

Anti-IL-23 Reference Antibody (guselkumab)

Recombinant Antibody Catalog # APR10030

Specification

Anti-IL-23 Reference Antibody (guselkumab) - Product Information

Application
Primary Accession
Reactivity
Clonality

Isotype

Calculated MW

FC, Kinetics, Animal Model

O9NPF7 Human Monoclonal

IqG1

144.8 KDa

Anti-IL-23 Reference Antibody (guselkumab) - Additional Information

Target/Specificity

IL-23

Endotoxin

< 0.001EU/ μg, determined by LAL method.

Conjugation Unconjugated

Expression system

CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

Anti-IL-23 Reference Antibody (guselkumab) - Protein Information

Name IL23A

Synonyms SGRF

Function

Associates with IL12B to form the pro-inflammatory cytokine IL-23 that plays different roles in innate and adaptive immunity (PubMed:11114383). Released by antigen-presenting cells such as dendritic cells or macrophages, binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R to activate JAK2 and TYK2 which then phosphorylate the receptor to form a docking site leading to the phosphorylation of STAT3 and STAT4 (PubMed:29287995, PubMed:32474165, PubMed:33606986). This process leads to activation of several pathways including p38 MAPK or NF-kappa-B and promotes the



production of pro- inflammatory cytokines such as interleukin-17A/IL17A (PubMed:12023369). In turn, participates in the early and effective intracellular bacterial clearance (PubMed:32474165). Promotes the expansion and survival of T-helper 17 cells, a CD4-positive helper T-cell subset that produces IL-17, as well as other IL-17-producing cells (PubMed:17676044).

Cellular Location

Secreted. Note=Secreted upon association with IL12B

Tissue Location

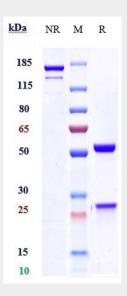
Secreted by activated dendritic and phagocytic cells and keratinocytes. Also expressed by dermal Langerhans cells (at protein level).

Anti-IL-23 Reference Antibody (guselkumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

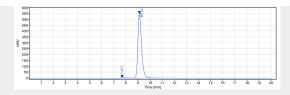
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-IL-23 Reference Antibody (guselkumab) - Images

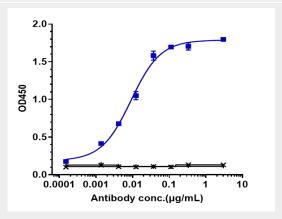


Anti-IL-23 Reference Antibody (guselkumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%

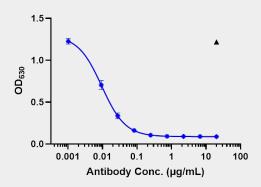




The purity of Anti-IL-23 Reference Antibody (guselkumab)is more than 98.97% ,determined by SEC-HPLC.



Immobilized human IL 23P40 His at 2 μ g/mL can bind Anti-IL-23 Reference Antibody (guselkumab) \square EC50=0.009014 μ g/mL.



Anti-IL-23 Reference Antibody (guselkumab) induced report gene STAT3 activity was evaluated using Human IL23 HEK-Blue. The EC50 was approximately 0.0095 ug/mL.