# Technical Data Sheet

## InVivoMAb anti-mouse TNFα

**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:** | **BE0058** |
| **Clone:** | **XT3.11** |
| **Isotype:** | Rat IgG1 |
| **Recommended Isotype Control(s):** | InVivoMAb rat IgG1 isotype control, anti-horseradish peroxidase |
| **Recommended Dilution Buffer:** | InVivoPure pH 8.0 Dilution Buffer |
| **Immunogen:** | Recombinant mouse TNFα |
| **Reported Applications:** | *in vivo* TNFα neutralization<br>*in vitro* TNFα neutralization<br>Western blot |
| **Formulation:** | PBS, pH 8.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | ≤1EU/mg (≤0.001EU/μg)<br>Determined by LAL gel clotting assay |
| **Purity:** | ≥95%<br>Determined by SDS-PAGE |
| **Sterility:** | 0.2 μm filtration |
| **Production:** | Purified from cell culture supernatant in an animal-free facility |
| **Purification:** | Protein G |
| **RRID:** | AB_1107764 |
| **Molecular Weight:** | 150 kDa |

## Description

The XT3.11 monoclonal antibody reacts with mouse TNFα (tumor necrosis factor-alpha) a multifunctional proinflammatory cytokine. TNFα exists as a soluble 17 kDa monomer, which forms homotrimers in circulation or as a 26 kDa membrane-bound form. TNFα belongs to the TNF superfamily of cytokines and signals through its two receptors, TNFR1 and TNFR2 which can be activated by both the soluble trimeric and membrane-bound and forms of TNFα. TNFα is primarily produced by macrophages in response to foreign antigens such as bacteria (lipopolysaccharides), viruses, and parasites as well as mitogens and other cytokines but can also be expressed by monocytes, neutrophils, NK cells, CD4 T cells and some specialized dendritic cells. TNFα is known to play key roles in a wide spectrum of biological processes including immunoregulation, cell proliferation, differentiation, apoptosis, antitumor activity, inflammation, anorexia, cachexia, septic shock, hematopoiesis, and viral replication. TNFα dysregulation has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Mouse and human TNFα share 79% amino acid sequence identity however, mouse TNFα is glycosylated while human TNFα is not. TNFα knockout animals display defects in response to bacterial infection, characterized by defects in forming organized follicular dendritic cell networks and germinal centers with a lack of primary B cell follicles.

## 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

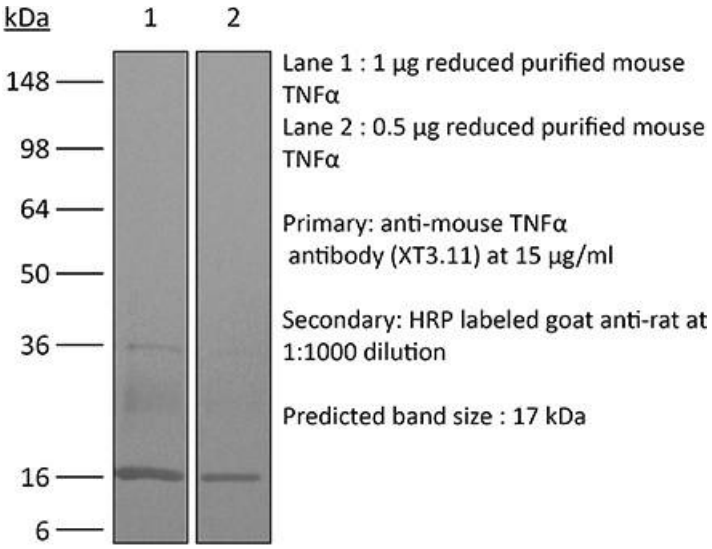
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit https://bioxcell.com/be0058?bxcs=9k1b3a#tab_references or scan the QR code below.

## Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.




**Bio X Cell, LLC**
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com

*Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.*
*Not for resale.*
**Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © 2025 Bio X Cell, LLC**