

Recombinant Mouse Interleukin-21/IL-21 Protein (His Tag)

Catalog Number: PKSM041083

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

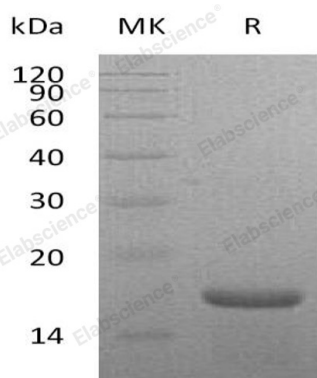
Description

Species	Mouse
Source	E.coli-derived Mouse Interleukin-21/IL-21 protein Pro25-Ser146, with an N-terminal His
Calculated MW	16.5 kDa
Observed MW	16 kDa
Accession	Q9ES17
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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 of 20mM Histidine-HCl, 6% Sucrose, 2% Glycine, 50mM NaCl, 0.05% Tween 80, pH 6.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Interleukin-21(IL-21) is an approximately 14 kDa cytokine which belongs to the IL-15/IL-21 family. Mature mouse IL-21 shares 66%,59%, 58%, and 88% aa sequence identity with mature canine, human, rabbit, and rat IL-21, respectively. IL-21 is produced by activated T follicular helper cells (Tfh), Th17 cells, and NKT cells. It exerts its biological effects through a heterodimeric receptor complex (IL-21 specific IL-21 R). IL-21 is a cytokine that has potent regulatory effects on cells of the immune system, including natural killer (NK) cells and cytotoxic T cells that can destroy virally infected or cancerous cells. This cytokine induces cell division/proliferation in its target cells. It is required for the migration of dendritic cells to draining lymph nodes .It co-stimulates the activation, proliferation, and survival of CD8+ T cells and NKT cells and promotes Th17 cell polarization. It blocks the generation of regulatory T cells and their suppressive effects on CD4+ T cells.