SANTA CRUZ BIOTECHNOLOGY, INC.

IFN-α/βRβ (P-17): sc-83257

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-αR, is only weakly responsive to type I interferons, in contrast to IFN-α/βR, which binds to and responds effectively to IFN-β and to several of the IFN-α subtypes. IFN-α/βR is expressed as two alternatively spliced transcripts, designated IFN-α/βRα (IFN-α/βR1) and IFN-α/βRβ (IFN-α/βR2), both of which are involved in signal transduction and ligand binding.

CHROMOSOMAL LOCATION

Genetic locus: IFNAR2 (human) mapping to 21q22.11.

SOURCE

IFN-α/βRβ (P-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of IFN-α/βRβ of human origin.

PRODUCT

Each vial contains 100 µg 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 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

IFN-α/βRβ (P-17) is recommended for detection of IFN-α/βRβ of human 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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/βRβ siRNA (h): sc-40091, IFN-α/βRβ shRNA Plasmid (h): sc-40091-SH and IFN-α/βRβ shRNA (h) Lentiviral Particles: sc-40091-V.

Molecular Weight of IFN-α/βRβ α subunit: 110 kDa.

Molecular Weight of IFN-α/βRβ β subunit: 95-100 kDa.

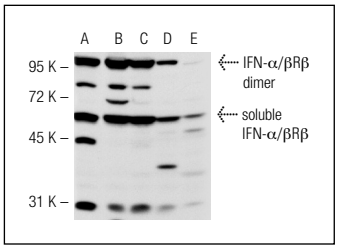
Molecular Weight of IFN-α/βRβ β subunit short form: 55 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or Hep G2 cell lysate: sc-2227.

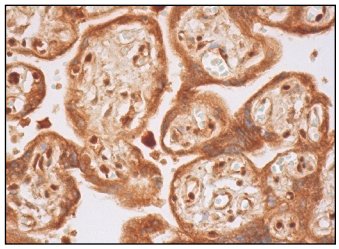
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



IFN-α/βRβ (P-17): sc-83257. Western blot analysis of IFN-α/βRβ expression in HEK293 (**A**), Jurkat (**B**), K-562 (**C**), Hep G2 (**D**) and Caco-2 (**E**) whole cell lysates.



IFN-α/βRβ (P-17): sc-83257. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

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.