IFNAR1 Recombinant Monoclonal Antibody

Product Code	CSB-RA011046A0HU
Abbreviation	Interferon alpha/beta receptor 1
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P17181
Immunogen	A synthesized peptide derived from human IFNAR1
Species Reactivity	Human
Tested Applications	ELISA
Relevance	Component of the receptor for type I interferons, including interferons alpha, IFNB1 and IFNW1 (PubMed:2153461, PubMed:7665574, PubMed:10049744, PubMed:14532120, PubMed:15337770, PubMed:21854986). Functions in general as heterodimer with IFNAR2 (PubMed:7665574, PubMed:10049744, PubMed:21854986). Type I interferon binding activates the JAK-STAT signaling cascade, and triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and the IFNR alpha- and beta-subunits themselves (PubMed:7665574, PubMed:21854986). Can form an active IFNB1 receptor by itself and activate a signaling cascade that does not involve activation of the JAK-STAT pathway (By similarity).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Interferon alpha/beta receptor 1, IFN-R-1, IFN-alpha/beta receptor 1, Cytokine receptor class-II member 1, Cytokine receptor family 2 member 1, CRF2-1, Type I interferon receptor 1, IFNAR1, IFNAR
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology
Gene Names	IFNAR1
Clone No.	1B12
Description	The production of the IFNAR1 recombinant monoclonal antibody involves the use of DNA recombinant technology and in vitro genetic manipulation. Initially, animals are immunized with a synthesized peptide derived from human IFNAR1, and B cells are isolated from them for further screening. Positive B cells are selected, and individual clones are identified. The light and heavy chains of the

IFNAR1 antibody are then amplified through PCR and inserted into a plasmid vector. This recombinant vector is transfected into a host cell line to facilitate antibody expression. The IFNAR1 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. This antibody exhibits specificity towards human IFNAR1 protein and is highly suitable for use in ELISA.

The IFNAR1 protein is a receptor protein involved in the cellular response to interferons, which are proteins that play a critical role in the immune response to viral infections and other pathogens. When interferons bind to the IFNAR1 receptor on the surface of a cell, a signal is initiated that activates a signaling pathway known as the JAK-STAT pathway. This leads to the expression of a variety of genes that play a role in antiviral defense and other immune responses. In addition to its role in the immune response, IFNAR1 has also been implicated in other cellular processes, including cell proliferation and differentiation.