Recombinant Human/Mouse/Rat BDNF Protein

Catalog No.: RP01243

Sequence Information

Species
Human,Mouse, Rat

Gene ID
627

Swiss Prot
P23560-1

Tags
C-His

Synonyms
ANON2, BULN2,BDNF,BULN2

Product Information

Source
E. coli

Purification
≥ 95 % as determined by SDS-PAGE;≥95 % as determined by HPLC.

Calculated MW
14.35 kDa

Observed MW
17 kDa

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Brain-derived neurotrophic factor (BDNF) is a member of the nerve growth factor family.The neurotrophin family is comprised of at least four proteins including NGF, BDNF, NT-3, and NT-4/5. These secreted cytokines are synthesized as prepropeptides that are proteolytically processed to generate the mature proteins.BDNF cDNA encodes a 247 amino acid residue precursor protein with a signal peptide and a proprotein that are cleaved to yield the 119 amino acid residue mature BDNF. The amino acid sequence of mature BDNF is identical in all mammals examined. BDNF binds with high affinity and specifically activates the TrkB tyrosine kinase receptor .

Basic Information

Description
Recombinant Human/Mouse/Rat BDNF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (His129-Arg247) of human BDNF (Accession #NP_733929.1.) fused with an initial Met at the N-terminus and a 6×His tag at the C-terminus.

Activity
1.Immobilized Recombinant Human/Mouse/Rat BDNF Protein at 5μg/mL (100 μL/well) can bind Recombinant Human TrkB with a linear range of 0.38-1.14 μg/mL.2.Immobilized Recombinant Human/Mouse/Rat BDNF Protein at 1μg /mL (100 μL/well) can bind BDNF Rabbit mAb with a linear range of 0.4-2.15 ng/mL.3.Immobilized Recombinant Human TrkB at 2μg/mL (100 μL/well) can bind Recombinant Human BDNF with a linear range of 1.95-258ng/mL.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

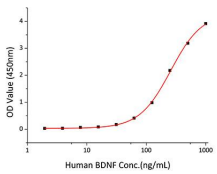
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

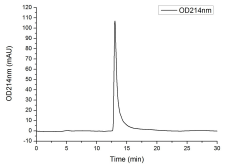
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

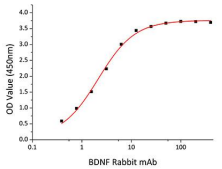
Validation Data



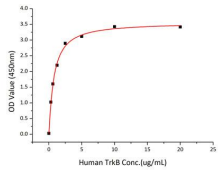
Immobilized Recombinant Human TrkB at 2μg/mL (100 μL/well) can bind Recombinant Human BDNF with a linear range of 1.95-258ng/mL.



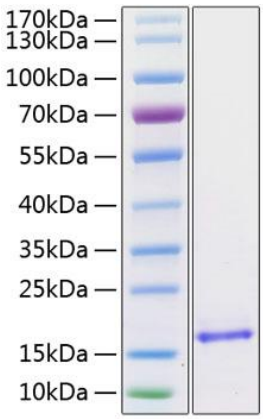
The purity of Recombinant Human/Mouse/Rat BDNF Protein (Cat.RP01243) was greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant Human/Mouse/Rat BDNF Protein at 1μg/mL (100 μL/well) can bind BDNF Rabbit mAb with a linear range of 0.4-2.15ng/mL.



Immobilized Recombinant Human/Mouse/Rat BDNF Protein at 5μg/mL (100 μL/well) can bind Recombinant Human TrkB with a linear range of 0.38-1.14 μg/mL.



Recombinant Human/Mouse/Rat BDNF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.