
GDNF Receptor alpha 2 Antibody Blocking Peptide

Catalog Number: bs-0054P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Glial cell line-derived neurotrophic factor (GDNF) and neurturin (NTN) are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. The protein encoded by this gene is a member of the GDNF receptor family. It is a glycosylphosphatidylinositol(GPI)-linked cell surface receptor for both GDNF and NTN, and mediates activation of the RET tyrosine kinase receptor. This encoded protein acts preferentially as a receptor for NTN compared to its other family member, GDNF family receptor alpha 1. This gene is a candidate gene for RET-associated diseases. Multiple transcript variants encoding different isoforms have been found for this gene. Members of the glial cell line-derived neurotrophic factor(GDNF) family, including GDNF and neurturin (NTN), play key roles in the control of vertebrate neuron survival and differentiation. Physiological responses to NTN require the presence of a novel glycosylphosphatidylinositol-linked protein NTN α , which is a cell surface receptor for NTN. The cDNAs encoding NTN α from human, rat, chicken, and mouse have been cloned recently. NTN α was also termed GDNFR β , Ret ligand 2 (RETL2) or TGF- β -related neurotrophic factor receptor 2 (TrnR2) and nominated as GFRA-2 recently. GFRA-2 binds NTN and mediates activation of RET receptor tyrosine kinase by both NTN and GDNF. Thus, NTN, GFRA-2, and the Ret PTK form a complex to transduce NTN signal and to mediate NTN function.