



IFN- α 1/2/13 (4E-A1): sc-69910

BACKGROUND

The genes encoding type I interferons (IFNs), which include 14 IFN- α genes, one IFN- β gene, one IFN- ω (also known as IFN- α II1) gene, and a number of IFN- ω pseudogenes, are clustered on human chromosome 9. Interferon- α and - β are cytokines that are widely known to induce potent antiviral activity. They exert a variety of other biological effects, including antitumor and immunomodulatory activities and are increasingly used clinically to treat a range of malignancies, myelodysplasias and autoimmune diseases. IFN- ω is antigenically different from human IFN- α , IFN- β or IFN- γ , but is a component of natural mixtures of IFN species produced by virus-induced leukocytes or Burkitt's lymphoma cells. The type I interferon receptor (IFN- α R) interacts with IFN- α , IFN- β and IFN- ω , and seems to be a multisubunit receptor.

REFERENCES

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4. Mire-Sluis, A.R., et al. 1996. An anti-cytokine bioactivity assay for interferons- α , - β and - ω . J. Immunol. Methods 195: 55-61.
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7. Barthe, C., et al. 2001. Expression of interferon- α (IFN- α) receptor 2c at diagnosis is associated with cytogenetic response in IFN- α -treated chronic myeloid leukemia. Blood 97: 3568-3573.
8. Eriksen, K.W., et al. 2004. Bi-phasic effect of interferon (IFN)- α : IFN- α up- and downregulates interleukin-4 signaling in human T cells. J. Biol. Chem. 279: 169-176.
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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.

CHROMOSOMAL LOCATION

Genetic locus: Ifna1/Ifna2/Ifna13 (mouse) mapping to 4 C4.

SOURCE

IFN- α 1/2/13 (4E-A1) is a rat monoclonal antibody raised against IFN- α of mouse origin.

PRODUCT

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

APPLICATIONS

IFN- α 1/2/13 (4E-A1) is recommended for detection of IFN- α subtypes 1, 2 and 13 of mouse origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with IFN- β or IFN- γ .

Molecular Weight of IFN- α : 19 kDa.

SELECT PRODUCT CITATIONS

1. Sun, C.Y., et al. 2016. CD4⁺ T cell responses in Balb/c mice with food allergy induced by trinitrobenzene sulfonic acid and ovalbumin. Mol. Med. Rep. 13: 5349-5357.

RESEARCH USE

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