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Anti-GDNF Picoband Antibody

Catalog # ABO11785

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.

Additional Information

Gene ID	2668
Other Names	Glial cell line-derived neurotrophic factor, hGDNF, Astrocyte-derived trophic factor, ATF, GDNF
Calculated MW	23720
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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 r˚Constitution, 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.

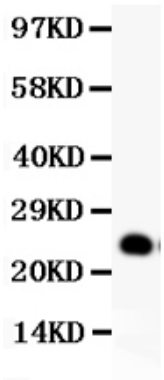
Protein Information

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

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.

Images



Anti-GDNF Picoband antibody, ABO11785-1.jpgAll lanes: Anti-GDNF(ABO11785) at 0.5ug/mlWB: Rat Brain Tissue Lysate at 40ugPredicted bind size: 24KDObserved bind size: 24KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.