

Recombinant Human IL-11 Protein(His Tag)

Catalog Number: PDEH101122

Note: Centrifuge before opening to ensure complete recovery of vial contents.

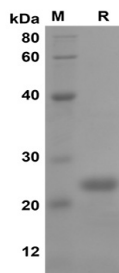
Description

Species	Human
Source	E.coli-derived Human IL-11 protein Pro22-Leu199, with an N-terminal His
Calculated MW	19.4 kDa
Observed MW	23 kDa
Accession	P20809
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human IL-11 proteins, 2µg/lane of Recombinant Human IL-11 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 23 kDa

Background

IL11 is a multifunctional cytokine first isolated in 199 from bone marrow-derived stromal cells. It is a key regulator of multiple events in hematopoiesis, most notably the stimulation of megakaryocyte maturation. IL11 is also known under the names adipogenesis inhibitory factor (AGIF) and oprelvekin. IL11 can improve platelet recovery after chemotherapy-induced thrombocytopenia, induce acute-phase proteins, modulate antigen-antibody responses, participate in the regulation of bone cell proliferation and differentiation, and could be used as a therapeutic for osteoporosis. IL11 stimulates the growth of certain lymphocytes and, in the murine model, stimulates an increase in the cortical thickness and strength of long bones. As a signaling molecule, IL11 has a variety of functions associated with its receptor interleukin 11 receptor alpha; such functions include placentation and to some extent of decidualization.