

Product datasheet

Recombinant human GDNF protein (Active) ab259417

[4 Images](#)

Description

Product name	Recombinant human GDNF protein (Active)	
Biological activity	Fully biologically active determined by the dose dependent increase in proliferation of SHSY-5Y cells in the presence of GFR α . ED ₅₀ is \leq 9.55 ng/ml, corresponding to a specific activity of 1.05×10^5 units/mg.	
Purity	\geq 95 % SDS-PAGE. =95% by HPLC	
Endotoxin level	\leq 0.005 Eu/ μ g	
Expression system	HEK 293 cells	
Accession	<u>P39905</u>	
Protein length	Full length protein	
Animal free	Yes	
Carrier free	Yes	
Nature	Recombinant	
Species	Human	
Sequence	KRSPDKQMAV LPRRERNRQA AAANPENSRG KGRRGQRGKN RGCVLTAIHL NVTDLGLGYE TKEELIFRYC SGSCDAAETT YDKILKNLSR NRRLVSDKVG QACCRPIAFD DDLSFLDDNL VYHILRKHSA KRCGCI	
Predicted molecular weight	15 kDa	
Actual molecular weight	15 kDa	
Molecular weight information	Predicted mass is 15409.58 Da (+/- 10Da by ESI TOF). Observed mass is 15411 Da.	
Amino acids	76 to 211	
Additional sequence information	N-terminal glycine tag. Full-length mature chain lacking the signal peptide	

Specifications

Our **Abpromise guarantee** covers the use of **ab259417** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
	HPLC

	Mass Spectrometry
	Functional Studies
	Cell Culture
Form	Lyophilized

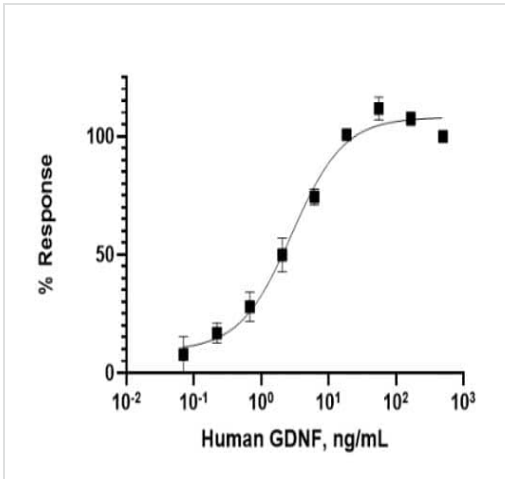
Preparation and Storage

Stability and Storage	<p>Shipped at Room Temperature. Store at Room Temperature.</p> <p>pH: 6.00</p> <p>Constituents: 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate, 10.26% Trehalose</p> <p>Buffer lyophilised from</p> <p>This product is an active protein and may elicit a biological response in vivo, handle with caution.</p>
Reconstitution	<p>Reconstitute with phosphate buffered saline. Store lyophilized form at room temperature.</p> <p>Reconstitute, aliquot and store at -80°C for 12 months or +4°C for 1 week. Avoid repeated freeze-thaw. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product.</p>

General Info

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	<p>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.</p> <p>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.</p>
Sequence similarities	Belongs to the TGF-beta family. GDNF subfamily.
Cellular localization	Secreted.

Images



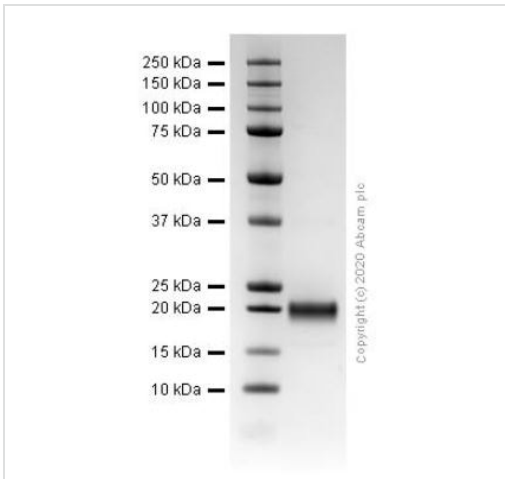
Functional Studies - Recombinant human GDNF protein (Active) (ab259417)

Fully biologically active determined by the dose dependent increase in proliferation of SHSY-5Y cells in the presence of GFR α .

ED₅₀ is ≤ 9.55 ng/ml, corresponding to a specific activity of 1.05×10^5 units/mg.

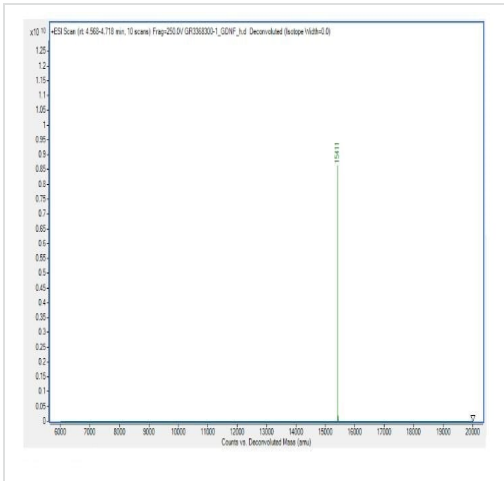
Cell based assay testing is performed on the first lot of protein only and is provided as a reference for protein activity; subsequent lots of protein must pass all biophysical quality control parameters that meet the same parameters as the first lot.

Lot: GR3368300-1



SDS-PAGE - Recombinant human GDNF protein (Active) (ab259417)

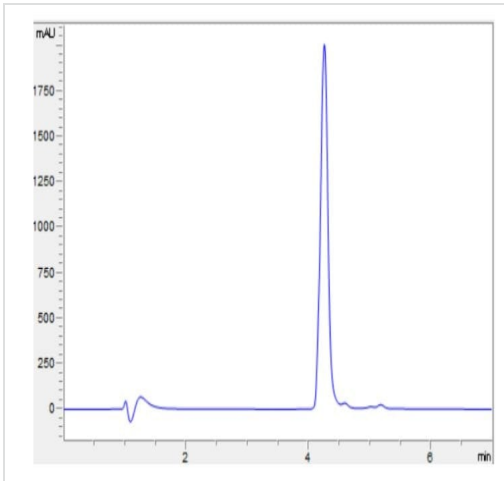
SDS-PAGE analysis of ab259417.



Mass Spectrometry - Recombinant human GDNF protein (Active) (ab259417)

Mass determination by ESI TOF.

Predicted mass is 15409.58 +/- 10Da by ESI TOF. Observed mass is 15411 Da.



HPLC - Recombinant human GDNF protein (Active) (ab259417)

HPLC analysis of ab259417.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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