

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pro-BDNF in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) BDNF (mature), rhβ-NGF, rhNT-3, rhNT-4, rhPro-NT-3 or rhPro-NT-4 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 584421
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Pro-BDNF Ala19-Arg247 Accession # P23560
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.

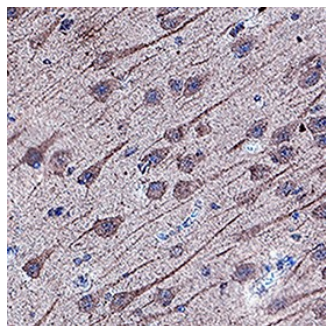
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	8-25 μg/mL	Immersion fixed paraffin-embedded sections of hippocampus

DATA

Immunohistochemistry



Detection of BDNF in Hippocampus. BDNF was detected in immersion fixed paraffin-embedded sections of hippocampus using Mouse Anti-Human Pro BDNF Monoclonal Antibody (Catalog # mab3175) at 15 μg/ml overnight at 4 degrees Celsius followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

BDNF is a member of the NGF family of neurotrophic factors that are required for the differentiation and survival of neuronal subpopulations in the central and peripheral nervous systems. BDNF functions through interactions with the TrkB receptor tyrosine kinase and the low affinity neurotrophin receptor, p75 (NTR). The human BDNF cDNA encodes 247 amino acids (aa). Cleavage of an 18 aa signal sequence produces an approximately 35 kDa Pro-BDNF form. The N-terminal pro region of BDNF is removed by tPA and furin to release biologically active, 14 kDa BDNF. The propeptides of human and mouse BDNF share 93% aa sequence identity.