

#73671 Store at -20C

## IFN-β1 (D1D7G) 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	H	Endogenous	19, 21	Rabbit IgG	#P01574	3456

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	IFN-β1 (D1D7G) Rabbit mAb recognizes endogenous levels of total IFN-β1 protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with recombinant human IFN-β1 protein.	
<b>Background</b>	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).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Paludan, S.R. and Bowie, A.G. (2013) <i>Immunity</i> 38, 870-80.</li> <li>2. Ivashkiv, L.B. and Donlin, L.T. (2014) <i>Nat Rev Immunol</i> 14, 36-49.</li> <li>3. Levy, D.E. et al. (1989) <i>Genes Dev</i> 3, 1362-71.</li> <li>4. Qureshi, S.A. et al. (1995) <i>Proc Natl Acad Sci U S A</i> 92, 3829-33.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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