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## 32-1073: proBDNF Recombinant Protein

Alternative Name: proBDNF, Precursor Form Brain-derived Neurotrophic Factor.

## **Description**

Source: Escherichia Coli. proBDNF Human Recombinant produced in E.Coli is a single, non-glycosylated, non-covalently linked homodimer with each polypeptide chain containing 229 amino acids and having a molecular mass of 52kDa. The proBDNF is purified by proprietary chromatographic techniques. proBDNF (the precursor form of Brain-derived neurotrophic factor) interacts preferentially with p75NTR (the pan-neurotrophin receptor p75) and vps10p domain-containing receptor sortilin and induces neuronal apoptosis, while the mature BDNF selectively binds with great affinity to the TrkB kinase receptor and promotes the survival, growth and differentiation of neurons. Since proneurotrophins and mature neurotrophins bring forth opposite biological effects, proBDNF cleavage in the neuronal system is regulated in a specific and cell-context dependent manner. proBDNF has an important role in negative regulation of neurotrophic actions in the brain.

## **Product Info**

Amount:  $10 \mu g$ 

**Purification:** Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Content: proBDNF was lyophilized from a concentrated (0.5mg/ml) solution in 20mM PB, pH 8.0 and

500mM NaCl.

Lyophilized proBDNF although stable at room temperature for 3 weeks, should be stored

Storage condition: desiccated below -18°C. Upon reconstitution proBDNF should be stored at 4°C between 2-7 days

and for future use below -18°C.Please prevent freeze-thaw cycles.

Amino Acid: The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-

Pro-Met-Lys.

## **Application Note**

It is recommended to reconstitute the lyophilized proBDNF in sterile 18M-cm H2O not less than  $100 \text{\AA} \mu\text{g/ml}$ , which can then be further diluted to other aqueous solutions.

