

Product datasheet

Recombinant Human/Murine/Rat BDNF protein (Active) ab9794

[18 References](#) [1 Image](#)

Description

Product name	Recombinant Human/Murine/Rat BDNF protein (Active)
Biological activity	Determined by its ability to bind recombinant human TrkB Fc Chimera in a functional ELISA. The active form of BDNF is a 27.0 kDa, dimer formed by two identical 119 amino acid subunits that is held together by strong hydrophobic interactions.
Purity	> 98 % SDS-PAGE. > 98% pure HPLC analyses.
Endotoxin level	< 1.000 Eu/μg
Expression system	Escherichia coli
Accession	<u>P23560</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Sequence	MHSDPARRGE LSVCDISEW VTAADKKTAV DMSGGTVTVL EKVPVSKGQL KQYFYETKCN PMGYTKEGCR GIDKRHWNSQ CRTTQSYVRA LTMDSKKRIG WRFIRIDTSC VCTLTIKRGR
Predicted molecular weight	27 kDa
Amino acids	129 to 247
Additional sequence information	aa 129 to 247 refers to the full length mature form. This product does not contain signal peptide or propeptide.

Specifications

Our **Abpromise guarantee** covers the use of **ab9794** in the following tested applications.

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

Applications	HPLC
	Cellular Activation
	SDS-PAGE
	Western blot

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

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

Reconstitution Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4C for 1 week or -20C for future use.

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.

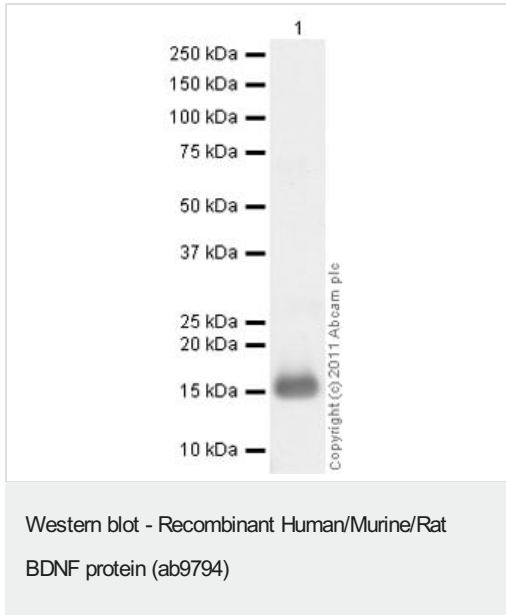
Involvement in disease Bulimia nervosa 2
Congenital central hypoventilation syndrome

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



Rabbit Anti-BDNF antibody at 1 µg/ml + Recombinant Human/Murine/Rat BDNF protein (Active) (ab9794) at 0.1 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 4 minutes

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

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