

Product datasheet

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

6 References 1 Image

Description

|  |   |  |
|--|---|--|
| <b>Product name</b>                    | Recombinant Human/Murine/Rat BDNF protein (Active)  |  |
| <b>Biological activity</b>             | <p>Determined by its ability to stimulate the proliferation of rat C6 cells. The expected ED<sub>50</sub> for this effect is 0.5-1.0 µg/ml.</p> <p>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.</p> |  |
| <b>Purity</b>                          | <p>&gt; 98 % SDS-PAGE.</p> <p>&gt; 98% pure HPLC analyses.</p>  |  |
| <b>Expression system</b>               | Escherichia coli  |  |
| <b>Accession</b>                       | <a href="#">P23560</a>  |  |
| <b>Protein length</b>                  | Full length protein   |  |
| <b>Animal free</b>                     | No  |  |
| <b>Nature</b>                          | Recombinant   |  |
| <b>Sequence</b>                        | <p>MHSDPARRGE LSVCDISEW VTAADKKTAV<br/>           DMSGGTVTVL EKVPVSKGQL KQYFYETKCN<br/>           PMGYTKEGCR GIDKRHWNSQ CRTTQSYVRA<br/>           LTMDSKKRIG WRFIRDITSC VCTLTIKRGR</p>  |  |
| <b>Predicted molecular weight</b>      | 27 kDa  |  |
| <b>Amino acids</b>                     | 129 to 247  |  |
| <b>Additional sequence information</b> | aa 129 to 247 refers to the full length mature form. This product does not contain signal peptide or propeptide.  |  |
| <b>Description</b>                     | Recombinant BDNF protein (Active)   |  |

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.

|                     |                     |
|---------------------|---------------------|
| <b>Applications</b> | HPLC                |
|                     | Cellular Activation |
|                     | SDS-PAGE            |

|             |              |
|-------------|--------------|
|             | Western blot |
|             | Other        |
| <b>Form</b> | Lyophilised  |

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## Preparation and Storage

|                              |   |
|------------------------------|---|
| <b>Stability and Storage</b> | 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.<br><br>n/a<br><br>This product is an active protein and may elicit a biological response in vivo, handle with caution. |
| <b>Reconstitution</b>        | 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.                                       |

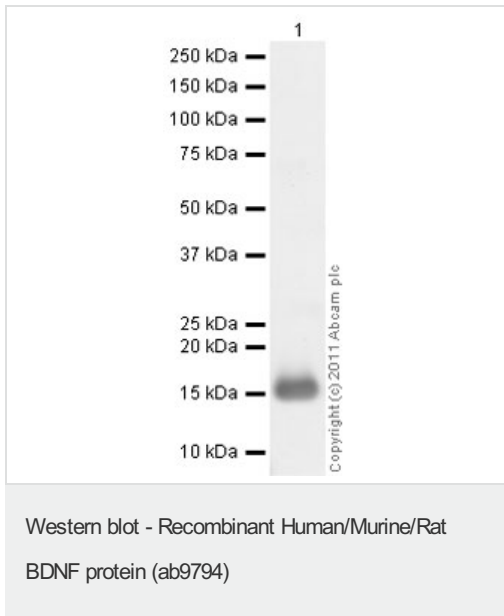
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## General Info

|   |   |
|---|---|
| <b>Function</b>                         | 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. |
| <b>Tissue specificity</b>               | Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.  |
| <b>Involvement in disease</b>           | Bulimia nervosa 2<br>Congenital central hypoventilation syndrome  |
| <b>Sequence similarities</b>            | Belongs to the NGF-beta family.   |
| <b>Post-translational modifications</b> | The propeptide is N-glycosylated and glycosulfated.<br>Converted into mature BDNF by plasmin (PLG).   |
| <b>Cellular localization</b>            | Secreted.   |

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## 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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