

## Mouse anti-IFN-alpha, clone F18 (Monoclonal)

Clone no. F18

MONOSAN

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Product name	Mouse anti-IFN-alpha, clone F18 (Monoclonal)
Host	Rat
Applications	FC, FUNC, ELISA, WB
Species reactivity	mouse
Conjugate	-
Immunogen	Unknown or proprietary to MONOSAN and/or its suppliers
Isotype	IgG1
Clonality	Monoclonal
Clone number	F18
Size	1 ml
Concentration	100 ug/ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

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**Additional info**

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- $\alpha$  has several regulatory roles and diverse biological activities, including control of cellular and humoral immune responses, inflammation, and tumor regression. In addition, IFN- $\alpha$  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- $\alpha$ , it is possible to interpret results obtained from crude materials containing both IFN- $\alpha$  and IFN- $\beta$ . 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.

**References**

1. Dalod et al. J Exp Med 2002;195:517
2. Diebold et al. Nature 2003;424:324
3. Joshi et al. J Interferon Cytokine Res 2006;26:739
4. Wilkstrom et al. J Virol 2013;87:7911
5. -

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