

Anti-IFNAR-1 [64G12] Standard Size Ab02215-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: 64G12

Alternative Name(s) of Target: IFNAR1; IFN-R-1; Interferon alpha/beta receptor 1; Cytokine receptor class-II member 1; Cytokine receptor family 2 member 1; CRF2-1; Type I interferon receptor 1

UniProt Accession Number of Target Protein: P17181

Published Application(s): confocal microscopy, inhibit, IP, NTRL, WB, ELISA, FC, IF

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing mice with recombinant soluble interferon (r sIFN-R) expressed and purified from E.coli or from a culture supernatant of Cos7 cells.

Specificity: This antibody binds the extracellular domain of the human type I-interferon receptor (IFN-R) and has neutralizing capacity against the biological properties of the human type I-IFN..

Application Notes: This antibody is capable of neutralizing the biologic activity of IFN-alpha, -beta, and -omega and natural type I IFN, but not IFN-gamma. The receptor-blocking anti-IFNAR-1 mAb 64G12 also inhibited IFN-α2α-induced ISGF3 and IFN regulatory factor-1 (IRF-1) binding to their ISRE. It is also reported that the affinity of this antibody for the cellular receptor depends on the cell line used. The binding characterization of this antibody was done using ELISA and western blotting (PMID: 8423335). The reactivity of the monoclonal antibodies (mAbs) recognizing the recombinant soluble IFN-R was tested against the natural class I receptor expressed at the surface of Daudi cells, by membrane immunofluorescence. Antibody 64G12 both inhibits the binding of radiolabeled interferon-α2 and IFN-α8 to their cell surface receptors and neutralizes the antiviral and antiproliferative actions of all the type I interferons tested, including IFN-β, IFN-ω, and human leukocyte IFN, a mixture of different interferon-α isotypes. Immunoprecipitation followed by surface iodination demonstrated that the neutralizing MAb 64G12 recognizes a protein of 105 kD in extracts of Daudi cells (PMID: 7584665). This antibody inhibits activation of the Jak-Stat signal transduction pathway, administered together with a subeffective dose of cyclosporine induced prolonged survival of skin allografts in major histocompatibility complex (MHC) divergent cynomolgus monkeys (PMID: 9568730). This antibody was also used to study the expression of

IFN- α/β receptor expression on a number of different human cell lines including Daudi, K562, Ly28 and HL60 using confocal microscopy and flow cytometry (PMID: 12040445).

Antibody First Published in: Benoit et al. A monoclonal antibody to recombinant human IFN-alpha receptor inhibits biologic activity of several species of human IFN-alpha, IFN-beta, and IFN-omega. Detection of heterogeneity of the cellular type I IFN receptor. J Immunol. (1993); 150(3):707-16.

[PMID:8423335](#)

Note on publication: Describes the generation and characterization of this antibody.

Product Form

Size: 200 μ g Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.