

Anti-IFN γ Reference Antibody (fontolizumab)

Recombinant Antibody

Catalog # APR10220

Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	P01579
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	19348

Additional Information

Target/Specificity	IFN γ
Endotoxin	
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.

Protein Information

Name	IFNG
Function	Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed: 16914093 , PubMed: 8666937). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed: 8349687). Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription (PubMed: 16914093). Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed: 8666937). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed: 8163024). Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference (PubMed: 11112687). Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins

B/CTSB, H/CTSH, and L/CTSL (PubMed:[7729559](#)). Participates in the regulation of hematopoietic stem cells during development and under homeostatic conditions by affecting their development, quiescence, and differentiation (By similarity).

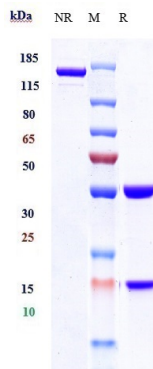
Cellular Location

Secreted.

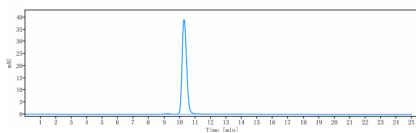
Tissue Location

Released primarily from activated T lymphocytes.

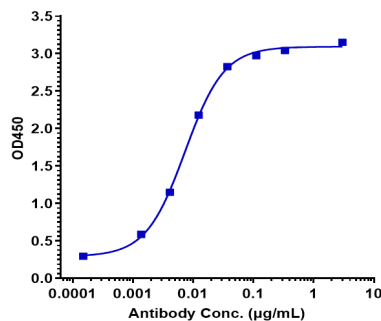
Images



Anti-IFN γ Reference Antibody (fontolizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-IFN γ Reference Antibody (fontolizumab) is more than 95%, determined by SEC-HPLC.



Immobilized human IFN γ His at 2 μ g/mL can bind Anti-IFN γ Reference Antibody (fontolizumab), EC₅₀=0.007326 μ g/mL

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