Biotinylated Mouse IL-6 R alpha / CD126 Protein, His,Avitag™

Catalog # ILR-M82E9

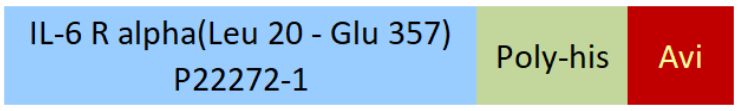
Synonym

IL6R,CD126,IL-6R-1,IL-6RA,IL6RA,IL-6R-alpha,IL6RQ,gp80

Source

Biotinylated Mouse IL-6 R alpha, His,Avitag(ILR-M82E9) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Glu 357 (Accession # P22272-1).
Predicted N-terminus: Leu 20

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 41.0 kDa. The protein migrates as 45-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

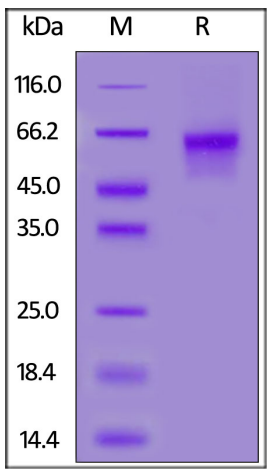
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

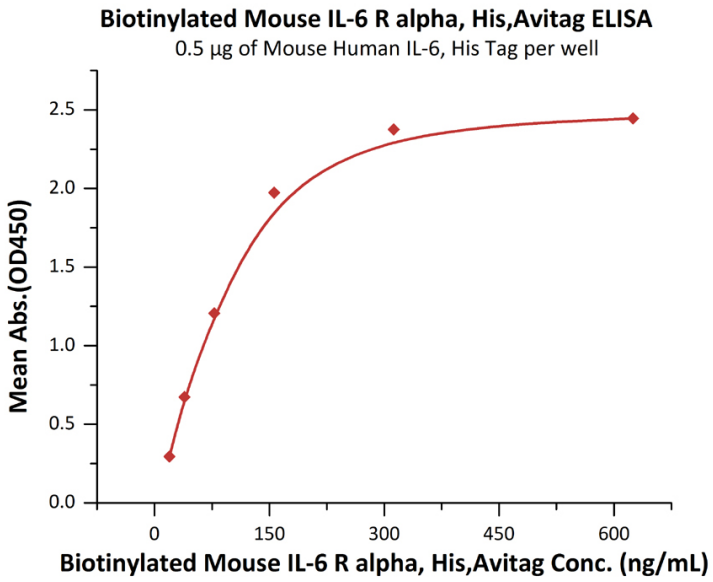
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Mouse IL-6 R alpha, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Mouse IL-6, His Tag (Cat. No. IL6-M5245) at 5 μg/mL (100 μL/well) can bind Biotinylated Mouse IL-6 R alpha, His,Avitag (Cat. No. ILR-M82E9) with a linear range of 20-156 ng/mL (QC tested).

Background

Interleukin 6 receptor (IL6R) is also known as CD126 (Cluster of Differentiation 126) , is a potent pleiotropic cytokine that regulates cell growth and differentiation of various tissues, and is known particularly for its role in the immune response and acute phase reactions. IL6R 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 also shared by many other cytokines. The soluble form of IL6R arises from proteolytic cleavage of membrane-bound IL6Rα, and acts agonistically by making the IL6 ligand accessible to the signal transducer gp130. Dysregulated production of IL6 and IL6R are implicated in the pathogenesis of several inflammatory diseases and malignancies such as multiple myeloma, rheumatoid arthritis, or osteoporosis, and it has been reported that a humanized anti-IL6R monoclonal antibody is a promising agent applicable to the therapeutic approach for IL6 driven diseases. Interleukin-6 receptor has been shown to interact with Interleukin 6 and Ciliary neurotrophic factor.