

# Technical Data Sheet

## InVivoMAb anti-human/mouse GRP78



**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:** BE0416  
**Clone:** N88  
**Isotype:** Mouse IgG1,  $\kappa$   
**Recommended Isotype Control(s):** InVivoMAb mouse IgG1 isotype control, unknown specificity  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Full-length recombinant GRP78 protein  
**Reported Applications:** *in vivo* administration  
Functional assays  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <2EU/mg (<0.002EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtered  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein G  
**RRID:**  
**Molecular Weight:** 150 kDa

### Description

The N88 monoclonal antibody reacts with human and mouse Glucose Regulated Protein 78 (GRP78) also known as BiP or HSPA5. GRP78 is a stress inducible, pro-survival, endoplasmic reticulum chaperone in the HSP70 family. Cell Surface GRP78 acts as a multifunctional receptor that affects both cell proliferation and viability. GRP78 is involved in many cellular processes, including translocating newly synthesized polypeptides across the ER membrane, facilitating the folding and assembly of proteins, targeting misfolded proteins for ER-associated degradation (ERAD), regulating calcium homeostasis, and serving as an ER stress sensor. Expression of cell surface GRP78 is associated with increased malignancy and resistance to chemotherapy and radiotherapy in various cancers, particularly prostate cancer. The N88 antibody binds to the N-terminal domain of GRP78 and has been shown to accelerate tumor growth in a B16F1 melanoma tumor model.

### 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.

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*Not for resale.*

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