

Source

Monoclonal Anti-IFN γ Antibody, Human IgG1 (8C5F8) is a chimeric monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which combines the variable region of a mouse monoclonal antibody with human IgG1 constant domain. The mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with IFN-gamma.

Isotype

Human IgG1/kappa

Specificity

This product is a specific antibody specifically reacts with IFN- γ , Human. No cross-reactivity is detected with other human cytokines, including IL-2, IL-4, IL-6, IL-10, GM-CSF and TNF-alpha.

Application

This antibody can be paired with other IFN γ antibodies to detect IFN γ in sandwich ELISA or LFA assay.

Purity

>95% as determined by SDS-PAGE.

Endotoxin

Less than 1.0 EU per μ g by the LAL method.

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

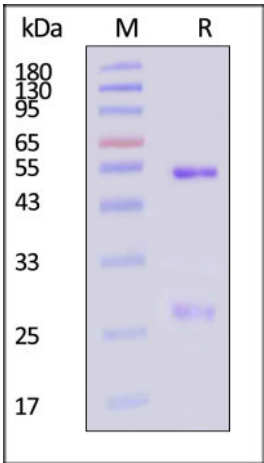
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

- 20 to -70 $^{\circ}$ C for 12 months in lyophilized state from date of receipt;
- 70 $^{\circ}$ C for 3 months under sterile conditions after reconstitution.

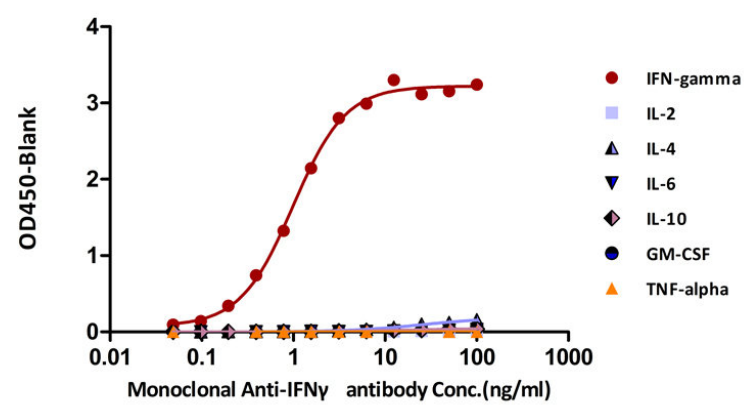
SDS-PAGE



Monoclonal Anti-IFN γ Antibody, Human IgG1 (8C5F8) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

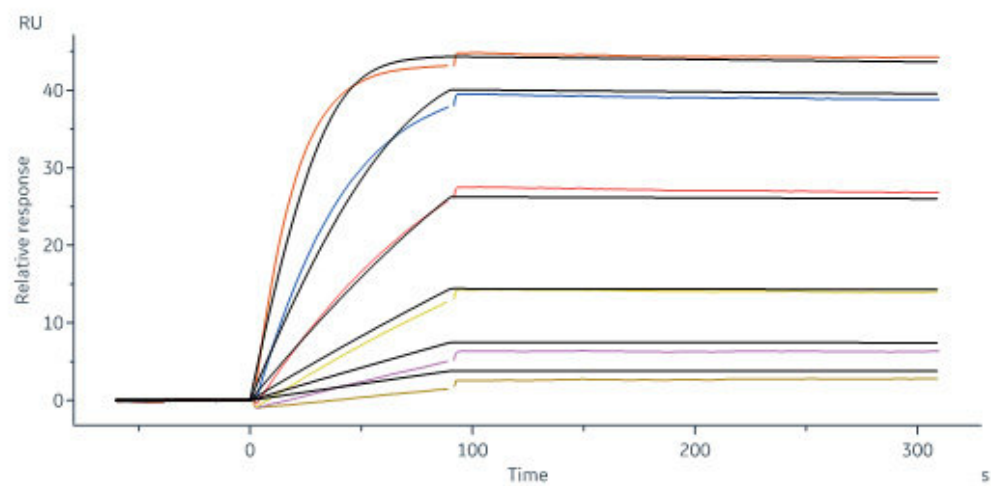
Bioactivity-Elisa

Detection of Monoclonal Anti-IFN γ antibody, Human IgG1 (8C5F8) by ELISA Assay



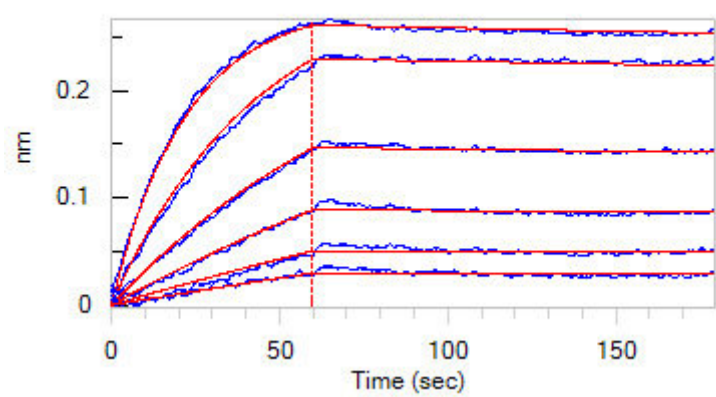
Immobilized Human IFN-gamma, premium grade (Cat. No. IFG-H4211) can bind Monoclonal Anti-IFN γ antibody, Human IgG1 (8C5F8) (Cat. No. IFN-M412) with a linear range of 0.09-1.56 ng/mL (QC tested). No cross-reactivity is detected with other human cytokines, including IL-2, IL-4, IL-6, IL-10, GM-CSF and TNF-alpha.

Bioactivity-SPR



Monoclonal Anti-IFN γ antibody, Human IgG1 (8C5F8) (Cat. No. IFN-M412) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human IFN-gamma, premium grade (Cat. No. IFG-H4211) with an affinity constant of 41.1 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity-BLI



Loaded Monoclonal Anti-IFN γ antibody, Human IgG1 (Cat. No. IFN-M412) on AHC Biosensor, can bind Human IFN-gamma, premium grade (Cat. No. IFG-H4211) with an affinity constant of 0.545 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interferon-gamma (IFN- γ /IFNG) is a dimerized soluble cytokine that is the only member of the type II class of interferon. This interferon was originally called macrophage-activating factor, a term now used to describe a larger family of proteins to which IFN- γ belongs. IFN-gamma has been used in a wide variety of clinical indications. Interferon-gamma (IFNgamma) is a central regulator of the immune response and signals via the Janus Activated Kinase (JAK)-Signal Transducer and Activator of Transcription (STAT) pathway. Interferon gamma has broader roles in activation of innate and adaptive immune responses to viruses and tumors, in part through upregulating transcription of genes involved in cell cycle regulation, apoptosis, and antigen processing/presentation. Despite this, rodent and human trophoblast cells show dampened responses to IFNG that reflect the resistance of these cells to IFNG-mediated activation of major histocompatibility complex (MHC) class II transplantation antigen expression.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.