Active Brain Derived Neurotrophic Factor (BDNF)

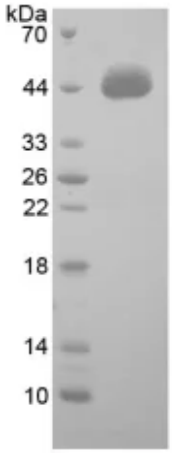
Catalog#:PEM12005

概述（Summary）

别称（Alternative Names）	Neurotrophin; Abrineurin
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Glu139-Arg249】
Accession #	P21237
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	42.6 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Important signaling molecule that activates signaling cascades downstream of NTRK2. 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.; Important signaling molecule that activates signaling cascades downstream of NTRK2. Activates signaling cascades via the heterodimeric receptor formed by NGFR and SORCS2. Signaling via NGFR and SORCS2 plays a role in synaptic plasticity and long-term depression (LTD). Binding to NGFR and SORCS2 promotes neuronal apoptosis. Promotes neuronal growth cone collapse.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

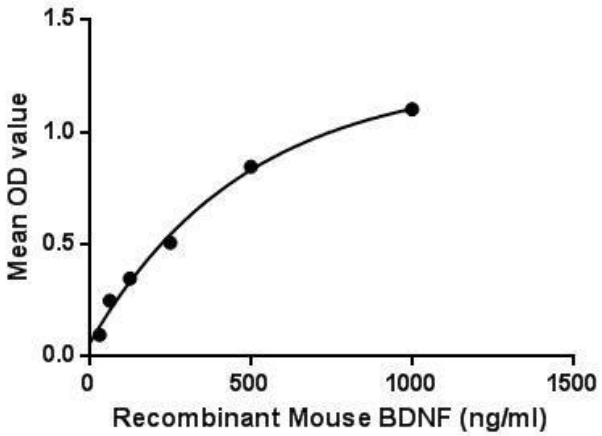


Figure. The binding activity of BDNF with APP. Brain-derived neurotrophic factor, also known as BDNF, is a member of the neurotrophin family of growth factors, which are related to the canonical Nerve Growth Factor. BDNF acts on certain neurons of the central nervous system and the peripheral nervous system, helping to support the survival of existing neurons, and encourage the growth and differentiation of new neurons and synapses. Besides, Amyloid Precursor Protein (APP) has been identified as an interactor of BDNF, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse BDNF and recombinant mouse APP. Briefly, BDNF were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100µL were then transferred to APP-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and

incubated for 1h with anti-BDNF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of of BDNF and APP was shown in Figure 1, and this effect was in a dose dependent manner.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.