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Product Information

Monoclonal Anti-Brain-derived Neurotrophic Factor
Clone 37141
produced in mouse, purified immunoglobulin

Catalog Number **B9436**

Synonym: Anti-BDNF

Product Description

Monoclonal Anti-Brain-derived Neurotrophic Factor (IgG2a isotype) is purified from a mouse hybridoma. Recombinant human BDNF (Gene ID: 627) expressed in *Sf* 21 insect cells was used as immunogen. The antibody is purified by Protein A affinity chromatography.

Monoclonal Anti-Brain-derived Neurotrophic Factor detects human BDNF in immunoblotting.

Brain-derived neurotrophic factor is a member of the neurotrophin family of growth factors that includes NGF, NT-3, and NT-4. All neurotrophins have six conserved cysteine residues and share a 55% sequence identity at the amino acid level. BDNF has been shown to enhance the survival and differentiation of several classes of neurons *in vitro*, including neural crest and placode-derived sensory neurons, dopaminergic neurons in the substantia nigra, basal forebrain cholinergic neurons, hippocampal neurons, and retinal ganglial cells.[1] BDNF is expressed within peripheral ganglia and is not restricted to neuronal target fields, raising the possibility that BDNF has paracrine, or even autocrine, actions on neurons as well as non-neuronal cells.[2]

Reagent

Supplied lyophilized from a 0.2 μm filtered solution of phosphate buffered saline with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 μm filtered phosphate buffered saline to produce a 0.5 mg/mL stock solution of antibody. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at –20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at –20 °C. Avoid repeated freezing and thawing.

Results

Immunoblotting: a working concentration of 1-2 μg/mL is recommended. The detection limit is ~300 ng/lane, under non-reducing and reducing conditions.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working concentrations by titration.

Endotoxin: < 25 ng/mg antibody determined by the LAL method.

References

1. Jones, K., et al., *Cell*, **76**, 989 (1994).
2. Snider, W., *Cell*, **77**, 627 (1994).
3. Davies, A.M., "Neurotrophic Factor Bioassay Using Dissociated Neurons" in Nerve Growth factors, Rush, R.A., (Ed), John Wiley and Sons, Ltd, pp 95-109 (1989)

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