

IFN- γ R α (2E2): sc-12753

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.

CHROMOSOMAL LOCATION

Genetic locus: IFNGR1 (human) mapping to 6q23.3; Ifngr1 (mouse) mapping to 10 A3.

SOURCE

IFN- γ R α (2E2) is a Armenian hamster monoclonal antibody epitope mapping to the extracellular domain 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.

IFN- γ R α (2E2) is available conjugated to agarose (sc-12753 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-12753 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-12753 PE), fluorescein (sc-12753 FITC), Alexa Fluor[®] 488 (sc-12753 AF488), Alexa Fluor[®] 546 (sc-12753 AF546), Alexa Fluor[®] 594 (sc-12753 AF594) or Alexa Fluor[®] 647 (sc-12753 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-12753 AF680) or Alexa Fluor[®] 790 (sc-12753 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

IFN- γ R α (2E2) is recommended for detection of IFN- γ R α of mouse, rat and 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 flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for IFN- γ R α siRNA (h): sc-29357, IFN- γ R α siRNA (m): sc-35636, IFN- γ R α shRNA Plasmid (h): sc-29357-SH, IFN- γ R α shRNA Plasmid (m): sc-35636-SH, IFN- γ R α shRNA (h) Lentiviral Particles: sc-29357-V and IFN- γ R α shRNA (m) Lentiviral Particles: sc-35636-V.

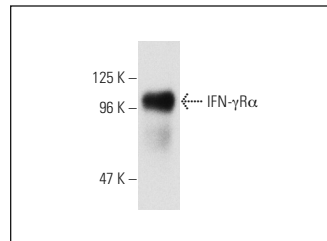
Molecular Weight of IFN- γ R α : 80-95 kDa.

Positive Controls: BYDP whole cell lysate: sc-364368.

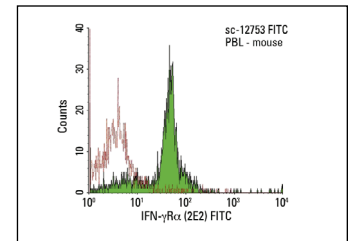
RESEARCH USE

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

DATA



IFN- γ R α (2E2): sc-12753. Western blot analysis of IFN- γ R α expression in BYDP whole cell lysate.



IFN- γ R α (2E2) FITC: sc-12753 FITC. FCM analysis of mouse peripheral blood leukocytes. Black line histogram represents the isotype control, normal Armenian hamster IgG-FITC: sc-2864.

SELECT PRODUCT CITATIONS

- Morgan, R., et al. 2004. N-acetylglucosaminyltransferase V (Mgat5)-mediated N-glycosylation negatively regulates Th1 cytokine production by T cells. *J. Immunol.* 173: 7200-7208.
- Ito, T., et al. 2005. Interferon- γ is a potent inducer of catagen-like changes in cultured human anagen hair follicles. *Br. J. Dermatol.* 152: 623-631.
- Sánchez, M.D., et al. 2006. Functional and phenotypic changes in monocytes from patients with tuberculosis are reversed with treatment. *Microbes Infect.* 8: 2492-2500.
- Numasaki, M., et al. 2007. IL-28 elicits antitumor responses against murine fibrosarcoma. *J. Immunol.* 178: 5086-5098.
- Neves, J.S., et al. 2008. Eosinophil granules function extracellularly as receptor-mediated secretory organelles. *Proc. Natl. Acad. Sci. USA* 105: 18478-18483.
- Mizuno, T., et al. 2008. Interferon- γ directly induces neurotoxicity through a neuron specific, calcium-permeable complex of IFN- γ receptor and AMPA GluR1 receptor. *FASEB J.* 22: 1797-1806.
- Chen, L., et al. 2019. Exosomes derived from T regulatory cells suppress CD8⁺ cytotoxic T lymphocyte proliferation and prolong liver allograft survival. *Med. Sci. Monit.* 25: 4877-4884.

PROTOCOLS

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

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