

I P-1

Catalog # PVGS1440

Product Information

Primary Accession P56478 **Species** Rat

Sequence DCHIKDKDGK AFGSVLMISI NQLDKMTGTD SDCPNNEPNF FKKHLCDDTK

EAAFLNRAAR KLRQFLKMNI SEEFNDHLLR VSDGTQTLVN CTSKEEKTIK

EOKKNDPCFL KRLLREIKTC WNKILKGSIH HHHHH

Purity > 95% as analyzed by SDS-PAGE.

Endotoxin Level Formulation

Lyophilized after extensive dialysis against PBS. Reconstitution Reconstituted in ddH₂O or PBS at 100 □g/ml.

Additional Information

Other Names Interleukin-7, IL-7, II7

Target Background Interleukin-7 (IL-7), also known as lymphopoietin 1 and pre-B cell factor, is a

hematopoietic growth factor belonging to the IL-7/IL-9 family. It is produced by keratinocytes, dendritic cells, hepatocytes, neurons and epithelial cells. IL-7 binds and signals through IL-7 receptor, a heterodimer consisting of IL-7 receptor alpha and common gamma chain receptor. IL-7 plays a role in regulating early B cell and T cell development. It is also important for optimal

dendritic cell-T cell interaction.

Protein Information

II7 Name

Function Hematopoietic cytokine that plays an essential role in the development,

> expansion, and survival of naive and memory T-cells and B- cells thereby regulating the number of mature lymphocytes and maintaining lymphoid homeostasis. Mechanistically, exerts its biological effects through a receptor composed of IL7RA subunit and the cytokine receptor common subunit gamma/CSF2RG. Binding to the receptor leads to activation of various kinases

including JAK1 or JAK3 depending on the cell type and subsequently propagation of signals through activation of several downstream signaling

pathways including the PI3K/Akt/mTOR or the JAK-STAT5.

Cellular Location Secreted {ECO:0000250 | UniProtKB:P13232}. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.