

# **Anti-IFNg Reference Antibody (fontolizumab)**

Recombinant Antibody Catalog # APR10220

## **Specification**

## Anti-IFNg Reference Antibody (fontolizumab) - Product Information

Application FC, E, FTA
Primary Accession P01579
Reactivity Human
Clonality Monoclonal
Isotype IgG1
Calculated MW 145 KDa

## Anti-IFNg Reference Antibody (fontolizumab) - Additional Information

**Target/Specificity** 

**IFNg** 

**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.

## **Storage**

-80°C for 2 years under sterile conditions -20°C for 1 year under sterile conditions Avoid repeated freeze-thaw cycles.

## Anti-IFNg Reference Antibody (fontolizumab) - 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:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>, PubMed:<a href="http://www.uniprot.org/citations/8666937" target="\_blank">8666937</a>). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed:<a href="http://www.uniprot.org/citations/8349687" target="\_blank">8349687</a>). 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:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>/a>). Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:<a

href="http://www.uniprot.org/citations/8666937" target="\_blank">8666937</a>). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed:<a href="http://www.uniprot.org/citations/8163024" target="\_blank">8163024</a>). 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:<a href="http://www.uniprot.org/citations/11112687" target="\_blank">11112687</a>). Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules

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:<a

href="http://www.uniprot.org/citations/7729559" target="\_blank">7729559</a>). 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.

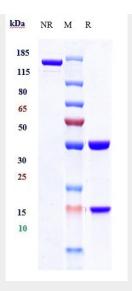
## Anti-IFNg Reference Antibody (fontolizumab) - Protocols

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

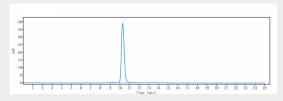
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-IFNg Reference Antibody (fontolizumab) - Images

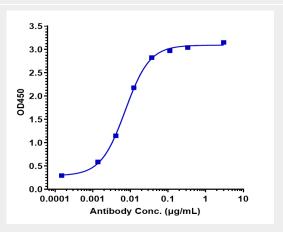




Anti-IFNg Reference Antibody (fontolizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



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



Immobilized human IFN  $\gamma$  His at 2  $~\mu g/mL$  can bind Anti-IFNg Reference Antibody (fontolizumab)[]EC50=0.007326  $\mu g/mL$