



## Monoclonal Anti-mouse MEA-1 Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB3088

**Clone:** 364605

**Lot Number:**YSZ01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** mouse MEA-1

**Immunogen:** E.coli-derived rmMEA-1

**Ig class:** rat IgG<sub>2A</sub>

**Recommended Application:**  
Western blot

**Other Application:**  
Direct ELISA

### **Preparation**

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, E.coli-derived, recombinant mouse male enhanced antigen 1 (rmMEA-1; aa 1 - 174: Accession # AAH13344). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. MEA-1 is a phylogenetically conserved protein that is highly expressed in primary and secondary spermatocytes and spermatids. It is thought to be essential for embryogenesis, spermatogenesis and sex determination. Mouse MEA-1 shares 99% and 93% amino acid sequence homology with rat and human MEA-1, respectively.

### **Formulation**

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### **Reconstitution**

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### **Storage**

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### **Specificity**

This antibody was selected for its ability to detect mouse MEA-1 in direct ELISAs and Western blots.

### **Applications**

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect mouse MEA-1. Using a colorimetric detection system, the detection limit for rmMEA-1 is approximately 5 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo™ Chemiluminescent Detection Substrate (R&D Systems Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse MEA-1. The detection limit for rmMEA-1 is approximately 2 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**