# IFN-γRβ (h): 293T Lysate: sc-159333



The Power to Question

## **BACKGROUND**

IFN- $\gamma$  induces a variety of biological responses, such as antiviral, antiproliferative and immunomodulatory activity in sensitive cells. Activation of the IFN- $\gamma$  receptor (IFN- $\gamma$ R) leads to autophosphorylation of the Janus kinases JAK1 and JAK2, and the nuclear translocation of the transcription factors Stat1 $\alpha$  p91 and Stat1 $\beta$  p84. The IFN- $\gamma$ R is composed of at least two chains, designated IFN- $\gamma$ R $\alpha$  and IFN- $\gamma$ R $\beta$ , respectively. Although expression of IFN- $\gamma$ R $\alpha$  is sufficient for ligand binding, it alone does not confer responsiveness to IFN- $\gamma$ . Concomitant expression of IFN- $\gamma$ R $\alpha$  and IFN- $\gamma$ R $\beta$  is required for transcriptional activation of IFN- $\gamma$ -inducible genes. The IFN- $\gamma$ R $\beta$  chain, also called AF-1, is 332 and 337 amino acids in length in mouse and human, respectively, and may represent the signal transducing component of the IFN- $\gamma$ R.

## **REFERENCES**

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- 5. Farrar, M.A., et al. 1993. The molecular cell biology of interferon- $\gamma$  and its receptor. Annu. Rev. Immunol. 11: 571-611.
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- Vilcek, J., et al. 1994. Recent progress in the elucidation of interferon-γ actions: molecular biology and biological functions. Int. Arch. Allergy Immunol. 104: 311-316.

# CHROMOSOMAL LOCATION

Genetic locus: IFNGR2 (human) mapping to 21q22.11.

# **PRODUCT**

IFN- $\gamma$ R $\beta$  (h): 293T Lysate represents a lysate of human IFN- $\gamma$ R $\beta$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## **APPLICATIONS**

IFN- $\gamma R\beta$  (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive IFN- $\gamma R\beta$  antibodies. Recommended use: 10-20  $\mu$ l per lane

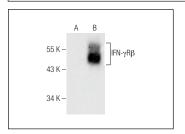
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IFN- $\gamma$ R $\beta$  (A-11): sc-377291 is recommended as a positive control antibody for Western Blot analysis of enhanced human IFN- $\gamma$ R $\beta$  expression in IFN- $\gamma$ R $\beta$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA



IFN-γRβ (A-11): sc-377291. Western blot analysis of IFN-γRβ expression in non-transfected: sc-117752 (**A**) and human IFN-γRβ transfected: sc-159333 (**B**) 293T whole cell lysates.

#### **RESEARCH USE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.