Sus scrofa (pig) IL6 / IL-6 Protein

Catalog Number: **62006-WNAE**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

IL6

Protein Construction:

A DNA sequence encoding the sus scrofa IL6 (NP_999564.1) (Pro29-Met212) was expressed with an initial Met.

Source: Sus scrofa (Pig)

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Bio Activity:

1. Measured by its binding ability in a functional ELISA. Immobilized sus scrofa (pig) IL6 (Cat: 62006-WNAE) at 2 μg/ml (100 μl/well) can bind Human IL-6R-His (Cat: 10398-H08H), the EC_{50} of Human IL-6R-His is 250-750 ng/mL.
2. Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED_{50} for this effect is typically 1-5ng/mL.

Endotoxin:

Please contact us for more information.

Predicted N terminal: Met

Molecular Mass:

The recombinant sus scrofa IL6 consists 185 amino acids and predicts a molecular mass of 21.2 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

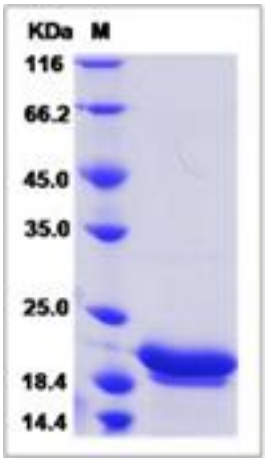
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin-6 (IL-6) is a multifunctional α-helical cytokine that regulates cell growth and differentiation of various tissues, which is known particularly for its role in the immune response and acute phase reactions. IL-6 protein is secreted by a variety of cell types including T cells and macrophages as phosphorylated and variably glycosylated molecule. It exerts actions through the its heterodimeric receptor composed of IL-6R that lacks the tyrosine/kinase domain and binds IL-6 with low affinity, and ubiquitously expressed glycoprotein 13 (gp13) that binds the IL-6. IL-6R complex with high affinity and thus transduces signals. IL-6 is also involved in hematopoiesis, bone metabolism, and cancer progression, and has been defined an essential role in directing transition from innate to acquired immunity.

References

1.Heinrich PC. et al. (2003). Principles of interleukin-6-type cytokine signalling and its regulation. Biochem J. 374: 1-20.
2.Rose-John S, et al. (2007) The IL-6/sIL-6R complex as a novel target for therapeutic approaches. Expert Opin Ther Targets. 11(5): 613-24.
3.Dinh W, et al. (2009) Elevated plasma levels of TNF-alpha and interleukin-6 in patients with diastolic dysfunction and glucose metabolism disorders. Cardiovasc Diabetol. 8:58.