SANTA CRUZ BIOTECHNOLOGY, INC.

IFN-β (7F-D3): sc-57201

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. Interferons-α and -β are cytokines that are widely known to induce potent anti-viral activity. IFN-α and -β exert a variety of other biological effects, including anti-tumor 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-αR) interacts with IFN-α, IFN-β and IFN-ω, and seems to be a multisubunit receptor.

REFERENCES

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3. Hussain, M., et al. 1996. Identification of interferon-α 7, -α 14, and -α 21 variants in the genome of a large human population. J. Interferon Cytokine Res. 16: 853-859.
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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CHROMOSOMAL LOCATION

Genetic locus: Ifnb1 (mouse) mapping to 4 C4.

SOURCE

IFN-β (7F-D3) is a rat monoclonal antibody raised against IFN-β of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IFN-β (7F-D3) is recommended for detection of IFN-β of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with IFN-α or IFN-γ.

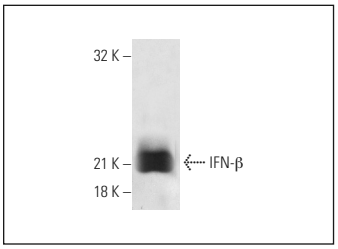
Suitable for use as control antibody for IFN-β siRNA (m): sc-39604, IFN-β shRNA Plasmid (m): sc-39604-SH and IFN-β shRNA (m) Lentiviral Particles: sc-39604-V.

Molecular Weight of IFN-β: 20 kDa.

STORAGE

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

DATA



IFN-β (7F-D3): sc-57201. Western blot analysis of mouse recombinant IFN-β.

SELECT PRODUCT CITATIONS

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RESEARCH USE

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