


## Human/Mouse/Rat BDNF protein, His tag (Animal-Free)

Cat #: PRP1066

Size: 5 µg/20 µg/100 µg/1 mg

### Product Information

	<b>Product Name:</b> Human/Mouse/Rat BDNF protein, His tag (Animal-Free)		
<b>REF</b>	<b>Catalog Number:</b> PRP1066	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> > 98% as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> <i>E.coli</i>
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Brain Derived Neurotrophic Factor (BDNF) is a neurotrophin that belongs to NGF-beta family. BDNF can bind to its high affinity receptor TrkB and activates signal transduction cascades (IRS1/2, PI3K, Akt). BDNF can also bind to the p75NTR, but the affinity for the p75NTR receptor is lower than for TrkB. BDNF is a neurotransmitter modulator, and is vital in maturation, survival and differentiation of neuronal populations during development. BDNF also participates in neuronal plasticity, which is essential for learning and memory. BDNF is widely expressed in the CNS.

**Sequence:** Amino acid sequence derived from Human/Mouse/Rat BDNF protein (His129-Arg247) with 6×His tag at the C-terminus was expressed.

**Protein length:** The recombinant Human/Mouse/Rat BDNF protein consists of 119 amino acids and predicts a molecular mass of 14.45 kDa.

**Biological Activity:** 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.

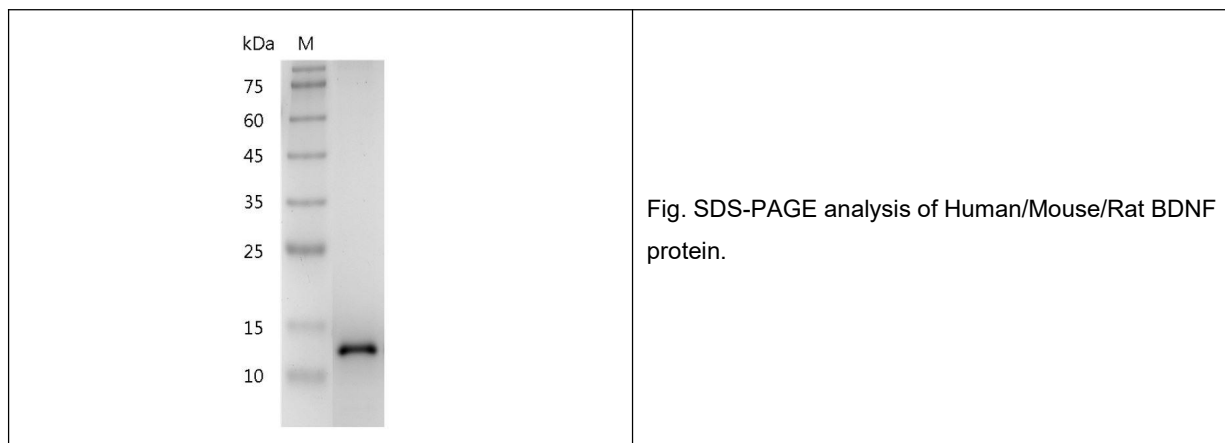
**Endotoxin:** < 0.1 EU per µg of the protein as determined by the LAL method.

**Formulation:** The protein was lyophilized from 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

**Storage Instructions:** Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant

Human/Mouse/Rat BDNF protein to a concentration of 0.1-1 mg/mL in sterile ddH<sub>2</sub>O, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.