

InVivoPro Anti-Mouse IFN β *in vivo* antibody, Clone HD β -4A7

Cat #: IV0140

Size: 1mg, 5mg, 25mg, 50mg, 100mg

Product Information

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| Isotype: | Mouse IgG2a κ |
| Reactivity: | Mouse |
| Formulation: | PBS, pH 7.2, contains no stabilizers or preservatives |
| Concentration: | Lot specific, generally ≥ 5.0 mg/ml |
| Applications: | <i>In vivo</i> neutralization of IFN β |
| Recommended Isotype Control: | IV0137 or Mouse IgG2a Isotype Control |
| Endotoxin: | ≤ 1.0 EU/mg, by the LAL method |
| Purity: | 99% |
| Sterility: | 0.2 μ M filtered |
| Purification: | Protein A or G |
| Recommended Dose Range: | Each investigator should determine their own optimal working dilution for specific applications. |
| Storage: | This antibody is stable for at least 2 months when stored at 2-8°C. For long term storage, aliquot in working volumes without diluting and store at -20°C or -80°C. Avoid repeated freeze thaw cycles. |

Background

IFN β is a type I interferon cytokine that binds its high-affinity (IFNAR 2) and low-affinity (IFNAR 1) subunits of the heterodimeric type I IFN receptor (IFNAR), activating canonical JAK-STAT and MAPK signaling to drive transcriptional regulation of IFN-stimulated genes (ISGs). IFN β plays a significant role in innate immunity to infections, tumorigenesis, and inflammation. In most cell types, IFN β is induced after microbial detection through pattern-recognition receptors (PRRs) and the subsequent activation/nuclear translocation of IRF-family transcription factor-1 (IRF-1) and IRF-3. IFN β elicits antimicrobial activities and regulates the LPS-inducible TNF production. IFN β directly mobilizes systemic immune responses through enhanced antigen presentation, NK cell activation, and T-cell effector function. The HD β -4A7 monoclonal antibody reacts with mouse IFN β and does not cross-react with mouse IFN γ or several different IFN α isoforms ($\alpha 1$, 4, 5 or 13).

Note: The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.