

Datasheet for ABIN1672798

**IL-6 Receptor ELISA Kit**[Go to Product page](#)**1** Image

## Overview

Quantity:	96 tests
Target:	IL-6 Receptor (IL6R)
Binding Specificity:	AA 20-358
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IL-6R alpha
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: sf21 Immunogen sequence: L20-D358
Specificity:	Expression system for standard: sf21 Immunogen sequence: L20-D358
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

Target:	IL-6 Receptor (IL6R)
Alternative Name:	IL6R ( <a href="#">IL6R Products</a> )
Background:	<p>Background: IL6R alpha(IL6RA) also known as CD126 or IL6R, is a type I cytokine receptor. The IL6 receptor is a protein complex consisting of a IL-6 receptor subunit(IL6R) and interleukin 6 signal transducer Glycoprotein 130. IL6R also denotes the human gene encoding this subunit. Alternatively spliced transcript variants encoding distinct isoforms have been reported. IL6R subunit is also shared by many other cytokines. Interleukin-6 receptor has been shown to interact with Interleukin 6 and Ciliary neurotrophic factor. Ligand binding did not appear to affect IL6R dimerization status. IL6R dimerization occurs both on the cell surface and in solution.</p> <p>Synonyms: Interleukin 6 receptor ,Interleukin 6 receptor, isoform CRA_a ,IL6R ,hCG_1810911 ,</p> <p>Full Gene Name: interleukin 6 receptor</p>
Gene ID:	3570
UniProt:	<a href="#">A0N0L5</a>
Pathways:	<a href="#">JAK-STAT Signaling</a> , <a href="#">Autophagy</a> , <a href="#">Growth Factor Binding</a> , <a href="#">Cancer Immune Checkpoints</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	human IL-6R alpha ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IL-6R alpha has been precoated onto 96-well plates. Standards(sf21, L20-D358) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-6R alpha is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase

## Application Details

Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human IL-6R alpha amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human IL-6R alpha standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA, citrate) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human IL-6R alpha standard solution and each sample be measured in duplicate.

**Assay Precision:**

- Sample 1: n=16, Mean(pg/ml): 115, Standard deviation: 9.2, CV(%): 8
- Sample 2: n=16, Mean(pg/ml): 768, Standard deviation: 26.11, CV(%): 3.4
- Sample 3: n=16, Mean(pg/ml): 1558, Standard deviation: 60.76, CV(%): 3.9,
- Sample 1: n=24, Mean(pg/ml): 124, Standard deviation: 10.54, CV(%): 8.5
- Sample 2: n=24, Mean(pg/ml): 845, Standard deviation: 47.32, CV(%): 5.6
- Sample 3: n=24, Mean(pg/ml): 1334, Standard deviation: 81.37, CV(%): 6.1

**Restrictions:** For Research Use only

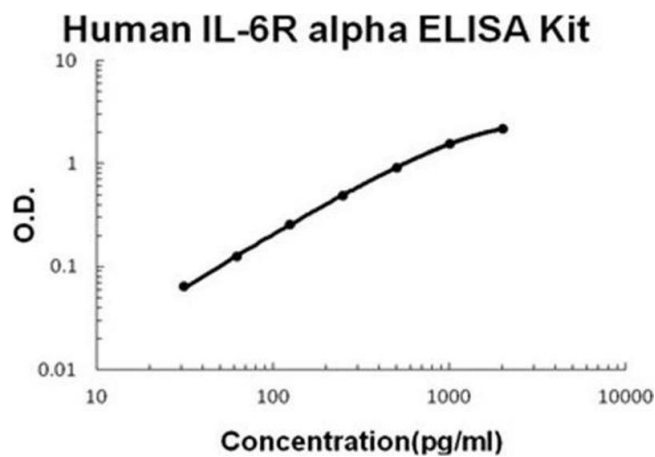
## Handling

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C, 4 °C

**Storage Comment:** Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

**Expiry Date:** 12 months



**ELISA**

**Image 1.** Human IL-6R alpha PicoKine ELISA Kit standard curve