

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human GDNF in ELISAs and Western blots. In sandwich immunoassays, less than 30% cross-reactivity with recombinant rat GDNF is observed and less than 0.1% cross-reactivity with recombinant human (rh) BDNF, rhCNTF, rhNeurturin, rh β -NGF, rhNT-3, and rhNT-4 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived and Mouse myeloma cell line NS0-derived recombinant human GDNF Arg109-Ile211 Accession # P39905 |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
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| Western Blot | 0.1 μ g/mL | Recombinant Human GDNF (Catalog # 212-GD) Recombinant Rat GDNF (Catalog # 512-GF) |
| Human GDNF Sandwich Immunoassay | | Reagent |
| ELISA Capture | 2-8 μ g/mL | Human GDNF Antibody (Catalog # MAB212) |
| ELISA Capture | 2-8 μ g/mL | Human GDNF Antibody (Catalog # MAB212R) |
| ELISA Detection | 0.1-0.4 μ g/mL | Human GDNF Biotinylated Antibody (Catalog # BAF212) |
| Standard | | Recombinant Human GDNF (Catalog # 212-GD) |

PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Glial Cell Line-derived Neurotrophic Factor (GDNF) is a neurotrophic factor that has been shown to promote the survival of various neuronal subpopulations in both the central as well as the peripheral nervous systems at different stages of their development. Neuronal subpopulations that have been shown to be affected by GDNF include motoneurons, midbrain dopaminergic neurons, Purkinje cells and sympathetic neurons.

Native GDNF, a disulfide-linked homodimeric glycoprotein, is a novel member of the TGF- β superfamily. Human GDNF cDNA encodes a 211 amino acid residue prepropeptide that is processed to yield a dimeric protein. Mature human GDNF was predicted to contain two 134 amino acid residue subunits. Mature rat and human GDNF exhibit approximately 93% amino acid sequence identity and show considerable species cross-reactivity. Cells known to express GDNF include Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells.