Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) (MALS verified)

Catalog # IFN-BS138

Source

Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with IFNγ. It is the chemically biotin labeled form of Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H4) (Cat. No. IFN-S138).

Isotype

Mouse 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

ELISA, LFA

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

Lyophilized from 0.22 μm 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

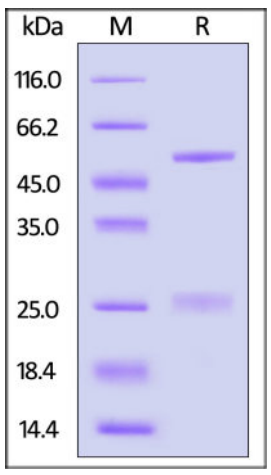
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

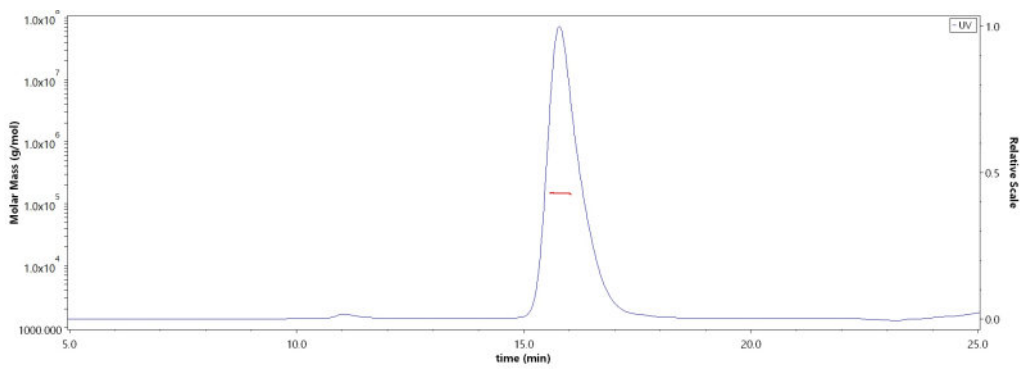
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



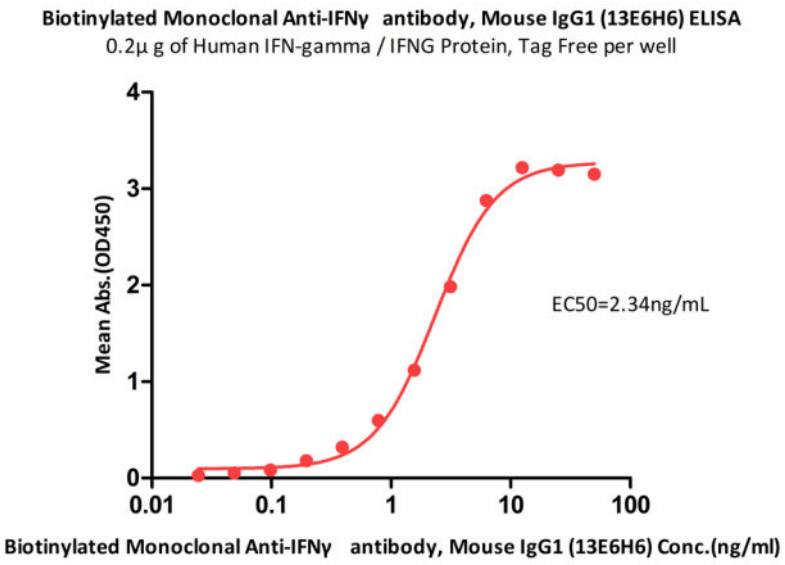
Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



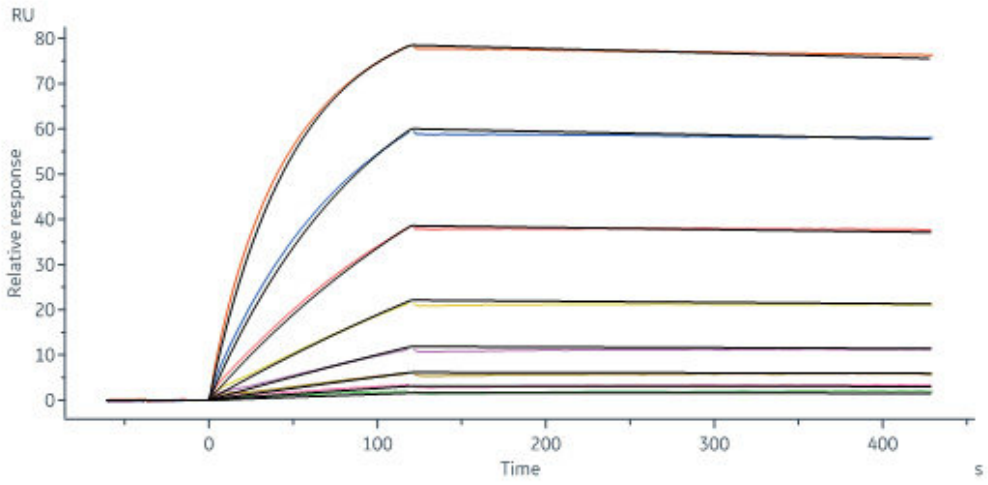
The purity of Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) (Cat. No. IFN-BS138) is more than 90% and the molecular weight of this protein is around 140-170 kDa verified by SEC-MALS.
Report

Bioactivity-Elisa



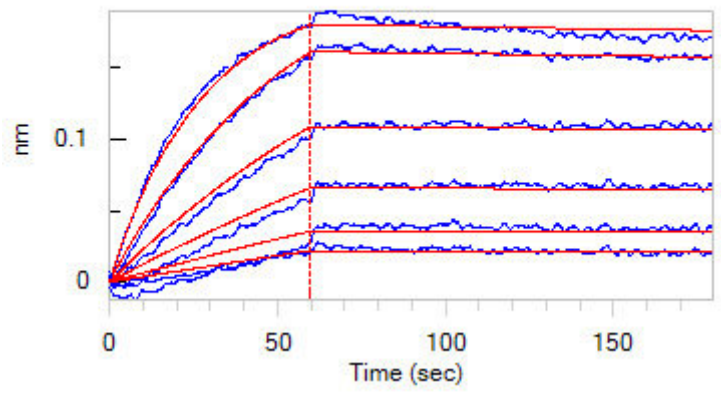
Immobilized Human IFN-gamma, premium grade (Cat. No. IFG-H4211) can bind Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) (Cat. No. IFN-BS138) with a linear range of 0.05-3.125 ng/mL (QC tested).

Bioactivity-SPR



Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) (Cat. No. IFN-BS138) captured on CM5 chip via anti-mouse antibodies surface can bind Human IFN-gamma, premium grade (Cat. No. IFG-H4211) with an affinity constant of 1.28 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Monoclonal Anti-IFNγ Antibody, Mouse IgG1 (13E6H6) (Cat. No. IFN-BS138) on AMC Biosensor, can bind Human IFN-gamma,

premium grade (Cat. No. IFG-H4211) with an affinity constant of 0.268 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