

**Anti-IL-23 Reference Antibody (guselkumab)
Recombinant Antibody
Catalog # APR10030****Specification**

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

Application	FC, Kinetics, Animal Model
Primary Accession	Q9NPF7
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	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

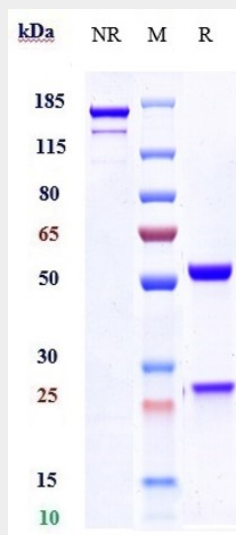
Secreted by activated dendritic and phagocytic cells and keratinocytes. Also expressed by dermal Langerhans cells (at protein level).

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

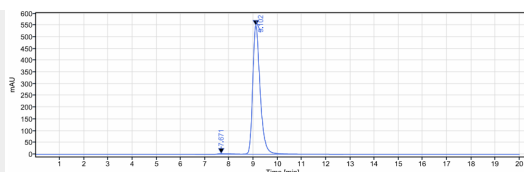
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

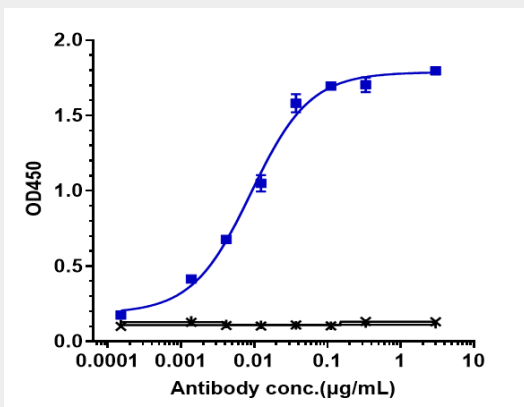
Anti-IL-23 Reference Antibody (guselkumab) - Images



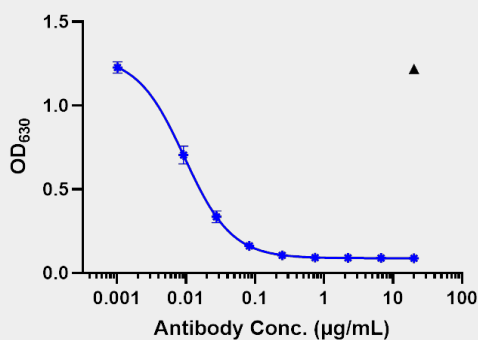
Anti-IL-23 Reference Antibody (guselkumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



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 μg/mL can bind Anti-IL-23 Reference Antibody (guselkumab) $EC_{50}=0.009014$ μg/mL.



Anti-IL-23 Reference Antibody (guselkumab) induced report gene STAT3 activity was evaluated using Human IL23 HEK-Blue. The EC_{50} was approximately 0.0095 ug/mL.