IFNAR1 Protein, Mouse (HEK293, His-Avi)

Cat. No.:	HY-P78309
Synonyms:	AVP; IFN-alpha/beta R1; IFN-alpha-REC; IFNAR; IFNAR1; IFN-aR1; IFNBR; IFNbR1; IFN-R-1; CRF2-1; IFRC ; IFN-alpha/β R1
Species:	Mouse
Source:	HEK293
Accession:	P33896 (E27-T429)
Gene ID:	15975
Molecular Weight:	67-70 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

IFNAR1, one of the subunit of IFN-α/β receptor, is a type I IFN receptor. IFNAR1 is expressed on peripheral blood B cells and monocytes, and mediates differentiation and activation of these cells[4].
IFNAR1 interacts with tyrosine kinase 2 (Tyk2), and the interaction is able to stabilize IFNAR1 on the plasma membrane[1]. Besides, IFNAR1 associates with TYK2 and initiates type I IFN-induced STAT signaling, but the activation needs IFNAR2 as a platform[2]. IFN-α/-β can induce association of the IFNAR1 and IFNAR2, and makes JAK1 and TYK2 form a functional signaling unit[1]. Upon activation by these IFNs, IFNAR1 and IFNAR2 undergo a conformational change to promote a cascade of downstream signaling events. The signaling events includes the phosphorylation of Tyk2 and JAK1, the signal transducers and activators of transcription STAT1 and STAT2, and the formation of the IFN-stimulated gene factor 3 (ISGF3) complex which consists of phosphorylated STAT1 and STAT2 and IRF9[3]. The lack of IFNAR1 in mice makes mice highly susceptible to bacteria and parasites infection, IFNAR1-deficiency in mice also accelerates tumor growth[5][6].
The sequence of amino acids in IFNAR1 differs in different species. Human IFNAR1 shares <50% aa sequence identity with mouse.
IFNAR1 mediates IFN-induced STAT signaling by interacting with tyrosine kinase 2 (Tyk2)[1].

REFERENCES

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