Datasheet for ABIN7319952

IL-6 Protein (His tag)

2 Images

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Overview

Quantity:	50 µg
Target:	IL-6 (IL6)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-6 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human IL-6 Protein (His Tag)
Sequence:	30V-212M
Characteristics:	A DNA sequence encoding the huamn IL-6 (30V-212M) was expressed with a polyhistidine tag at the N-terminus.
Purity:	>90 % as determined by reducing SDS-PAGE.

Target Details

Target:	IL-6 (IL6)
Alternative Name:	IL-6 (IL6 Products)
Background:	Background: Interleukin-6 (IL-6) is a pleiotropic, alpha -helical, 22-28 kDa phosphorylated and variably glycosylated cytokine that plays important roles in the acute phase reaction, inflammation, hematopoiesis, bone metabolism, and cancer progression. IL-6 induces signaling through a cell surface heterodimeric receptor complex composed of a ligand binding subunit

Target Details

	(IL-6 R alpha) and a signal transducing subunit (gp130). IL-6 binds to IL-6 R alpha, triggering IL-6 R alpha association with gp130 and gp130 dimerization. Soluble forms of IL-6 R alpha are generated by both alternative splicing and proteolytic cleavage. In a mechanism known as trans-signaling, complexes of soluble IL-6 and IL-6 R alpha elicit responses from gp130-expressing cells that lack cell surface IL-6 R alpha. Trans-signaling enables a wider range of cell types to respond to IL-6, as the expression of gp130 is ubiquitous, while that of IL-6 R alpha is predominantly restricted to hepatocytes, monocytes, and resting lymphocytes. Soluble splice forms of gp130 block trans-signaling from IL-6/IL-6 R alpha but not from other cytokines that use gp130 as a co-receptor. IL-6, along with TNF-alpha and IL-1, drives the acute inflammatory response and the transition from acute inflammation to either acquired immunity or chronic inflammatory disease. When dysregulated, it contributes to chronic inflammation in obesity, insulin resistance, inflammatory bowel disease, arthritis, sepsis, and atherosclerosis. IL-6 can also function as an anti-inflammatory molecule, as in skeletal muscle where it is secreted in response to exercise. Synonym: Interleukin-6,IL-6,B-cell hybridoma growth factor,Interleukin HP-1
Molecular Weight:	20.8kDa
UniProt:	P05231
Pathways:	TLR Signaling, Hormone Transport, Negative Regulation of Hormone Secretion, Myometrial Relaxation and Contraction, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Regulation of Carbohydrate Metabolic Process, Autophagy, Cell RedoxHomeostasis, Cancer Immune Checkpoints, Inflammasome

Application Details

Restrictions:	For Research Use only

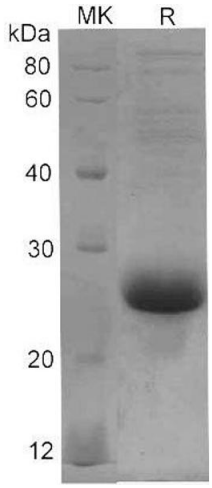
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile potassium phosphate, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

Handling

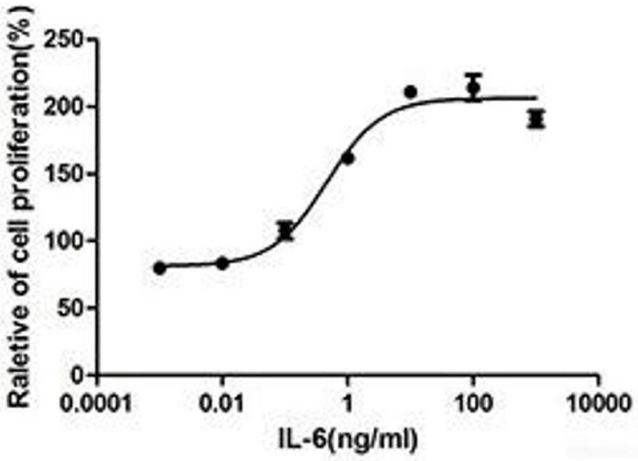
samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.



ELISA

Image 2.