Mouse IL23 (IL23A & IL12B Heterodimer) recombinant protein

Catalog Number: 504794

General Information

Protein Construction

A DNA sequence encoding the mouse IL23A (Q9EQ14) (Met1-Ala196) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding mouse IL12B (P43432) (Met1-Ser335) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were coexpressed and the mouse IL23 heterodimer was purified.

Organism

Mouse

Expression Host

Human Cells

QC Testing

Activity

Measured by its binding ability in a functional ELISA.

1. Measured by its ability to bind recombinant rat IL23R-Fc (Cat:504727) in a functional ELISA. 2. Immobilized mouse IL12Bh (m)+mIL23Ah at 10 μ g/ml (100 μ l/well) can bind human IL23R-Fc (Cat:504738). The EC₅₀ of human IL23R-Fc (Cat:504738) is 0.14-0.35 μ g/ml.

3.Immobilized mouse IL12Bh (m)+mIL23Ah at 10 μ g/ml (100 μ l/well) can bind Cynomolgus IL23R-Fc (Cat:502630). The EC₅₀ of Cynomolgus IL23R-Fc (Cat:502630) is 0.05-0.11 μ g/ml.

4.Immobilized mouse IL12Bh (m)+mIL23Ah at 10 μ g/ml (100 μ l/well) can bind biotinylated human IL12RB1-His (Cat:501974). The EC₅₀ of biotinylated human IL12RB1-His (Cat:501974) is

21.3-49.8 ng/mL.

5. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED_{50} for this effect is 1-5 ng/mL.

(33.1+31.5+32.9) % as determined by SDS-PAGE

Endotoxin

< 1.0 EU per μg of the protein as determined by the LAL method

Stability

Samples are stable for up to twelve months from date of receipt at -70 $^{\circ}\mathrm{C}$

Predicted N terminal

Val 22 & Met 23

Molecular Mass

The recombinant mouse IL23 (mouse IL23A&IL12B Heterodimer) comprises 510 (186+324) amino acids and has a calculated molecular mass of 58.3 (21.1+ 37.2) KDa. The apparent molecular mass of the recombinant protein is approximately 47,45 and 26 KDa respectively in SDS-PAGE under reducing conditions.

Formulation

Lyophilized from sterile PBS, pH 7.4.1.5 % trehalose and mannitol are added as protectants before lyophilization.2. Please contact us for any concerns or special requirements.

Usage Guide

Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

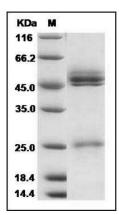
Purity



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SDS-PAGE



NovoPro

Mouse IL-23 (IL23A & IL12B Heterodimer) Protein SDS-PAGE