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Datasheet for ABIN2666739
IL36A/IL1F6 Protein (AA 6-158)

Overview

Quantity:	10 µg
Target:	IL36A/IL1F6 (IL1F6)
Protein Characteristics:	AA 6-158
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS), Intracellular Flow Cytometry (ICFC)

Product Details

Purity:	> 97 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.01 ng per µg cytokine as determined by the LAL method.

Target Details

Target:	IL36A/IL1F6 (IL1F6)
Alternative Name:	IL-36 alpha (IL1F6 Products)
Background:	IL-36α is one of the IL-36 cytokines that are part of the IL-1 family. Like other IL-1 family members, IL-36α requires N-terminal processing to gain full bioactivity, currently, the proteases responsible for processing IL-36α are unknown. IL-36α signals through IL-36R/IL-1RAcP, which results in MAPK, Erk1/2, and JNK activation. IL-36α is implicated in skin homeostasis, and it is

Target Details

overexpressed in psoriatic lesional skin. Transgenic mice overexpressing IL-36 α in skin have an inflammatory skin condition showing some characteristics of human psoriasis, including thickened scaly skin, acanthosis, hyperkeratosis, and dermis infiltration. EGF regulates the expression of IL-36 α in the skin. IL-36 α can also be detected in adipose tissue. IL-36 α reduces adipocyte differentiation and also induces inflammatory gene expression in mature adipocytes. In lungs, the expression of IL-36 α is increased in response to inflammatory stimuli. Intratracheal instillation of recombinant mouse IL-36 α induces CXCL1 and CXCL2 expression and also neutrophil influx in the lungs. IL-36 α , IL-36 β , and IL-36 γ induce in vitro expression of RNA of multiple cytokines (IL-6, IL-12 p40, CXCL1, CCL1, IL-12 p35, IL-1b, IL-19 p19, GM-CSF, CXCL10, TNF α , CCL3, VCAM-1, and ICAM-1) in mouse bone marrow-derived dendritic cells and CD4 T cells obtained from normal mice. IL-36 α expression is elevated in chronic kidney disease and in rheumatoid arthritis synovium, and decreased expression correlates with a poor prognosis in hepatocellular carcinoma.

Molecular Weight: The 153 amino acid recombinant protein has a predicted molecular mass of approximately 17 kDa. The DTT-reduced and non-reduced protein migrate at approximately 17 kDa by SDS-PAGE. The predicted N-terminal amino acid is Lys.

Pathways: [Cancer Immune Checkpoints](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: The ED50 is 20 - 50 ng/ml, corresponding to a specific activity 2 - 5 x 10⁴ units/mg, as determined by a dose-dependent stimulation of IL-8 secretion in human preadipocytes.

Restrictions: For Research Use only

Handling

Format: Liquid

Reconstitution: For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 μ g/mL in sterile buffer (PBS, HPBS, DPBS, and EBSS) containing carrier protein such as 1 % BSA or HSA.

Buffer: 0.22 μ m filtered protein solution is in 20 mM Hepes pH 7.2, 150 mM NaCl, 10 mM TCEP.

Handling Advice: Avoid repeated freeze/thaw cycles.

Handling

Storage: -20 °C

Storage Comment: Unopened vial can be stored between 2°C and 8°C for one week, at -20°C for three months, or at -70°C for 6 months.