

HumanKine® recombinant human GDNF protein



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

Product Description

GDNF is essential for the development of the enteric nervous system. GDNF is a protein that promotes the survival and differentiation of dopaminergic neurons in culture. It has the capabilities of preventing apoptosis of motor neurons induced by axotomy. This product signals through a receptor system which activates receptor tyrosine kinase RET signaling. The death of the motor neurons may lead to diseases like Parkinson's and ALS. GDNF is sought to have regenerative properties specifically for brain cells.

Alternative Names

ATF, ATF1, ATF2, GDNF, HFB1 GDNF, hGDNF

Source

Human Embryonic Kidney cells (HEK293). HEK293-derived GDNF protein

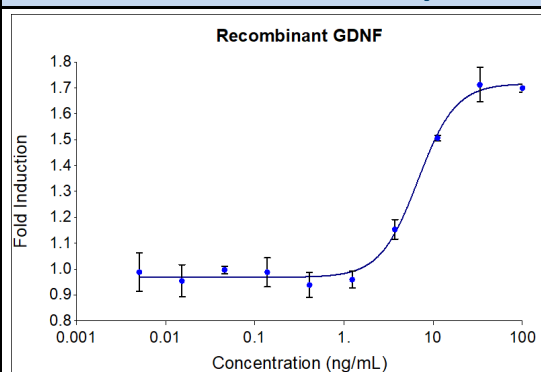
Species Reactivity

human

Specifications

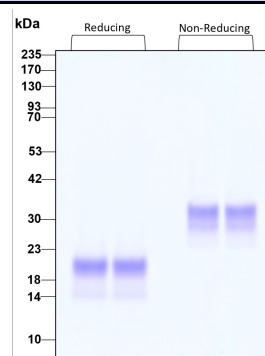
Test	Method	Specification
Activity	Dose-dependent stimulation of the proliferation of SH-SY5Y cells	< 10 ng/mL
Molecular Mass	SDS-PAGE	22 to 25 kDa reduced, 30 to 38 kDa non-reduced, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/g

Activity Data



GDNF stimulates dose-dependent proliferation of the SH-SY5Y Neuroblastoma cell line. SH-SY5Y cells were treated with increasing concentrations of recombinant GDNF for 72 hours in the presence of 100 ng/mL GFR alpha-1. Viable cell number was quantitatively assessed by PrestoBlue® Cell Viability Reagent. The EC50 was determined using a 4-parameter non-linear

SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	1x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

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Proteintech Group, Inc.
5500 Pearl Street, Suite 400 Rosemont, IL 60612
t: 1-888-478-4522; f: 1-312-455-8408
Email: proteintech@ptglab.com