

Brain-Derived Neurotrophic Factor (BDNF) Active Protein | BDNF active protein

Recombinant Human Brain-Derived Neurotrophic Factor (BDNF) Active

CATALOG #
AAA235614

HOST
E Coli

PRODUCT SYNONYMS

Brain-Derived Neurotrophic Factor (BDNF); Recombinant Human Brain-Derived Neurotrophic Factor (BDNF) Active; Brain-Derived Neurotrophic Factor; BDNF; Abrineurin; BDNF active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Specificity	Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized from a 0.2 µm Filtered 20 mM PB, 250 mM NaCl, pH 7.2
Sequence Positions	129-247aa; Full Length of Mature Protein
Sequence	HSDPARRGEL SVCDSISEWV TAADKKTAVD MSGGTVTVLE KVPVSKGQLK QYFYETKCNP MGYTKEGCRG IDKRHWNSQC RTTQSYVRAL TMSKKRIGW RFIRIDTSCV CTLTIKRGR
Sequence Length	247
Species	Human
Tag	Tag-Free
Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Biological Activity	The ED50 as determined by its ability to bind Human TrkB in functional ELISA is less than 5 ug/ml.
Subcellular Location	Secreted
Protein Families	NGF-beta Family
Classification	Cytokine
Subdivision	Growth Factor
Pathway	cAMP Signaling Pathway
Preparation and Storage	Store at -20 degree C. For extended storage, conserve at -20 degree C or -80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week.

ADDITIONAL INFORMATION

Related Product Information for BDNF active protein	Relevance: Brain-Derived Neurotrophic Factor (BDNF) is a member of the neurotrophin family. Along with other structurally related neurotrophic factors NGF, NT-3 and NT-4, BDNF binds with high affinity to the TrkB kinase receptor. It also binds with the LNGFR (for low-affinity nerve growth factor receptor, also known as p75). BDNF promotes the survival, growth and differentiation of neurons. It serves as a major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. BDNF expression is altered in neurodegenerative disorders such as Parkinson's and Alzheimer's disease. Function: During development, promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. Participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. Major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. The versatility of BDNF is emphasized by its contribution to a range of adaptive neuronal responses including long-term potentiation (LTP), long-term depression (LTD), certain forms of short-term synaptic plasticity, as well as homeostatic regulation of intrinsic neuronal excitability.
Product Categories/Family for BDNF active protein	Neuroscience

NCBI AND UNIPROT INFORMATION

NCBI GI #	114900
NCBI GeneID	627
UniProt Accession #	P23560
Molecular Weight	13 kDa
NCBI Official Full Name	Brain-derived neurotrophic factor
NCBI Official Synonym Full Names	brain derived neurotrophic factor
NCBI Official Symbol	BDNF
NCBI Official Synonym Symbols	ANON2; BULN2
NCBI Protein Information	brain-derived neurotrophic factor
UniProt Protein Name	Brain-derived neurotrophic factor
UniProt Gene Name	BDNF
UniProt Synonym Gene Names	BDNF
UniProt Entry Name	BDNF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/brain-derived-neurotrophic-factor-bdnf/235614>