

## **Human Pro BDNF Antibody**

Monoclonal Mouse IgG<sub>2A</sub> Clone # 584431 Catalog Number: MAB31752

| DESCRIPTION        |  |
|--------------------|--|
| Species Reactivity | Human  |
| Specificity        | Detects human Pro-BDNF in direct ELISAs and sandwich immunoassays.   |
| Source             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 584431  |
| Purification       | Protein A or G purified from hybridoma culture supernatant   |
| Immunogen          | Chinese hamster ovary cell line CHO-derived recombinant human Pro-BDNF<br>Met1-Arg247<br>Accession # P23560  |
| Formulation        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

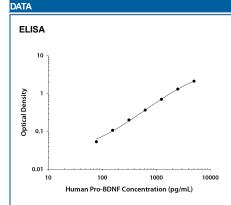
## APPLICATIONS

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.

**ELISA** 

This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human BDNF Monoclonal Antibody (Catalog # MAB848).

This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Pro-BDNF DuoSet ELISA Kit (Catalog # DY3175) for convenient development of a sandwich ELISA.



**Human Pro-BDNF ELISA** Standard Curve. Recombinant Human Pro-BDNF protein was serially diluted 2-fold and captured by Mouse Anti-Human Pro-BDNF Monoclonal Antibody (Catalog # MAB31752) coated on a Clear Polystyrene Microplate (Catalog # DY990). Mouse Anti-Human BDNF Monoclonal Antibody (Catalog # MAB848) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).

## PREPARATION AND STORAGE

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.

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 m

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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.

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