


Product datasheet

Anti-GDNF antibody [EPR2714(N)] **ab176564**

Recombinant **RabMAb**

★★★★★ **3 Abreviews** **17 References** [3 Images](#)

Overview

Product name	Anti-GDNF antibody [EPR2714(N)]
Description	Rabbit monoclonal [EPR2714(N)] to GDNF
Host species	Rabbit
Specificity	GDNF homodimerizes and has 5 isoforms along with a signal and propeptide, so there is a potential for multiple bands in western blot.
Tested applications	Suitable for: Flow Cyt (Intra), WB Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human GDNF aa 50-150 (Cysteine residue). The exact sequence is proprietary. Database link: P39905
Positive control	SH-SY5Y and HepG2 whole cell lysate (ab7900), SH-SY5Y cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2714(N)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab176564 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

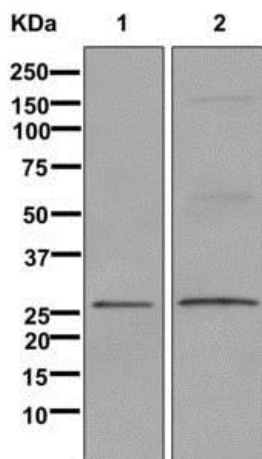
Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 24 kDa. GDNF homodimerizes and has 5 isoforms along with a signal and propeptide, so there is a potential for multiple bands in western blot.

Application notes Is unsuitable for ICC/IF, IHC-P or IP.

Target

Function	Neurotrophic factor that enhances survival and morphological differentiation of dopaminergic neurons and increases their high-affinity dopamine uptake.
Tissue specificity	In the brain, predominantly expressed in the striatum with highest levels in the caudate and lowest in the putamen.
Involvement in disease	Defects in GDNF may be a cause of Hirschsprung disease (HSCR) [MIM:142623]. 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.
Sequence similarities	Belongs to the TGF-beta family. GDNF subfamily.
Cellular localization	Secreted.

Images



Western blot - Anti-GDNF antibody [EPR2714(N)] (ab176564)

All lanes : Anti-GDNF antibody [EPR2714(N)] (ab176564) at 1/1000 dilution

Lane 1 : SH-SY5Y cell lysate

Lane 2 : HepG2 cell lysate

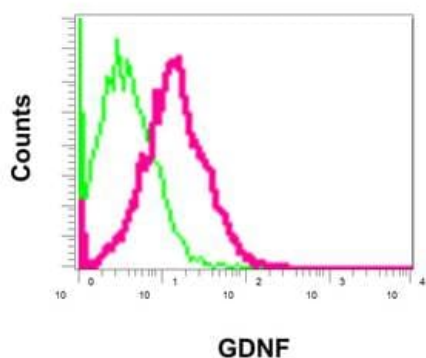
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 24 kDa



Flow Cytometry (Intracellular) - Anti-GDNF antibody [EPR2714(N)] (ab176564)

Intracellular Flow Cytometry analysis of permeabilized SH-SY5Y cells labeling GDNF (red) with ab176564 at a 1/10 dilution, or negative control rabbit IgG (green)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-GDNF antibody [EPR2714(N)] (ab176564)

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