

**Rabbit Anti-BDNF Polyclonal: RC0054**

**Intended Use:** For Research Use Only

**Description:** Neurotrophins are composed of at least four family members, including NGF, Brain-derived neurotrophic factor (BDNF), NT-3, and NT-4, and all are known to influence growth, development, differentiation, and survival of neurons. BDNF is crucial for the survival, development, and synaptic plasticity of neurons. Certain common genetic variations (polymorphisms) in the BDNF gene have been associated with an increased risk of developing psychiatric disorders such as bipolar disorder, anxiety, and eating disorders. Evidence shows that BDNF is an important biomarker for the pathogenesis of depression; reduced levels are linked to reduced synaptic plasticity and neuronal atrophy, while elevated levels are associated with survival and neuronal differentiation, which is compatible with the neurogenic hypothesis of depression.

**Specifications**

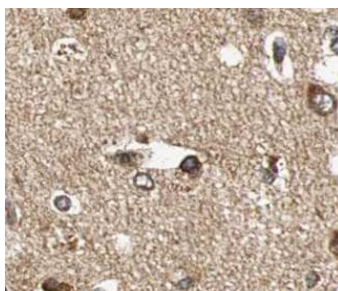
Clone: Polyclonal  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human, mouse, rat  
Immunogen: Synthesized peptide of human BDNF protein  
Localization: Secreted  
Formulation: Purified antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, IF, WB  
Package:

Description	Catalog No.	Size
BDNF Polyclonal Concentrated	RC0054	1 ml

**IHC Procedure\***

Positive Control Tissue: Brain, bladder cancer  
Concentrated Dilution: 10-100  
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
Incubation Time and Temp: Overnight @ 4°C  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human brain tissue stained with anti-BDNF using DAB

**References:**

1. Caloric Vestibular Stimulation Induced Enhancement of Behavior and Neurotrophic Factors in Chronic Mild Stress Induced Rats. George SD, et al. Front Pharmacol 13:834292, 2022.
2. Association of Brain-derived neurotrophic factor gene polymorphisms with body mass index: A systematic review and meta-analysis. Shahab-Aldin Akbarian, et al. Adv Med Sci. Mar;63(1):43-56, 2018.
3. Small-molecule suppression of calpastatin degradation reduces neuropathology in models of Huntington's disease. Hu D, et al. Nat Commun 12:5305, 2021.