Recombinant Human IL-32 alpha protein(His Tag)

Catalog Number: PKSH034116

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

Description

Species	Human
Source	E.coli-derived Human IL-32 alpha protein Met 1-Lys 131, with an C-terminal His
Calculated MW	15.7 kDa
Observed MW	18 kDa
Accession	P24001-4
Bio-activity	Measure by its ability to induce TNF alpha secretion in RAW264.7 cells. The ED_{50} for this effect is <10 μg/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. 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.

Background

IL-32 is a recently discovered cytokine that induces various proinflammatory cytokines (TNF-alpha, IL-1beta, IL-6) and chemokines in both human and mouse cells through the NF-kappaB and p38 MAPK inflammatory signal pathways. It is regulated robustly by other major proinflammatory cytokines and is crucial to inflammation and immune responses. Four of the IL-32 isoforms (alpha, beta, gamma, and delta) are the most representative IL-32 transcripts, and the gamma isoform of IL-32 is the most active, although all isoforms are biologically active. IL-32, a cytokine produced mainly by T, natural killer, and epithelial cells induces significant amounts of TNFalpha and MIP-2 and increases the production of both cytokines in a dose-dependent manner. IL-32 has been implicated in inflammatory disorders, Mycobacterium tuberculosis infections, inflammatory bowel disease, and influenza A virus infection, as well as in some autoimmune diseases, such as rheumatoid arthritis, ulcerative colitis, and in the human stomach cancer, human lung cancer, and breast cancer tissues. Thus, IL-32 expression might be valuable as a biomarker for cancer.