Cynomolgus / Rhesus IL23R / IL23 Receptor Protein (Fc Tag)

Catalog Number: **90123-C02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

IL-23R

Protein Construction:

A DNA sequence encoding the cynomolgus IL23R [(Identical to the rhesus IL23R (F6XR82)] (Met1-Asp353) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. 1. Immobilized human IL23A-His+IL12B-His (Cat:CT012-H08H) at 10 μg/ml (100 μl/well) can bind Cynomolgus IL23R-Fc. The EC_{50} of Cynomolgus IL23R-Fc is 0.14-0.35 μg/ml. 2.Immobilized mouse mIL12Bh (m)+mIL23Ah (Cat:CT028-M08H) at 10 μg/ml (100 μl/well) can bind Cynomolgus IL23R-Fc (Cat:90123-C02H). The EC50 of Cynomolgus IL23R-Fc (Cat:90123-C02H) is 0.05-0.11 μg/ml.

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 ℃

Predicted N terminal: Gly 24

Molecular Mass:

The recombinant cynomolgus IL23R comprises 571 amino acids and has a calculated molecular mass of 64.9 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

Storage:

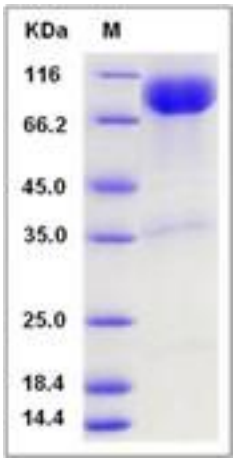
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

IL23R, also known as IL23 receptor, belongs to the type I cytokine receptor family, Type 2 subfamily. It contains 2 fibronectin type-III domains and is expressed by monocytes, Th1, Th0, NK and dendritic cells. Isoform 1 is specifically expressed in NK cells. IL23R associates with IL12RB1 to form the interleukin-23 receptor. It binds IL23 and mediates T-cells, NK cells and possibly certain macrophage/myeloid cells stimulation probably through activation of the Jak-Stat signaling cascade. IL23 functions in innate and adaptive immunity and may participate in acute response to infection in peripheral tissues. IL23 may be responsible for autoimmune inflammatory diseases and be important for tumorigenesis. Genetic variations in IL23R are associated with inflammatory bowel disease type 17 (IBD17). IBD17 is a chronic, relapsing inflammation of the gastrointestinal tract with a complex etiology. Genetic variations in IL23R also can cause susceptibility to psoriasis type 7.

References

1.Duerr RH, *et al.* (2006) A genome-wide association study identifies IL23R as an inflammatory bowel disease gene. Science. 314(5804):1461-3.
2.Cargill M, *et al.* (2007) A large-scale genetic association study confirms IL12B and leads to the identification of IL23R as psoriasis-risk genes. Am J Hum Genet. 80(2):273-90.
3.Dubinsky MC, *et al.* (2007) IL-23 receptor (IL-23R) gene protects against pediatric Crohn's disease. Inflamm Bowel Dis. 13(5):511-5.