

#97450 Store at -20°C

IFN-β1 (D2J1D) Rabbit mAb



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, FC-FP	M	Endogenous	24, 26	Rabbit IgG	#P01575	15977

Product Usage Information

Application

Western Blotting
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:3200

Specificity / Sensitivity

IFN-β1 (D2J1D) Rabbit mAb recognizes endogenous levels of total IFN-β1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant mouse IFN-β1 protein.

Background

The type I interferon (IFN) family includes IFN-β1 and IFN-α1 through IFN-α13 in humans and IFN-α1 through IFN-α14 in mice. Type I IFN is produced following detection of pathogen-associated molecular patterns (PAMPs) and is important for induction of antiviral genes, activation of dendritic cells, and initiation of adaptive immunity (1, 2). Type I IFNs signal through the IFN alpha receptor (IFNAR), which is a heterodimer composed of IFNAR1 and IFNAR2. Activation of IFNAR leads to formation of the nuclear complex IFN-stimulated gene factor 3 (ISGF3), which consists of STAT1, STAT2, and IRF-9 (3, 4). ISGF3 binds to IFN-stimulated response elements (ISREs) to initiate transcription of interferon-stimulated genes (3).

Background References

1. Paludan, S.R. and Bowie, A.G. (2013) *Immunity* 38, 870-80.
2. Ivashkiv, L.B. and Donlin, L.T. (2014) *Nat Rev Immunol* 14, 36-49.
3. Levy, D.E. et al. (1989) *Genes Dev* 3, 1362-71.
4. Qureshi, S.A. et al. (1995) *Proc Natl Acad Sci U S A* 92, 3829-33.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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