10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL-6R

Catalog # PVGS1357

Specification

IL-6R - Product Information

Primary Accession P08887

Species
Human

Sequence
Leu20-Phe365

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

Endotoxin Level
< 0.2 EU/ µg of protein by gel clotting method

Biological Activity
ED₅₀ < 0.2 µg/ml, measured in a cell proliferation assay using M1 cells in the presence of 10.0 ng/ml human IL-6.

Expression System
CHO

Formulation **Lyophilized after extensive dialysis against PBS.**

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 ddH_2O or PBS up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

IL-6R - Additional Information

Gene ID 3570

Other Names
Interleukin-6 receptor subunit alpha, IL-6 receptor subunit alpha, IL-6R subunit alpha, IL-6R-alpha, IL-6RA, IL-6R 1, Membrane glycoprotein 80, gp80, CD126, Soluble interleukin-6 receptor subunit alpha, sIL6R, IL6R (HGNC:6019)

Target Background

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Interleukin-6 Receptor Alpha, also known as IL-6RA, IL-6R1 and CD126, belongs to the type I cytokine receptor family. It is mainly expressed on T cells, fibroblasts and macrophages. IL-6RA couples with gp130 to form the IL-6 receptor; IL-6RA binds specifically to IL-6 and depends on gp130 to transmit signals. IL-6RA dysfunction has been correlated with the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer. Soluble IL-6RA, which consists of only the extracellular domain of IL-6RA, acts as an agonist of IL-6 activity.

IL-6R - Protein Information

Name IL6R (HGNC:6019)

Function
Part of the receptor for interleukin 6. Binds to IL6 with low affinity, but does not transduce a signal (PubMed:28265003). Signal activation necessitate an association with IL6ST. Activation leads to the regulation of the immune response, acute-phase reactions and hematopoiesis (PubMed:30995492, PubMed:31235509). The interaction with membrane-bound IL6R and IL6ST stimulates 'classic signaling', the restricted expression of the IL6R limits classic IL6 signaling to only a few tissues such as the liver and some cells of the immune system. Whereas the binding of IL6 and soluble IL6R to IL6ST stimulates 'trans- signaling'. Alternatively, 'cluster signaling' occurs when membrane- bound IL6:IL6R complexes on transmitter cells activate IL6ST receptors on neighboring receiver cells (Probable).

Cellular Location
[Isoform 1]: Cell membrane {ECO:0000250|UniProtKB:P22272}; Single-pass type I membrane protein [Soluble interleukin-6 receptor subunit alpha]: Secreted

Tissue Location
[Isoform 2]: Expressed in peripheral blood mononuclear cells and weakly found in urine and serum. 1%-20% of the total sIL6R in plasma is generated by alternative splicing (PubMed:28060820).

IL-6R - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-6R - Images