Technical Data Sheet

InVivoMAb anti-mouse IFN-α

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**BE0488**
Clone:	**TIF-3C5**
Isotype:	Armenian hamster IgG
Recommended Isotype Control(s):	InVivoMAb Armenian hamster IgG isotype control, anti-S. japonicum glutathione S-transferase
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Recombinant murine IFN-α5
Reported Applications:	*in vivo* neutralization of IFN-α *in vitro* neutralization of IFN-α ELISA
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤1EU/mg (≤0.001EU/μg) Determined by LAL assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The TIF-3C5 monoclonal antibody reacts with mouse interferon alpha (IFN-α), a pleiotropic cytokine belonging to the type I IFN family. TIF-3C5 is often regarded as a pan-IFN-α antibody because it is shown to recognize multiple subtypes of IFN-α, namely IFN-αA, IFN-α1, IFN-α4, IFN-α5, IFN-α11, and IFN-α13. This antibody does not cross-react with mouse IFN-β, mouse IFN-γ, and human IFN-αA/D. The type I IFNs bind a ubiquitously expressed heterodimeric type I IFN receptor (IFNAR), which consists of the α-chain (IFNAR1) and the β-chain (IFNAR2) subunits. The differing binding affinity of the IFN-α subtypes with IFNAR subunits correlates with differential regulation of the downstream signaling molecules, such as STATs and MAPKs. IFN-α is naturally produced during viral infections, and the major source of this cytokine is plasmacytoid dendritic cells (pDCs), also called "natural interferon-producing cells" (NIPCs). IFN-α is also produced by macrophages, monocytes, B-cells, T-cells, and, to a lesser extent, fibroblasts and endothelial cells in pathophysiological conditions such as tumors and pathogenic exposure. IFN-α's role in both the pathology and biotherapeutics of viral infections and cancer is well established, and it also acts as a key immunopathogenic driver of autoimmune diseases, such as systemic lupus erythematosus (SLE). IFN-α's anti-tumor properties include direct cytotoxic killing of tumor cells and stimulating innate or adaptive immunity.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0488?bxcs=9k1b3a#tab_references or scan the QR code below.

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