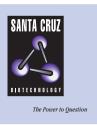
SANTA CRUZ BIOTECHNOLOGY, INC.

IFN-τ (I-14): sc-28073



BACKGROUND

The genes encoding type I interferons (IFNs), which include 14 IFN- α genes, 1 IFN- β gene, 1 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 , IFN- τ or IFN- γ , but is a component of natural mixtures of IFN species produced by virus-induced leukocytes or Burkitt's lymphoma cells. IFN- τ , a secreted monomer used in treatment for multiple sclerosis, has antiviral, antibacterial and anticancer activities. 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

- 1. 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.
- 2. Mire-Sluis, A.R., et al. 1996. An anti-cytokine bioactivity assay for interferons- α - β and - ω . J. Immunol. Methods 195: 55-61.
- 3. Adolf, G.R. 1987. Antigenic structure of human interferon ω 1 (interferon α II1): comparison with other human interferons. J. Gen. Virol. 68: 1669-1676.
- 4. http://harvester.embl.de/harvester/Q86W/Q86WN2.htm
- 5. Lim, J.K., et al. 1994. Intrinsic ligand binding properties of the human and bovine α -interferon receptors. FEBS Letts. 350: 281-286.
- Cutrone, E.C. and Langer, J.A. 1997. Contributions of cloned type I interferon receptor subunits to differential ligand binding. FEBS Letts. 404: 197-202.

SOURCE

IFN- τ (I-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IFN- τ of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28073 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.

APPLICATIONS

IFN-τ (I-14) is recommended for detection of IFN-τ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IFN-t siRNA (h): sc-105552.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluores-cence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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