



Interleukin-32 alpha, His Tag, human recombinant (rHuIL-32a-His)

Catalog No: 97250
Lot No: XXXXX
Source: *E. coli*
Synonyms: NK4, TAIF, TAIFa, TAIFb, TAIFc, TAIFd, IL-32beta, IL-32alpha, IL-32delta, IL-32gamma, Interleukin-32, IL-32, Natural killer cells protein 4, Tumor necrosis factor alpha-inducing factor, IL-32a, IL32a, IL32, Interleukin-32 alpha

Background

IL-32 is part of the cytokine family and contains a tyrosine sulfation site, 3 potential N-myristoylation sites, multiple putative phosphorylation sites, and an RGD cell-attachment sequence. IL-32 expression is elevated after the activation of T-cells by mitogens or the activation of NK cells by IL-2. IL-32 induces the production of TNF- α from macrophage cells. IL-32 pro-inflammatory pathway is activated in response to influenza A virus infection. Dysregulation of IL-32 in myelodysplastic syndrome and chronic myelomonocytic leukemia modulates apoptosis and impairs NK function. Induction of TNF, IL-1 β , and IL-6 by IL-32 is intervened by p38-MAPK. IL-32 induced monocyte-to-macrophage differentiation is mediated through nonapoptotic, caspase-3-dependent mechanisms. IL32 plays an important role in the pathogenesis of rheumatoid arthritis. IL-32 is involved in activation-induced cell death in T cells, through its intracellular actions. IL-32 is a cell-associated proinflammatory cytokine, which is particularly stimulated by mycobacteria through a caspase-1- and IL-18-dependent production of interferon gamma. IL-32 is associated with TNF- α , IL-1 β , and IL-18. IL32 is involved in human rheumatoid arthritis and is a novel target in autoimmune diseases.

Description

Interleukin-32 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 168 amino acids (1-131) and having a molecular mass of 19.1 kDa. IL-32 is fused to a 37 amino acid His Tag at N-terminus and purified by conventional chromatography.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The IL-32 His Tag protein solution contains 20 mM Tris-HCl, pH 8, 1 mM DTT and 10% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMCF PKVLSDDMKK LKARMHQAIE RFYDKMQNAE SGRGQVMSSL
AELEDDFKEG YLETVAAYYE EQHPELTPLL EKERDGLRCR GNRSPVPDVE DPATEEPGES FCDKSYGAPR GDKEELTPQK
CSEPQSSK



Usage

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