gp130/IL6ST Protein, Rhesus Macaque (HEK293, His)

Cat. No.:	HY-P77375
Synonyms:	Interleukin-6 receptor subunit beta; IL-6RB; CDw130; gp130; CD130; IL6ST
Species:	Rhesus Macaque
Source:	HEK293
Accession:	G7MTS1/NP_001252920.1(E23-Q681)
Gene ID:	574127
Molecular Weight:	Approximately 69.2 kDa.

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Glycoprotein 130 mRNA is ubiquitously expressed in the human body,exhibiting highest levels in saphenous vein, pericardium, ovary, omental adipose tissue, peritoneum, spleen lymphnodes, and trigeminal ganglia. And gp130 expression is significantly increased in adult organs compared to fetal organs. Moreover, gp130 is highly expressed in multiple types of cancers compared to normal tissues[3]. The amino acid sequence of human gp130 protein has low homology between mouse and rat gp130 protein. gp130 signaling is initiated when autocrine or paracrine cyto-kines induce the dimerization of gp130 and an α-receptor subunit to form the receptor complex, leading to185the activation of downstream signaling cascades, such as the JAK/STAT, the PI3K/Akt, and the Ras/Raf/Mek/Erk1/2MAPK pathways. The activation of JAK/Stat3 pathway induces its target gene expression, resulting in cell growth and proliferation (cyclin D, CDC25 A, c-Myc, survivin), survival (survivin, Bcl-2, Bcl-X_L), angiogenesis (VEGF), and cell migration (MMP-2, MMP-7, and MMP-9)[3]. gp130 is a IL-6 antagonist shows anti-tumor, anti-inflammation and antinociceptive activity[4]. gp130 decreases the STAT3 phosphorylation induced by IL-6, and decreases IL-6-induced increase of Ki67[5].

REFERENCES

[1]. Cao Y, et al. Glycoprotein 130 is associated with adverse postoperative clinical outcomes of patients with late-stage non-metastatic gastric cancer. Sci Rep. 2016 Dec 5;6:38364.

[2]. Nogueira-Silva C, et al. The role of glycoprotein 130 family of cytokines in fetal rat lung development. PLoS One. 2013 Jun 24;8(6):e67607.

[3]. Xu S, et al. gp130: a promising drug target for cancer therapy. Expert Opin Ther Targets. 2013 Nov;17(11):1303-28.

[4]. Boettger MK, et al. Differential effects of locally and systemically administered soluble glycoprotein 130 on pain and inflammation in experimental arthritis. Arthritis Res Ther. 2010;12(4):R140.

[5]. Hong J, et al. Recombinant soluble gp130 protein reduces DEN-induced primary hepatocellular carcinoma in mice. Sci Rep. 2016 Apr 15;6:24397.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA