

## Recombinant Human pro-BDNF

Catalog No: C077

<b>Description</b>	Recombinant Human Pro-Brain-Derived Neurotrophic Factor is produced by our E.coli expression system and the target gene encoding Ala19-Arg247(R125A,R127A,R128A) is expressed.	
<b>Source</b>	E. coli	
<b>Alternative name</b>	Brain-Derived Neurotrophic Factor; BDNF; Abreineurin	
<b>Accession No.</b>	P23560	
<b>Predicted Molecular Weight</b>	25.6kDa	
<b>AP Molecular Weight</b>	28kDa, reducing conditions.	
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.	
<b>Quality Control</b>	Bioactivity	Immobilized Human pro-BDNF (Cat#C077) at 2ug/ml (100 µl/well) can bind Human TrkB-His (Cat#C507).
	Purity	The ED50 of Human pro-BDNF (Cat#C077) is 0.5-4 ug/ml. Greater than 95% as determined by reducing SDS-PAGE.
	Endotoxin	Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.	
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.	
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.	
<b>Background</b>	The precursor form of Brain-Derived Neurotrophic Factor (pro-BDNF) interacts preferentially with the pan- neurotrophin receptor p75 (p75NTR) and vps10p domain-containing receptor sortilin and induces neuronal apoptosis, whereas mature BDNF selectively binds with high affinity to the TrkB kinase receptor and promotes the survival, growth and differentiation of neurons. As proneurotrophins and mature neurotrophins elicit opposite biological effects, Pro-BDNF cleavage in the neuronal system is regulated in a specific and cell-context dependent manner. Pro-BDNF plays important role in negative regulation of neurotrophic actions in the brain.	

### SDS-PAGE

