

Interferon Gamma Active Protein | IFNG active protein

Interferon Gamma Protein, Mouse, Recombinant

CATALOG #
AAA258199

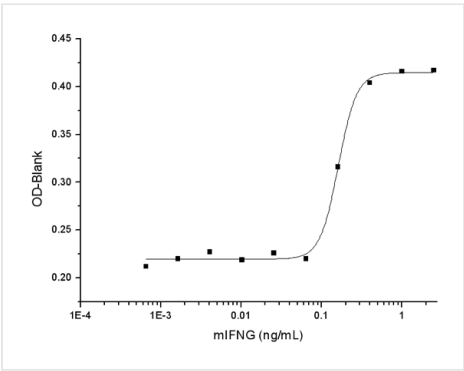
HOST
HEK293 Cells

PRODUCT SYNONYMS

Interferon Gamma; Interferon Gamma Protein; Mouse; Recombinant; Mouse IFNG/Interferon Gamma Protein; Ifg Protein; IFN-g Protein; interferon; gamma; IFNG active protein

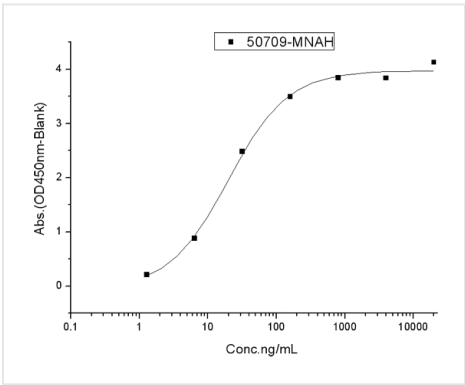
PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>85% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Cys15 5
Species	Mouse
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	His 23
Tag	Native
Protein Construction	A DNA sequence encoding the mouse IFNG (NP_032363.1)(Met1-Cys155) was expressed and purified.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its binding ability in a functional ELISA. Immobilized Mouse Interferon Gamma at 2ug/ml (100uL/well) can bind Mouse IFNGR1 hFc. The EC50 of Mouse IFNGR1 hFc is 7.0-30.0ng/mL. 2. Measured in antiviral assays using L929 cells infected with vesicular stomatitisvirus (VSV). The ED50 for this effect is 0.05-0.3ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



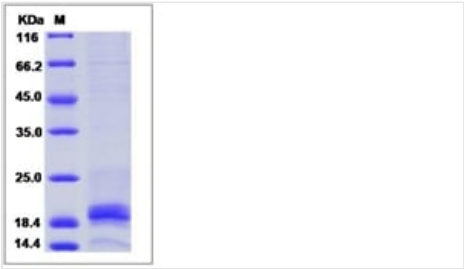
Application Data

Measured in antiviral assays using L929 cells infected with vesicular stomatitisvirus (VSV).The ED50 for this effect is 0.05-0.3 ng/mL.



Application Data

Measured by its binding ability in a functional ELISA. Immobilized Mouse Interferon Gamma at 2 ug/ml (100 ul/well) can bind Mouse IFNGR1 hFc, the EC50 of Mouse IFNGR1 hFc is7.0-30.0 ng/mL.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for IFNG active protein	Background: IFN gamma, also known as IFNG, is a secreted protein that belongs to the type II interferon family. IFN gamma is produced predominantly by natural killer and natural killer T cells as part of the innate immune response, and by CD4 and CD8 cytotoxic T lymphocyte effector T cells once antigen-specific immunity develops. IFN gamma has antiviral, immunoregulatory, and anti-tumor properties. IFNG, in addition to having antiviral activity, has important immunoregulatory functions, it is a potent activator of macrophages and has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons. The IFNG monomer consists of a core of six alpha-helices and an extended unfolded sequence in the C-terminal region. IFN gamma is critical for innate and adaptive immunity against viral and intracellular bacterial infections and tumor control. Aberrant IFN gamma expression is associated with some autoinflammatory and autoimmune diseases. The importance of IFN gamma in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. IFNG also promotes NK cell activity.
Product Categories/Family for IFNG active protein	Neuroinflammation; IL12 signaling pathway
References	Gray P W, et al. (1982) Structure of the human immune interferon gene. Nature. 298: 859-63. Taya Y, et al. (1982) Cloning and structure of the human immune interferon-gamma chromosomal gene. EMBO J. 1: 953-8. Goshima N, et al. (2008) Human protein factory for converting the transcriptome into an in vitro-expressed proteome. Nomura N Nat Methods. 5: 1011-7. Thiel DJ, et al. (2000) Observation of an unexpected third receptor molecule in the crystal structure of human interferon-gamma receptor complex. Structure. 8 (9): 927-36. Naylor SL, et al. (1983) Human immune interferon gene is located on chromosome 12. J Exp Med. 157 (3): 1020-7. Schoenborn JR, et al. (2007) Regulation of interferon-gamma during innate and adaptive immune responses. Adv Immunol. 96: 41-101.

NCBI AND UNIPROT INFORMATION

Molecular Weight	The recombinant mouse IFNG consists of 133 amino acids and predicts a molecular mass of 15.5kDa. As a result of different glycosylation, it migrates as approximately 19.6 and 15.4kDa band in SDS-PAGE under reducing conditions.
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-ifng-active-protein/interferon-gamma/258199>