

IFN- α / β R β (T-20): sc-83258

BACKGROUND

The type I interferons, IFN- α and IFN- β , are a group of structurally and functionally related proteins that are induced by either viruses or double-stranded RNA and are defined by their ability to confer an antiviral state in cells. IFN- α and IFN- β appear to compete with one another for binding to a common cell surface receptor, while immune IFN (IFN- γ) binds to a distinct receptor. This distinct receptor, IFN- α R, is only weakly responsive to type I interferons, in contrast to IFN- α / β R, which binds to and responds effectively to IFN- β and to several of the IFN- α subtypes. IFN- α / β R is expressed as two alternatively spliced transcripts, designated IFN- α / β R α (IFN- α / β R1) and IFN- α / β R β (IFN- α / β R2), both of which are involved in signal transduction and ligand binding.

REFERENCES

1. Branca, A.A. and Baglioni C. 1981. Evidence that type I and II interferons have different receptors. *Nature* 294: 768-770.
2. Orchansky, P., et al. 1984. Type I and type II interferon receptors. *J. Interferon Res.* 4: 275-282.

CHROMOSOMAL LOCATION

Genetic locus: IFNAR2 (human) mapping to 21q22.1.

SOURCE

IFN- α / β R β (T-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of IFN- α / β R β of human origin.

PRODUCT

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

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

APPLICATIONS

IFN- α / β R β (T-20) is recommended for detection of IFN- α / β R β of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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- α / β R β siRNA (h): sc-40091, IFN- α / β R β shRNA Plasmid (h): sc-40091-SH and IFN- α / β R β shRNA (h) Lentiviral Particles: sc-40091-V.

Molecular Weight of soluble IFN- α / β R β : 55 kDa.

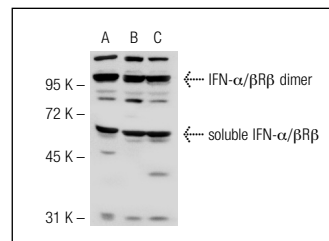
Molecular Weight of IFN- α / β R β dimer: 95-100 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or HEK293 whole cell lysate: sc-45136 .

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IFN- α / β R β (T-20): sc-83258. Western blot analysis of IFN- α / β R β expression in HEK293 (A), Jurkat (B) and K-562 (C) whole cell lysates.

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 or our catalog for detailed protocols and support products.



Try IFN- α / β R β (G-4): sc-376273 or IFN- α / β R β (D-6): sc-271105, our highly recommended monoclonal alternatives to IFN- α / β R β (T-20).