

IFN- γ R β (2 HUB 145): sc-53588

BACKGROUND

IFN- γ induces a variety of biological responses, such as antiviral, antiproliferative and immunomodulatory activity in sensitive cells. Activation of the IFN- γ receptor (IFN- γ R) leads to autophosphorylation of the Janus kinases JAK1 and JAK2, and the nuclear translocation of the transcription factors Stat1 α p91 and Stat1 β p84. The IFN- γ R is composed of at least two chains, designated IFN- γ R α and IFN- γ R β . Although expression of IFN- γ R α is sufficient for ligand binding, it alone does not confer responsiveness to IFN- γ . Concomitant expression of IFN- γ R α and IFN- γ R β is required for transcriptional activation of IFN- γ -inducible genes. The IFN- γ R β 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- γ R.

REFERENCES

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3. Aguet, M., et al. 1988. Molecular cloning and expression of the human interferon- γ receptor. *Cell* 55: 273-280.
4. Silvennoinen, O., et al. 1993. Interferon-induced nuclear signalling by JAK protein tyrosine kinases. *Nature* 366: 583-585.
5. Farrar, M.A., et al. 1993. The molecular cell biology of interferon- γ and its receptor. *Annu. Rev. Immunol.* 11: 571-611.
6. Soh, J., et al. 1994. Identification and sequence of an accessory factor required for activation of the human interferon- γ receptor. *Cell* 76: 793-802.
7. Hemmi, S., et al. 1994. A novel member of the interferon receptor family complements functionality of the murine interferon- γ receptor in human cells. *Cell* 76: 803-810.
8. 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 21q22.1.

SOURCE

IFN- γ R β (2 HUB 145) is an Armenian hamster monoclonal antibody raised against the extracellular domain of IFN- γ R β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IFN- γ R β (2 HUB 145) is available conjugated to either phycoerythrin (sc-53588 PE) or fluorescein (sc-53588 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

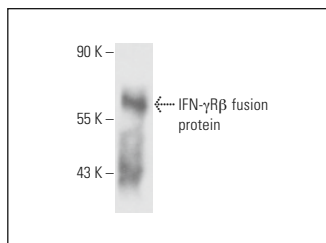
APPLICATIONS

IFN- γ R β (2 HUB 145) is recommended for detection of IFN- γ 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)] and flow cytometry (1 μ g per 1×10^6 cells).

Suitable for use as control antibody for IFN- γ R β siRNA (h): sc-40094; and as shRNA Plasmid control antibody for IFN- γ R β shRNA Plasmid (h): sc-40094-SH.

Molecular Weight of IFN- γ R β : 38 kDa.

DATA



IFN- γ R β (2 HUB 145): sc-53588. Western blot analysis of human recombinant IFN- γ R β fusion protein.

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 for detailed protocols and support products.