

Product datasheet

Recombinant human GDNF protein (Animal Free)  
ab218088

2 Images

Description

<b>Product name</b>	Recombinant human GDNF protein (Animal Free)	
<b>Biological activity</b>	The activity is determined by the dose-dependent proliferation of C6 cells and is typically 0.5-5 µg/ml. This corresponds to an expected specific activity of 2 x 10 <sup>3</sup> units/mg.	
<b>Purity</b>	= 97 % SDS-PAGE. The purity of ab218088 is determined by Reducing and Non-reducing SDS-PAGE.	
<b>Endotoxin level</b>	< 0.050 Eu/µg	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<a href="#">P39905</a>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	Yes	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	MSPDKQMAVLPRRERNRQAAAANPENSRGKGRRGQRG KNRGCVLTAIHLN VTDLGLGYETKEELIFRYCSGSCDAAETTYDKILKNLSRNR RLVSDKVGQ ACCRPIAFDDDL SFLDDNLVYHILRKHS AKRCGCI	
<b>Predicted molecular weight</b>	30 kDa	
<b>Amino acids</b>	78 to 211	
<b>Additional sequence information</b>	This product is the mature full length protein from aa 78 to 211. The signal peptide and propeptide are not included. Non-glycosylated homodimer.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab218088** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Lyophilized

## Preparation and Storage

### Stability and Storage

Shipped at 4°C. Store at -20°C. Avoid freeze / thaw cycle.

Constituents: 0.29% Sodium citrate, 0.58% Sodium chloride

Lyophilised from a sterile filtered solution.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### Reconstitution

Reconstitute in sterile water at 0.1 mg/ml. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80 °C and avoid repeat freeze thaws.

## 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

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.

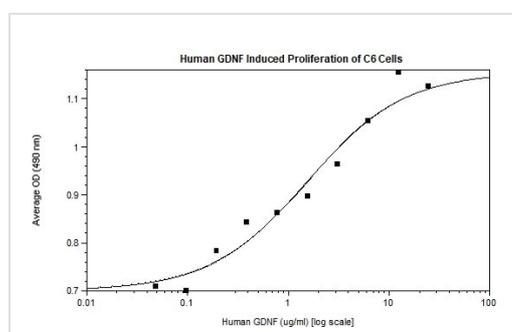
### Sequence similarities

Belongs to the TGF-beta family. GDNF subfamily.

### Cellular localization

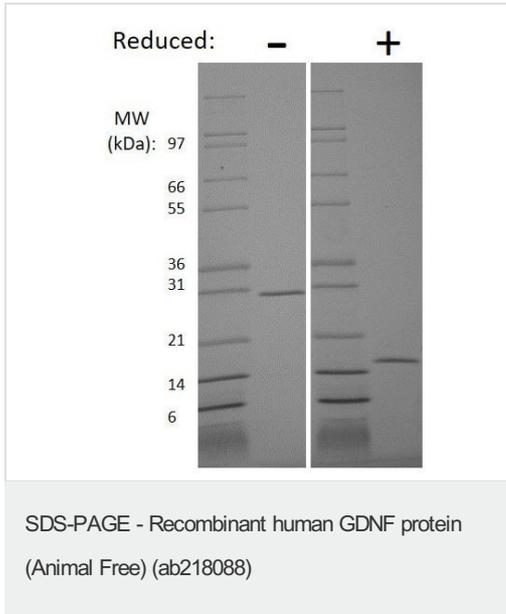
Secreted.

## Images



Functional analysis of ab218088

Functional Studies - Recombinant human GDNF protein (Animal Free) (ab218088)



SDS PAGE analysis of ab218088 under non-reducing (-) and reducing (+) conditions. Stained with Coomassie Blue.

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

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