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

IL-6R

Catalog # PVGS1357

Product Information

Primary Accession	P08887
Species	Human
Sequence	Leu20-Phe365
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	
Biological Activity	ED_{50}
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 □g/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.

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	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.

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).