

## Anti-GFR $\alpha$ -1 Antibody

### ORDERING INFORMATION

**Catalog No.:** 1133

**Size:** 100 ug IgG in PBS, pH 7.4, purified by immunoaffinity chroma-tography.

### BACKGROUND

Glial cell line-derived neurotrophic factor (GDNF) is a potent survival factor for central and peripheral neurons and is essential for the development of the kidney and the enteric nervous system. Physiological responses to GDNF require the presence of a novel glycosylphosphatidylinositol linked protein, GDNFR $\alpha$ , a cell surface receptor for GDNF. The cDNAs encoding GDNFR $\alpha$  from human, rat, chicken, and mouse have been cloned. GDNFR $\alpha$  has also been referred to as GFR $\alpha$ -1, Ret ligand 1 (RETL1) and TGF- $\beta$ -related neurotrophic factor receptor 1 (Tmr1). GFR $\alpha$ -1 binds GDNF specifically and mediates activation of the Ret protein tyrosine kinase (PTK). Thus, GDNF, GFR $\alpha$ , and the Ret PTK form a complex to transmit the GDNF signal and to mediate GDNF function. GFR $\alpha$ -1 has been identified in brain, liver, kidney, and spleen.

### SPECIFICATION SUMMARY

**Antigen:** Peptide corresponding to aa 369-382 of human GFR $\alpha$ -1. This peptide sequence is identical to those of mouse and rat.

**Host Species:** Rabbit

**Stabilizers:** None

**Preservatives:** 0.02% sodium azide.

### SPECIFICITY

This antibody recognizes human, mouse, and rat GFR $\alpha$ -1 (approx. 50 kD).

### APPLICATIONS

*Immunoblotting:* use at 1:500 dilution.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid multiple freeze-thaw cycles.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*