

ProBDNF, human recombinant protein
Abrineurin
Catalog # PBV10204r**Specification**

ProBDNF, human recombinant protein - Product info

Primary Accession [P23560](#)
Calculated MW ~52 kDa

ProBDNF, human recombinant protein - Additional Info

Gene ID	627
Gene Symbol	BDNF
Other Names	
Brain-derived neurotrophic factor (BDNF) (Abrineurin)	
Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	HPLC; ≥95%
Recombinant	Yes
Sequence	Recombinant Human precursor form of Brain-derived neurotrophic factor produced in E. coli is a non-glycosylated polypeptide chain containing 2X229 amino acids as a homodimer and having a molecular mass of 52 kDa. The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Met-Lys-Glu.

Target/Specificity
ProBDNF

Application Notes

Dissolve in 1x PBS (It is not recommended to reconstitute to a final concentration less than 100 µg/ml.). This can further be diluted to other aqueous buffers.

Format

Lyophilized protein

Storage

-20°C; Lyophilized from a 0.2 µm filtered solution of 20 mM PB and 250 mM NaCl, pH 7.2.

ProBDNF, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ProBDNF, human recombinant protein - Images**ProBDNF, human recombinant protein - Background**

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.

ProBDNF, human recombinant protein - References

Jones K.R.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:8060-8064(1990).
Maisonpierre P.C.,et al.Genomics 10:558-568(1991).
Shintani A.,et al.Biochem. Biophys. Res. Commun. 182:325-332(1992).
Liu Q.-R.,et al.Am. J. Med. Genet. B Neuropsychiatr. Genet. 134:93-103(2005).
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