Elabscience®

Recombinant Human IL-32α Protein(Trx Tag)

Catalog Number: PDEH100654

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

Description	
Species	Human
Source	E coli-derived Human IL-32 α protein Met1-Asn131, with an N-terminal Trx
Calculated MW	36.4 kDa
Observed MW	35 kDa
Accession	P24001
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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μ m 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-32 α proteins, 2 μ g/lane of Recombinant Human IL-32a proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 35 KD

Background

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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.