SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-GDNF antibody

Catalog Number: SL23586R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	GDNF
Immunogen:	KLH conjugated synthetic peptide derived from human GDNF : 151-211/211
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse,Sheep)
Predicted MW.:	15kDa
Subcellular Location:	Secretory protein
Background:	Neurobiology. Neurotrophins. Neuroscience. This gene encodes 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. The encoded 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. Mutations in this gene may be associated with Hirschsprung disease. **Function:** Neurotrophic factor that enhances survival and morphological

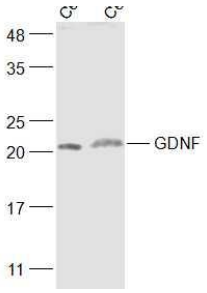
Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

	differentiation of dopaminergic neurons and increases their high-affinity dopamine uptake. **Subunit:** Homodimer; disulfide-linked. **Subcellular Location:** 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. DISEASE: Defects in GDNF may be a cause of Hirschsprung disease type 3 (HSCR3) [MIM:613711]. In association with mutations of RET gene, defects in GDNF may be involved in Hirschsprung disease. This genetic disorder of neural crest development is characterized by the absence of intramural ganglion cells in the hindgut, often resulting in intestinal obstruction. Defects in GDNF are a cause of congenital central hypoventilation syndrome (CCHS) [MIM:209880]; also known as congenital failure of autonomic control or Ondine curse. CCHS is a rare disorder characterized by abnormal control of respiration in the absence of neuromuscular or lung disease, or an identifiable brain stem lesion. A deficiency in autonomic control of respiration results in inadequate or negligible ventilatory and arousal responses to hypercapnia and hypoxemia. **Similarity:** Belongs to the TGF-beta family. GDNF subfamily. **Database links:** **Entrez Gene:** 2668 Human **Entrez Gene:** 14573 Mouse **Entrez Gene:** 25453 Rat Omim: 600837 Human **SwissProt:** P39905 Human **SwissProt:** P48540 Mouse **SwissProt:** Q07731 Rat **Unigene:** 248114 Human **Unigene:** 4679 Mouse **Unigene:** 53970 Rat

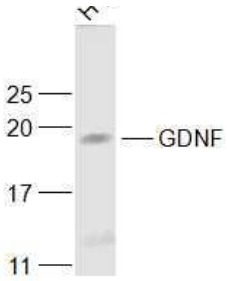
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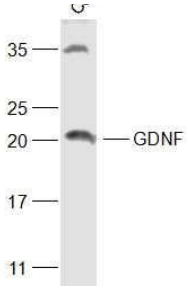
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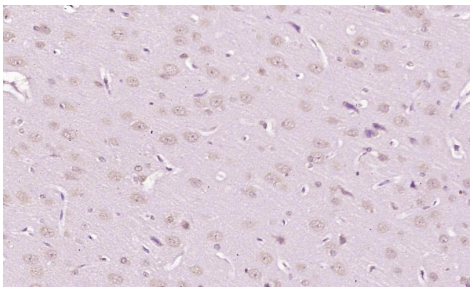
Sample:
Cerebrum (Rat) Lysate at 40 ug
Cerebellum (Rat) Lysate at 40 ug
Primary: Anti-GDNF (SL23586R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 15 kD
Observed band size: 20 kD



Sample:
HepG2(Human) Cell Lysate at 30 ug
Primary: Anti-GDNF (SL23586R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 15 kD
Observed band size: 19 kD



Sample:
Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti-GDNF (SL23586R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 15 kD
Observed band size: 20 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GDNF) Polyclonal Antibody, Unconjugated (SL23586R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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