

Product datasheet for AM26712PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Interferon gamma (IFNG) Mouse Monoclonal Antibody [Clone ID: 4S.B3]

Product data:

Product Type: Primary Antibodies

Clone Name: 4S.B3

Applications: ELISA, FC, FN, IF, IHC, IP, R, WB

Recommended Dilution: Flow Cytometry: Intracellular staining.

Immunoprecipitation.

Western Blot.

Immunohistochemistry on Paraffin Sections.

Immunocytochemistry.

ELISA: Used as detection antibody in combination with capture antibody NIB42.

RIA.

Functional Application: Neutralization (weak).

Reactivity: Human, Primate

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Interferon gamma derived from Human leukocytes

Specificity: This antibody 4S.B3 recognizes IFN-gamma, a 16-25 kDa cytokine produced by activated Th1

cells and NK cells. Binds both glycosylated and non-glycosylated protein.

Formulation: PBS, pH~7.4

State: Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

Preservative: 15 mM Sodium Azide

Concentration: lot specific

Purification: Affinity Chromatography on Protein A

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

DO NOT FREEZE!

Stability: Shelf life: one year from despatch.





Gene Name: interferon, gamma

Database Link: Entrez Gene 3458 Human

P01579

Background: The Interferon gamma (IFN-gamma; 16-25 kDa) is an important regulator of the immune

response, produced in activated Th1 cells and NK cells, particularly in response to IL-2, TNFalpha and IL-12; its production is suppressed by IL-4, IL-10, and TGF-beta. The producing of IFN-gamma is activated by specific antigens or mitogens through the T cell antigen receptor. IFN-gamma polypeptide forms: 40-60 kDa forms are observable under non-denaturing conditions as dimers and trimers; 20 kDa and 25 kDa forms exist due to variable glycosylation. IFN-gamma belongs to the type II interferons, also called immune IFN. IFN-gamma shows antiviral activity and has important immunoregulatory functions. It is a potent activator of macrophages and had antiproliferative effects on transformed cells. IFNgamma plays an important role in regulating B cell differentiation by simultaneously stimulating class switch recombination to the IgG3 and IgG2a isotypes while represing class switch recombination to the IgE and IgG1 isotypes. It also appears to promote antigen presentation by B cells through its effects on MHC. Binding of IFN-gamma to its receptor increases the expression of class I MHC on all somatic cells. It also enhances the expression of class II MHC on antigen-presenting cells. IFN-gamma is the major means by which T cells activate macrophages, increasing their ability to kill bacteria, parasites, and tumours. The activation of macrophages by IFN-gamma is essential for the elimination of bacteria that replicate within the phagosomes of macrophages (f.e. Mycobacteria and Listeria monocytogenes). IFN-gamma can potentiate the high antiviral and antitumor effects of the

type I interferons (IFN-alpha, IFN-beta). IFN-gamma may also activate neutrophils and NK

cells.

Synonyms: IFN-gamma, gamma IFN