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Anti-IL-23 Reference Antibody (guselkumab)

Recombinant Antibody
Catalog # APR10030

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q9NPF7
Reactivity	Cynomolgus, Human
Clonality	Monoclonal
Isotype	hIgG1
Calculated MW	20730

Additional Information

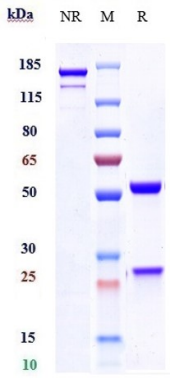
Target/Specificity	IL-23
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

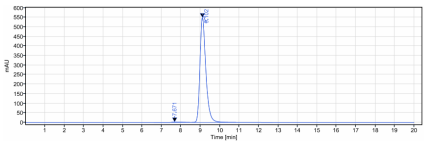
Name	IL23A
Synonyms	SGRF
Function	Associates with IL12B to form the pro-inflammatory cytokine IL-23 that plays different roles in innate and adaptive immunity (PubMed:11114383). Released by antigen-presenting cells such as dendritic cells or macrophages, binds to a heterodimeric receptor complex composed 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 Secreted by activated dendritic and phagocytic cells and keratinocytes. Also

Tissue Location expressed by dermal Langerhans cells (at protein level).

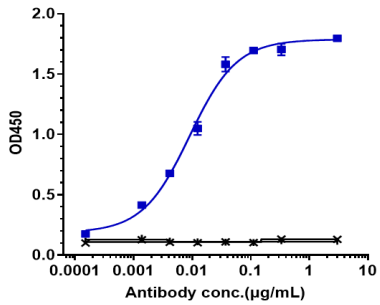
Images



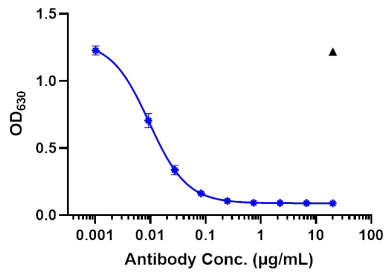
Anti-IL-23 Reference Antibody (guselkumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



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



Immobilized human IL 23P40 His at 2 ug/mL can bind Anti-IL-23 Reference Antibody (guselkumab), EC50=0.009014 ug/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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.