

## Product datasheet for TP728148S

#### OriGene Technologies, Inc.

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## Recombinant BDNF (Brain-derived neurotrophic factor), Human/Mouse/Rat

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant BDNF (Brain-derived neurotrophic factor), Human/Mouse/Rat

**Species:** Human/Mouse/Rat

**Expression Host:** E. coli

**Expression cDNA Clone** 

or AA Sequence:

MHSDPARRGELSVCDSISEWVTAADKKTAVDMSGGTVTVLEKVPVSKGQLKQYFYETKCNPMGYTKEGCR

GIDKRHWNSQCRTTQSYVRALTMDSKKRIGWRFIRIDTSCVCTLTIKRGR with polyhistidine tag at the

C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 14.45 kDa. The protein migrates as 14 kDa under

reducing condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

**Buffer:** The protein was lyophilized from a 0.2 μm filtered solution containing 20 mM sodium citrate,

0.2 M NaCl, pH 3.5.

Bioactivity: Measure by its ability to induce proliferation in BaF3 cells transfected with TrkB. The ED<sub>50</sub> for

this effect is <2 ng/mL.

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P23560

Synonyms: ANON2, BULN2

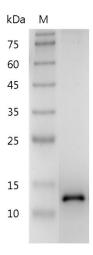




#### **Summary:**

Brain-derived neurotrophic factor (BDNF) is a member of neurotrophin family that not only primarily expressed in hippocampus, amygdala, cerebral cortex, hypothalamus and cerebellum but also has been detected in blood platelets and in circulating plasma. BDNF is a 27.8 kDa protein containing 247 residues, which plays a critical role in regulating synaptic transmission and plasticity in various region of the CNS. Additionally, BNDF can acts as a modulator in the long-term potentiation of memory-related modifications in hippocampal synaptic transmission.

# **Product images:**



SDS- PAGE analysis of recombinant human/mouse/rat BDNF