

**GNDF Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8680A**

**Specification**

---

**GNDF Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P39905</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	8-36

**GNDF Antibody (N-term) - Additional Information**

**Gene ID** 2668

**Other Names**

Glial cell line-derived neurotrophic factor, hGDNF, Astrocyte-derived trophic factor, ATF, GDNF

**Target/Specificity**

This GDNF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-36 amino acids from the N-terminal region of human GDNF.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50  
FC~~1:10~50  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GNDF Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GNDF Antibody (N-term) - Protein Information**

**Name** GDNF

**Function** Neurotrophic factor that enhances survival and morphological differentiation of

dopaminergic neurons and increases their high- affinity dopamine uptake (PubMed:[8493557](#)). Acts by binding to its coreceptor, GFRA1, leading to autophosphorylation and activation of the RET receptor (PubMed:[10829012](#), PubMed:[25242331](#), PubMed:[31535977](#)). Involved in the development of the neural crest (PubMed:[15242795](#)).

#### Cellular Location

Secreted

#### Tissue Location

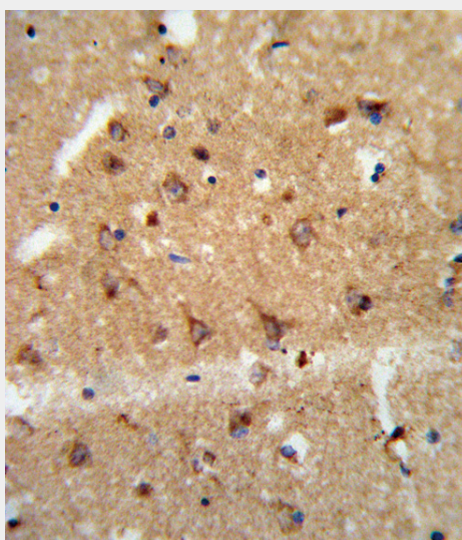
In the brain, predominantly expressed in the striatum with highest levels in the caudate and lowest in the putamen Isoform 2 is absent from most tissues except for low levels in intestine and kidney. Highest expression of isoform 3 is found in pancreatic islets. Isoform 5 is expressed at very low levels in putamen, nucleus accumbens, prefrontal cortex, amygdala, hypothalamus and intestine. Isoform 3 is up-regulated in the middle temporal gyrus of Alzheimer disease patients while isoform 2 shows no change

#### GDNF Antibody (N-term) - Protocols

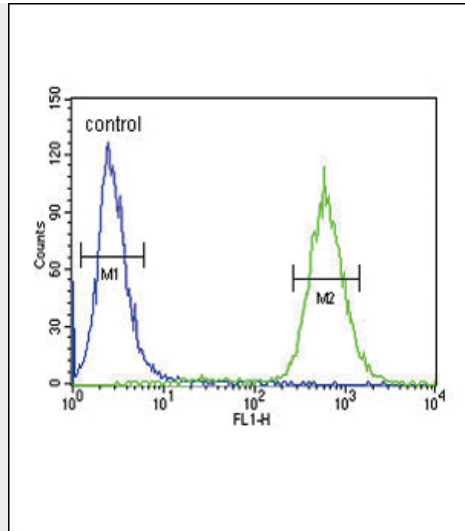
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### GDNF Antibody (N-term) - Images



Formalin-fixed and paraffin-embedded human brain tissue reacted with GDNF Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



GDNF Antibody (N-term) (Cat. #AP8680a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **GDNF Antibody (N-term) - Background**

GDNF is a highly conserved neurotrophic factor. The recombinant form of this protein was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. This protein is processed to a mature secreted form that exists as a homodimer. The mature form of the protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. In addition to the transcript encoding GDNF, two additional alternative transcripts encoding distinct proteins, referred to as astrocyte-derived trophic factors, have also been described.

#### **GDNF Antibody (N-term) - References**

Tomac, A., et al., Nature 373 (6512), 335-339 (1995)