

ARG70083 Human IL37 / IL1F7 / FIL1 zeta recombinant protein (Active) (Histagged, C-ter)

Package: 100 μg, 20 μg Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human IL37 / IL1F7 / FIL1 zeta recombinant protein
Tested Application	SDS-PAGE
Target Name	IL37 / IL1F7 / FIL1 zeta
Species	Human
A.A. Sequence	Lys53 - Asp218
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce IL-8 secretion in human PBMCs. The ED50 for this effect is < 0.9 $\mu\text{g}/\text{mL}.$
Alternate Names	Interleukin-1 zeta; IL-1 zeta; FIL1; Interleukin-37; IL-1X; IL-1F7; FIL1 zeta; IL-1H4; Interleukin-1 homolog 4; FIL1Z; IL1H4; Interleukin-1 family member 7; Interleukin-23; IL-37; FIL1(ZETA); IL-1H; IL-1RP1; IL1RP1; IL1F7; Interleukin-1-related protein

Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/ μg of the protein, as determined by the LAL test.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 8.0)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 μ g/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	IL37
Gene Full Name	interleukin 37
Background	The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine can bind to, and may be a ligand for interleukin 18 receptor (IL18R1/IL-1Rrp). This cytokine also binds to interleukin 18 binding protein (IL18BP), an inhibitory binding protein of interleukin 18 (IL18), and subsequently forms a complex with IL18 receptor beta subunit, and through which it inhibits the activity of IL18. This gene along with eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. Five alternatively spliced transcript variants encoding distinct isoforms have been

	reported. [provided by RefSeq, Jul 2008]
Function	Suppressor of innate inflammatory and immune responses involved in curbing excessive inflammation. This function requires SMAD3. Suppresses, or reduces, proinflammatory cytokine production, including IL1A and IL6, as well as CCL12, CSF1, CSF2, CXCL13, IL1B, IL23A and IL1RN, but spares anti-inflammatory cytokines. Inhibits dendritic cell activation. [UniProt]
PTM	Proteolytically converted to the mature form by CASP1. [UniProt]
Cellular Localization	Cytoplasm, cytosol. Nucleus. Secreted. Note=Stimulation with IL1B leads to colocalization with SMAD3 mostly in perinuclear regions (PubMed:20935647). Only the CASP1-cleaved mature form translocates into the nucleus upon LPS stimulation (PubMed:18390730). [UniProt]

Images

