

Anti-GDNF Picoband Antibody
Catalog # ABO11785**Specification**

Anti-GDNF Picoband Antibody - Product Information

Application	WB
Primary Accession	P39905
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Glial cell line-derived neurotrophic factor(GDNF) detection.
Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GDNF Picoband Antibody - Additional Information

Gene ID 2668

Other Names

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

Calculated MW

23720 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Human

Subcellular Localization

Secreted .

Tissue Specificity

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. .

Protein Name

Glial cell line-derived neurotrophic factor

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived human GDNF recombinant protein (Position: S78-I211). Human GDNF shares 93% amino acid (aa) sequence identity with both mouse and rat GDNF.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the TGF-beta family. GDNF subfamily.

Anti-GDNF Picoband Antibody - 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](http://www.uniprot.org/citations/8493557)). Acts by binding to its coreceptor, GFRA1, leading to autophosphorylation and activation of the RET receptor (PubMed: [10829012](http://www.uniprot.org/citations/10829012)), PubMed: [25242331](http://www.uniprot.org/citations/25242331), PubMed: [31535977](http://www.uniprot.org/citations/31535977)). Involved in the development of the neural crest (PubMed: [15242795](http://www.uniprot.org/citations/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.

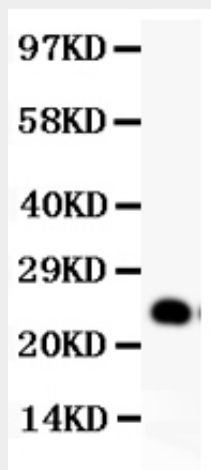
Anti-GDNF Picoband Antibody - Protocols

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](#)

Anti-GDNF Picoband Antibody - Images



Anti-GDNF Picoband antibody, ABO11785-1.jpg All lanes: Anti-GDNF(ABO11785) at 0.5ug/ml WB: Rat Brain Tissue Lysate at 40ug Predicted bind size: 24KD Observed bind size: 24KD

Anti-GDNF Picoband Antibody - Background

Glial cell line-derived neurotrophic factor(GDNF) is a glycosylated, disulfide-bonded homodimer that is a distantly related member of the transforming growth factor-beta superfamily. GDNF is also a potent neurotrophic factor that promotes the survival of dopaminergic neurones in cultures including embryonic neuronal cultures. In addition to its potential role in the differentiation and survival of central nervous system neurons, it has profound effects on kidney organogenesis and the development of the peripheral nervous system. GDNF may have utility in the treatment of Parkinson's disease, which is marked by progressive degeneration of midbrain dopaminergic neurons.