



Recombinant Protein Technical Manual

Recombinant Mouse Interleukin-21/IL-21 Protein (His Tag) RPES1765

Product Data:

Product SKU: RPES1765

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: Q9ES17

Protein Information:

Molecular Mass: 14.4 kDa

AP Molecular Mass: 17 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 PB,150mM NaCl,pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Interleukin-21;IL-21;IL21;IL21

Immunogen Information:

Sequence: Pro25-Ser146

Background:

Interleukin-21(IL-21) is an approximately 14 kDa cytokine which belongs to the IL5/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.