

Product datasheet

Recombinant human BDNF protein ab206642

[4 References](#) [3 Images](#)

Description

Product name	Recombinant human BDNF protein	
Biological activity	The activity is determined by the dose-dependent proliferation of C6 cells and is typically between 0.5-1.5 µg/mL. Corresponding to a specific activity of 1 x 10 ³ units/mg.	
Purity	97 % SDS-PAGE. Purity is typically 97% as determined by HPLC, Reducing and Non-reducing SDS-PAGE and UV spectroscopy at 280 nm	
Endotoxin level	< 0.050 Eu/µg	
Expression system	Escherichia coli	
Accession	<u>P23560</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	MHSDPARRGELSVCDSEWVTAADKKTAVDMSGGTVT VLEKVPVSKGQL KQYFYETKCNPMGYTKEGCRGIDKRHWNSQCRTTQSYVR ALTMDSKKRIG WRFIRIDTSCVCTLTIKRGR	
Predicted molecular weight	27 kDa including tags	
Amino acids	129 to 247	
Additional sequence information	Non-glycosylated homodimer, containing two 119 amino acid chains.	

Specifications

Our **Abpromise guarantee** covers the use of **ab206642** in the following tested applications.

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

Applications	HPLC
	SDS-PAGE
	Functional Studies
Form	Lyophilized

Preparation and Storage

Stability and Storage

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

Constituent: 0.1% Trifluoroacetic acid

Lyophilised from a sterile filtered solution containing no additives.

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

Reconstitution

Reconstitute with Sterile water at 100µg/mL. Centrifuge vial before opening. 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

During development, promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. Participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. Major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. The versatility of BDNF is emphasized by its contribution to a range of adaptive neuronal responses including long-term potentiation (LTP), long-term depression (LTD), certain forms of short-term synaptic plasticity, as well as homeostatic regulation of intrinsic neuronal excitability.

Tissue specificity

Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.

Involvement in disease

Bulimia nervosa 2
Congenital central hypoventilation syndrome

Sequence similarities

Belongs to the NGF-beta family.

Post-translational modifications

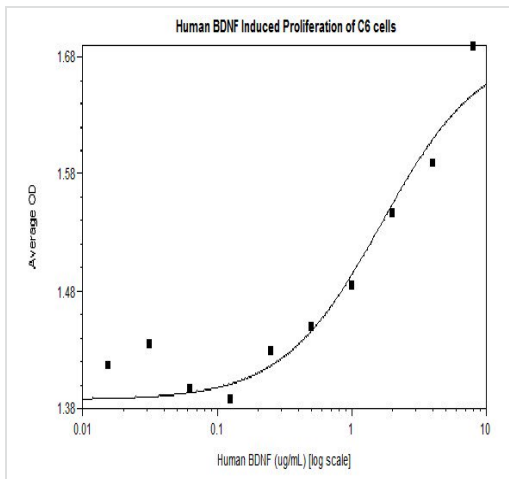
The propeptide is N-glycosylated and glycosulfated.
Converted into mature BDNF by plasmin (PLG).

Cellular localization

Secreted.

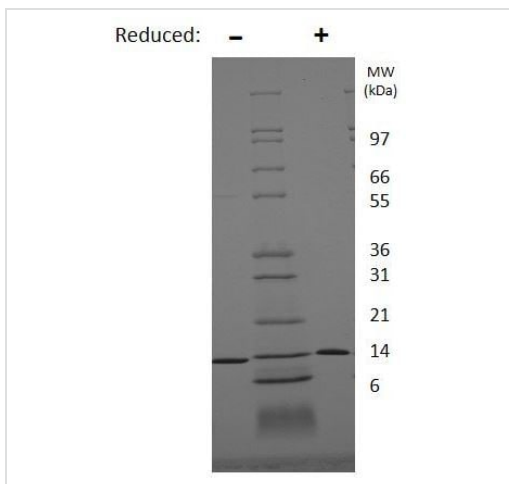
Images

Functional analysis of ab206642



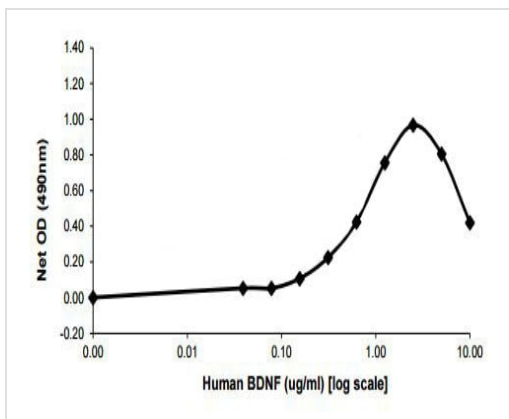
Functional Studies - Recombinant human BDNF protein (ab206642)

SDS PAGE analysis of ab206642 under non-reducing (-) and reducing (+) conditions. Stained with Coomassie Blue.



SDS-PAGE - Recombinant human BDNF protein (ab206642)

C6 cells were cultured with 0 to 10 ug/mL Human BDNF. Cell proliferation was measured after 7 days and the linear portion of the curve was used to calculate the ED₅₀. The ED₅₀ of this lot of ab206642 is 0.5-0.8 ug/mL. This value is comparable to the expected range of 0.5-1.5 ug/mL.



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