

IL-25

Catalog # PVGS1060

Specification

IL-25 - Product Information

Primary Accession **Species**Mouse

Q9CPT4

Sequence

Val25-Leu166, expressed with an N-terminal Met

Purity

> 95% as analyzed by SDS-PAGE
br>> 95% as analyzed by HPLC

Endotoxin Level

< 1 EU/ µg of protein by LAL method

Expression System

E. coli

Theoretical Molecular Weight

15.8 kDa

Formulation

Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

IL-25 - Additional Information

Gene ID 28106

Other Names

Myeloid-derived growth factor, MYDGF, Mydgf {ECO:0000303|PubMed:25581518}

Target Background

Interleukin-25 (IL-25), also known as interleukin-17E (IL-17E), is a cytokine that belongs to the IL-17 cytokine family together with IL-17A (named also IL-17), IL-17B, IL-17C, IL-17D and IL-17F. IL-25 has a heterodimeric receptor. The receptor is composed of two subunits IL-17RA and IL-17RB, it does not bind directly to IL-17RA, but this subunit is necessary for its functions, as well as IL-17RB which directly bind IL-25. IL-25 can induce NF-kB activation, and stimulate the



production of IL-8 (named also CXCL8), which is the major chemotactic substance of neutrophils. Another important function of IL-25 is to support the Th2 immune response. IL-25 has been shown to induce the production of IL-4, IL-5 and IL-13. Evidence is the expression of IL-17RB on Th2 cells, not on Th1 and Th17. In addition, IL-25 is responsible for the decrease in IFN gamma.

IL-25 - Protein Information

Name Mydgf {ECO:0000303|PubMed:25581518}

Function

Bone marrow-derived monocyte and paracrine-acting protein that promotes cardiac myocyte survival and adaptive angiogenesis for cardiac protection and/or repair after myocardial infarction (MI). Stimulates endothelial cell proliferation through a MAPK1/3-, STAT3- and CCND1-mediated signaling pathway. Inhibits cardiac myocyte apoptosis in a PI3K/AKT-dependent signaling pathway.

Cellular Location

Secreted. Endoplasmic reticulum-Golgi intermediate compartment {ECO:0000250|UniProtKB:Q969H8}. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q969H8}. Golgi apparatus {ECO:0000250|UniProtKB:Q969H8}. Note=The C-terminal RTEL motif may provide retention in the endoplasmic reticulum {ECO:0000250|UniProtKB:Q969H8}

Tissue Location

Expressed in prostate, spleen and lung, and weakly expressed in the left ventricle (LF) and liver. Expressed predominantly in inflammatory cells, such as monocytes and macrophages, and weakly expressed in neutrophils, T-cells, B-cells, endothelial cells and cardiac myocytes, after myocardial infarction (MI) (at protein level)

IL-25 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IL-25 - Images