

GM CSF Human, Sf9

Granulocyte Macrophage-Colony Stimulating Factor Human Recombinant, Sf9

GRF0139

Product Overview

Name	GM CSF Human, Sf9
Accession(Primary)	P04141
Description	Granulocyte Macrophage-Colony Stimulating Factor Human Recombinant, Sf9

Target information (P04141)

Gene Name

About Gene Symbol

Background

Recombinant Granulocyte-Macrophage Colony-Stimulating Factor (GMCSF) is a protein that plays a crucial role in the production and differentiation of white blood cells, including granulocytes and macrophages. It is a potent stimulator of hematopoietic stem cells, which are responsible for the production of all blood cells in the body. Recombinant GMCSF is a synthetic version of the protein that is produced using recombinant DNA technology. Recombinant GMCSF has been extensively studied for its potential therapeutic applications in a variety of medical conditions, including cancer, autoimmune diseases, and infectious diseases. In cancer, GMCSF is used as an immunostimulatory agent to enhance the immune response against cancer cells. By stimulating the production and differentiation of white blood cells, GM-CSF can increase the number of immune cells that can recognize and attack cancer cells. This approach has been successfully used in the treatment of several types of cancer, including melanoma and leukemia. In autoimmune diseases, recombinant GMCSF has been investigated as a potential treatment for conditions such as rheumatoid arthritis and multiple sclerosis. These diseases are characterized by an overactive immune response that attacks healthy tissues in the body. By

modulating the immune response, GMCSF may be able to reduce inflammation and prevent further damage to affected tissues. In infectious diseases, recombinant GMCSF has been studied as a potential treatment for conditions such as sepsis and HIV/AIDS. In sepsis, a severe bacterial infection, GMCSF may be able to stimulate the production of white blood cells and improve the immune response against the infection. In HIV/AIDS, GMCSF may be able to enhance the immune response against the virus and reduce the risk of opportunistic infections. Recombinant GMCSF is typically administered by injection, either directly into the affected tissue or into the bloodstream. It is generally well-tolerated, although some patients may experience side effects such as fever, fatigue, and muscle pain. In conclusion, recombinant GMCSF is a promising therapeutic agent with potential applications in a variety of medical conditions. Its ability to stimulate the production and differentiation of white blood cells makes it a valuable tool in the treatment of cancer, autoimmune diseases, and infectious diseases. Ongoing research is likely to uncover new uses for this protein and further refine its therapeutic potential.