

IFN- γ R α (M-300): sc-25482

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 , respectively. 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

1. Orchansky, P., et al. 1984. Type I and type II interferon receptors. *J. Interferon Res.* 4: 275-282.
2. Novick, D., et al. 1987. The human interferon- γ receptor, purification, characterization and preparation of antibodies. *J. Biol. Chem.* 262: 8483-8487.
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.

CHROMOSOMAL LOCATION

Genetic locus: IFNGR1 (human) mapping to 6q24; Ifngr1 (mouse) mapping to 10 A3.

SOURCE

IFN- γ R α (M-300) is a rabbit polyclonal antibody raised against amino acids 178-477 of IFN- γ R α of mouse origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

IFN- γ R α (M-300) is recommended for detection of IFN- γ R α of mouse and rat 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- γ R α siRNA (m): sc-35636, IFN- γ R α shRNA Plasmid (m): sc-35636-SH and IFN- γ R α shRNA (m) Lentiviral Particles: sc-35636-V.

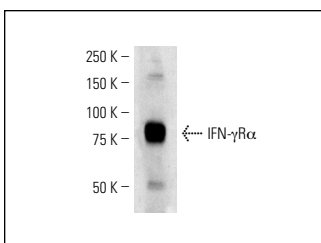
Molecular Weight of IFN- γ R α : 80-95 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, WEHI-231 whole cell lysate: sc-2213 or BYDP whole cell lysate: sc-364368.

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- γ R α (M-300): sc-25482. Western blot analysis of IFN- γ R α expression in BYDP whole cell lysate.

STORAGE

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



Try IFN- γ R α (GIR-94): sc-12755 or IFN- γ R α (F-6): sc-74450, our highly recommended monoclonal alternatives to IFN- γ R α (M-300).