

## Datasheet for ABIN2191742 anti-IFNA antibody

# Publications



Overview	
Quantity:	100 μg
Target:	IFNA
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This IFNA antibody is un-conjugated
Application:	Western Blotting (WB), Functional Studies (Func), Flow Cytometry (FACS), Immunoassay (IA)
Product Details	
Clone:	F18
Isotype:	lgG1
Cross-Reactivity (Details):	Cross reactivity: Human IFN : No, Mouse IFN-β : No, : No, Mouse IFN-: No
Sterility:	0.2 μm filtered
Target Details	
Target:	IFNA
Alternative Name:	Interferon-alpha (IFNA Products)
Background:	The monoclonal antibody F18 recognizes and neutralizes both natural and recombinant mouse alpha Interferon (IFN- $\alpha$ ). IFN- $\alpha$ is a cytokine that belongs to the type I interferons (IFN-I). IFN- $\alpha$ is secreted by many cell types including lymphocytes (NK cells, B-cells and T-cells), macrophages, fibroblasts, endothelial cells, osteoblasts, microglia and others. Interferons stimulate both

macrophages and NK cells to elicit an anti-viral response, and are also active against tumors. Although all cells can produce IFN-I, plasmacytoid dendritic cells (pDCs) produce 1,000-fold higher levels than other cell types, and are responsible for systemic IFN-I responses to many viruses. They are coined as the natural IFN- producing cells. However, under deprived pDC condition, other dendritic cells are capable of producing high levels of IFN-I. Interferons were initially characterized for their ability to 'interfere' with viral replication, slow cell proliferation, and profoundly alter immunity. IFN-a has several regulatory roles and diverse biological activities, including control of cellular and humoral immune responses, inflammation, and tumor regression. In addition, IFN-a participates in the regulation of various cellular and humoral processes such as the endocrine system modulates behavior, brain activity, temperature, glucose sensitive neurons, feeding pattern and opiate activity. With the availability of monoclonal antibodies directed against IFN-α, it is possible to interpret results obtained from crude materials containing both IFN-α and IFN-β. The difficulties in studying in vitro and in vivo effects of 'type 1' Interferons arise from the fact that both alpha and beta Interferons are produced in response to the same stimuli and also seem to act via the same receptor. These Interferon activities can only be distinguished from one another by use of specific neutralizing antibodies. Aliases IFN-a

Pathways:

JAK-STAT Signaling, TLR Signaling, Hepatitis C, Inflammasome

#### **Application Details**

Application Notes:

For flow cytometry, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting. 1

Restrictions:

For Research Use only

#### Handling

Buffer: PBS, containing 0.1 % bovine serum albumin.

Storage: 4 °C

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Storage Comment: Product should be stored at 4 °C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label.

### **Publications**

Product cited in:

Joshi, Kalvakolanu, Chen, Zhang, Kang, Thomas, Vogel, Cross: "A role for Stat1 in the regulation of lipopolysaccharide-induced interleukin-1beta expression." in: **Journal of interferon & cytokine research: the official journal of the International Society for Interferon and Cytokine Research**, Vol. 26, Issue 10, pp. 739-47, (2006) (PubMed).

Diebold, Montoya, Unger, Alexopoulou, Roy, Haswell, Al-Shamkhani, Flavell, Borrow, Reis e Sousa: "Viral infection switches non-plasmacytoid dendritic cells into high interferon producers." in: **Nature**, Vol. 424, Issue 6946, pp. 324-8, (2003) (PubMed).