

IFN- γ (GIF-3): sc-57210

BACKGROUND

Interferon (IFN)- γ is an antiviral and antiparasitic agent produced by CD4⁺/CD8⁺ lymphocytes and natural killer cells that undergo activation by antigens, mitogens or alloantigens. IFN- γ production modulates T cell growth and differentiation and inhibits the growth of B cells. Synthesis of IFN- γ is inducible by IL-2, FGF and EGF. The active form of IFN- γ is a homodimer with each subunit containing six helices. The dimeric structure of human IFN- γ is stabilized by non-covalent interactions through the interface of the helices. IFN- γ translated precursor is 166 amino acids, including the 23 amino acid secretory sequence. Multiple forms exist due to variable glycosylation and under non-denaturing conditions due to dimers and tetramers.

REFERENCES

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3. Okamura, H., et al. 1998. Regulation of IFN- γ production by IL-12 and IL-18. *Curr. Opin. Immunol.* 10: 259-264.
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8. Sizemore, N., et al. 2004. Inhibitor of κ B kinase is required to activate a subset of IFN- γ -stimulated genes. *Proc. Natl. Acad. Sci. USA* 101: 7994-7998.
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CHROMOSOMAL LOCATION

Genetic locus: IFNG (human) mapping to 12q15.

SOURCE

IFN- γ (GIF-3) is a mouse monoclonal antibody raised against full length IFN- γ of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

IFN- γ (GIF-3) is recommended for detection of IFN- γ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with human IFN- α .

Suitable for use as control antibody for IFN- γ siRNA (h): sc-39606, IFN- γ shRNA Plasmid (h): sc-39606-SH and IFN- γ shRNA (h) Lentiviral Particles: sc-39606-V.

Molecular Weight of IFN- γ : 20-25 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, Daudi cell lysate: sc-2415 or Jurkat whole cell lysate: sc-2204.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CONJUGATES

See **IFN- γ (E-10): sc-373727** for IFN- γ antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.