

DESCRIPTION

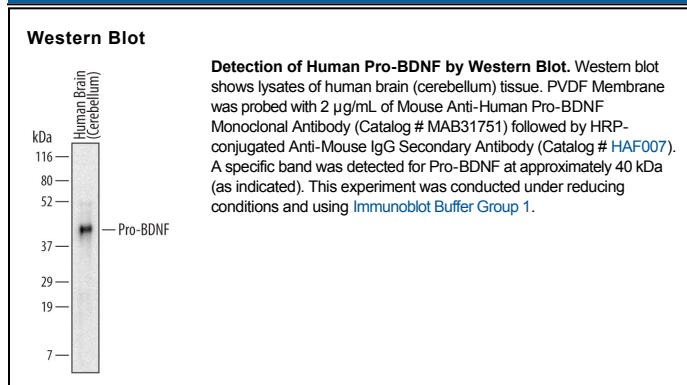
| | |
|---------------------------|--|
| Species Reactivity | Human |
| Specificity | Detects human Pro-BDNF in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse Pro-BDNF is observed and no cross-reactivity with recombinant human β -NGF, NT-4, Pro-NT-3 or Pro-NT-4 is observed. In Western blots, 100% cross-reactivity with recombinant mouse Pro-BDNF is observed and no cross-reactivity with recombinant human mature BDNF or recombinant human NT-3 is observed. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 584412 |
| 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 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS. |

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 |
|-----------------------------|----------------------------------|---|
| Western Blot | 2 μ g/mL | See Below |
| Immunohistochemistry | 8-25 μ g/mL | Immersion fixed paraffin-embedded sections of human brain (spinal cord) subjected to Antigen Retrieval Reagent-Basic (Catalog # CTS013) |

DATA



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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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.