Recombinant Human/Murine/Rat BDNF

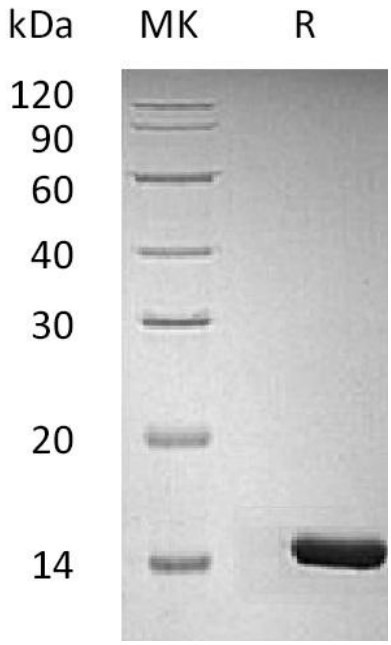
Catalog No.: RP0005

Basic Information

Information	
Source	*E.coli*
Description	Recombinant Human Brain-Derived Neurotrophic Factor is produced by our E.coli expression system and the target gene encoding His129-Arg247 is expressed.
Accession	P23560
Known As	Brain-Derived Neurotrophic Factor; BDNF; Abrineurin
Predicted Mol Mass	13 KDa
Apparent Mol Mass	14 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 250mM NaCl, pH 7.2.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	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.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

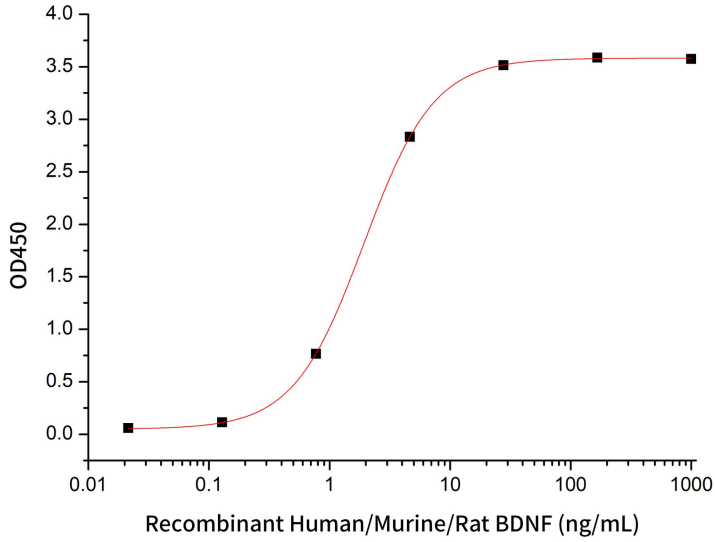
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Immobilized Human TrkB (C-6His) at 5 μg/mL (100 μL/well) can bind Human/Murine/Rat BDNF*: Biotinylated by NHS-biotin prior to testing. The EC50 of Human/Murine/Rat BDNF* is ≤20 ng/mL. （QC Verified）

Background

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.