Active Interleukin 6 Receptor (IL6R)

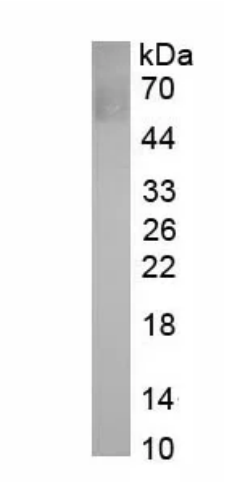
Catalog#:PHH12747

概述（Summary）

别称（Alternative Names）	CD126; gp80; IL6R; IL-6R-1; IL-6R-Alpha; IL6RA; IL-6 receptor subunit alpha; Membrane glycoprotein 80
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu20-Pro365】
Accession #	P08887
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	40.2 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Part of the receptor for interleukin 6. Binds to IL6 with low affinity, but does not transduce a signal. Signal activation necessitate an association with IL6ST. Activation leads to the regulation of the immune response, acute-phase reactions and hematopoiesis. 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).; Signaling via the membrane-bound IL6R is mostly regenerative and anti-inflammatory (Probable). Drives naive CD4(+) T cells to the Th17 lineage, through 'cluster signaling' by dendritic cells.; Soluble form of IL6 receptor (sIL6R) that acts as an agonist of IL6 activity. The IL6:sIL6R complex (hyper-IL6) binds to IL6ST/gp130 on cell surfaces and induces signaling also on cells that do not express membrane-bound IL6R in a process called IL6 'trans-signaling'. sIL6R is causative for the proinflammatory properties of IL6 and an important player in the development of chronic inflammatory diseases. In complex with IL6, is required for induction of VEGF production. Plays a protective role during liver injury, being required for maintenance of tissue regeneration. 'Trans-signaling' in central nervous system regulates energy and glucose homeostasis.; Soluble form of IL6 receptor (sIL6R) that acts as an agonist of IL6 activity. The IL6:sIL6R complex (hyper-IL6) binds to IL6ST/gp130 on cell surfaces and induces signaling also on cells that do not express membrane-bound IL6R in a process called IL6 'trans-signaling'. sIL6R is causative for the proinflammatory properties of IL6 and an important player in the development of chronic inflammatory diseases. In complex with IL6, is required for induction of VEGF production. Plays a protective role during liver injury, being required for maintenance of tissue regeneration. 'Trans-signaling' in central nervous system regulates energy and glucose homeostasis.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

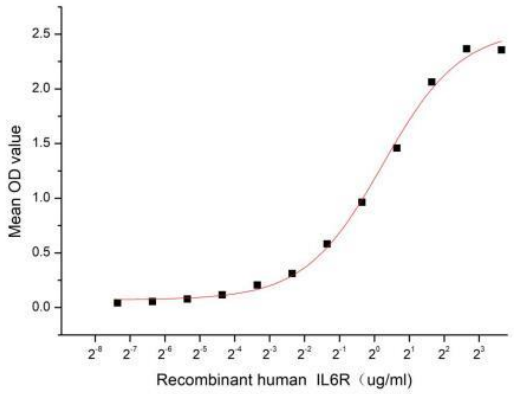


Figure 1. The binding activity of recombinant human IL6R and recombinant human JAK2

Interleukin-6 receptor (IL-6R) is a receptor for IL-6, belonging to the type I cytokine receptor family, subfamily 3. IL-6 is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in immune response. IL-6R is a protein complex composed of this protein and the interleukin-6 signal transductor (IL6ST/GP130/IL6β). This receptor subunit is also shared by many other cytokines. Dysproduction of IL-6 and this receptor has been implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer. In addition, IL-6Rα (IL-6RA) is the primary functional alpha subunit of the IL-6 receptor, which is also a component of other interleukin receptors. IL-6RA is a type I transmembrane glycoprotein that regulates the biological activity of IL-6 by forming a complex with CD130. IL-6R also plays an important role in acute response and hematopoietic response. A binding ELISA assay was conducted to detect the association of recombinant human IL6R with recombinant human JAK2. Briefly, biotin-linked IL6R were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to JAK2-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of IL6R and JAK2 was shown in Figure 1, the EC50 for this effect is 1.182 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.