

# IFN- $\gamma$ (GC8): sc-51973

## BACKGROUND

Interferon (IFN)- $\gamma$  is an antiviral and antiparasitic agent produced by CD4<sup>+</sup>/CD8<sup>+</sup> lymphocytes and natural killer cells that undergo activation by antigens, mitogens or alloantigens. IFN- $\gamma$  production modulates T cell growth and differentiation and inhibits the growth of B cells. Synthesis of IFN- $\gamma$  is inducible by IL-2, FGF and EGF. The active form of IFN- $\gamma$  is a homodimer with each subunit containing six helices. The dimeric structure of human IFN- $\gamma$  is stabilized by non-covalent interactions through the interface of the helices. IFN- $\gamma$  translated precursor is 166 amino acids, including the 23 amino acid secretory sequence. 20 kDa and 25 kDa forms exist due to variable glycosylation; 40-60 kDa forms are observable under non-denaturing conditions as dimers and tetramers.

## REFERENCES

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3. Okamura, H., et al. 1998. Regulation of IFN- $\gamma$  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  $\kappa$ B kinase is required to activate a subset of IFN- $\gamma$ -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- $\gamma$  (GC8) is a mouse monoclonal antibody raised against human recombinant interferon  $\gamma$ .

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

IFN- $\gamma$  (GC8) is recommended for detection of IFN $\gamma$  of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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

Molecular Weight of IFN- $\gamma$ : 20-25 kDa.

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

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **IFN- $\gamma$  (E-10): sc-373727** for IFN- $\gamma$  antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.