



#### ORDERING INFORMATION

**Catalog Number:** MAB1677

**Clone:** 171217

**Lot Number:** JBV01

**Size:** 500 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** mouse GFR $\alpha$ -4

**Immunogen:** NS0-derived rmGFR $\alpha$ -4

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

**Applications:** ELISA  
Immunohistochemistry

## ***Monoclonal Anti-mouse GFR $\alpha$ -4 Antibody***

### ***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, NS0-derived, recombinant mouse Glial cell line-derived neurotrophic factor (GDNF) receptor alpha 4 (rmGFR $\alpha$ -4). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. GFR $\alpha$ -4 is a GPI-linked cell surface protein that associates with the c-Ret transmembrane tyrosine kinase to form a functional receptor complex for the GDNF family ligand, persephin.

### ***Formulation***

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

### ***Reconstitution***

Reconstitute with sterile PBS. If 1 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 GFR $\alpha$ -4 in direct ELISAs. In this format, this antibody does not cross-react with rmGFR $\alpha$ -2, rhGFR $\alpha$ -3, rrGFR $\alpha$ -1 or rhGFR $\alpha$ -4.

### ***Applications***

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse GFR $\alpha$ -4. The detection limit for rmGFR $\alpha$ -4 is approximately 2 ng/well.

**Immunohistochemistry** - A biotin conjugate of this antibody was used at a concentration of 25 µg/mL to detect GFR $\alpha$ -4 in frozen mouse brain tissue sections. For chromogenic detection of labeling, the use of R&D Systems' Cell and Tissue Staining Kits (CTS Series) is recommended.

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