory phase with the clinical signs of organ failure such as ARDS/shock. Hyperinflammation, which is triggered by activation of T cells and monocytes/macrophages, is essential for organ pathologies. Interferon IFN-ɣ, tumor necrosis factor (TNF)-α, IL-10 and interleukin-6 (IL-6) play important roles as mediators of inflammation. In analogy to the cytokine release syndrome (CRS) after CAR-T cell therapy, the therapeutic activity of the IL-6 receptor antibody tocilizumab is investigated in clinical studies.The coagulation system is activated during the inflammatory phase of COVID infection, most likely on the pathophysiological basis of immune thrombosis. Clinically, there is a significantly increased incidence of venous (especially pulmonary artery embolism), but also arterial thromboembolism (TE). In laboratory chemistry, the D-dimer, fibrinogen but also vWF and FVIII are significantly increased. Guidelines for the prophylaxis and therapy of COVID-associated coagulopathy have been developed. Analogous to other viral infections, there are approaches to passive immunization using convalescent plasma. Its administration has shown promising activity in first uncontrolled case series and is currently being examined in clinical studies worldwide for its therapeutic activity.