



Product Specification Sheet

Brain-Derived Neurotrophic Factor (BDNF) Antibodies

Cat. # BDNF12-A

Goat Anti-human BDNF IgG

SIZE: 500 ul

Methylation at the 5'-position of cytosine is the only known naturally occurring covalent modification of the mammalian genome. DNA methylation requires the enzymatic activity of DNA 5-cytosine methyltransferase (Dnmt) proteins, which catalyze the transfer of a methyl group from S-adenosyl methionine to the 5'-position of cytosines residing in the dinucleotide CpG motif, and this methylation results in transcriptional repression of the target gene. The Dnmt enzymes are encoded by independent genes. Dnmt1 is the most abundant, and it preferentially methylates hemimethylated DNA and coordinates gene expression during development. Additional mammalian Dnmt proteins include Dnmt2 and Dnmt3. Dnmt2 lacks the large N-terminal regulator domain of Dnmt1, is expressed at substantially lower levels in adult tissues, and is likely involved in methylating newly integrated retroviral DNA. Dnmt3a and Dnmt3b are encoded by two distinct genes, but both are abundantly expressed in embryonic stem cells, where they also methylate CpG motifs on DNA.

Source of Antigen and Antibodies

Antigen	14-aa peptide from the c-terminus of human BDNF (protein accession #P23560) conjugated to KLH
Antibody host/type	Goat, polyclonal affinity purified IgG, Cat # BDNF12-A
Secondary Ab	Rabbit Anti-goat IgG-HRP conjugate Cat # SA-30220 (AP, biotin, FITC conjugates also available)
Negative Control Ab	# SA-20011-1, Goat (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage

Aff Pure (purified)

100 ug/500vial
solution, PBS pH 7.5, 0.1% gelatin, 0.05% azide
lyophilized powder

Reconstitute powder in 500 ul water to prepare 200 ug/ml stock.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-5 ug/ml using ECL. mol wt 100-130 kda using HeLa Cell lysates.

ELISA (0.1-1 ug/ml as detecting antibody.

Histochemistry: We recommend the use of 2-10 ug/ml of antibody in paraformaldehyde-fixed, paraffin embedded sections.

Immunoneutralization

BDNF11-M will neutralize the biological activity of recombinant human BDNF. Antibody concentration must be optimized for each application under defined experimental conditions.

Specificity & Cross-reactivity

Anti-human BDNF11-M has no significant reactivity with NGF, NT-3 or NT-4. The antibodies reacts with mouse, rat, and human BDNF. Antibody crossreactivity in various other species is not established. Purified recombinant BDNF protein can be used to block the antibody activity or test antibodies using ELISA or Western. (see detailed protocol at the web site).

General References: Maisonpierre,P.C et al (1991) Genomics 10 (3), 558-568; Shintani A et al (1991) Biochem. Biophys. Res. Commun. 182, 325-332; Robinson RC (1995) Biochemistry 34 (13), 4139-4146; Yancopoulos,G.D et al (1990) Cold Spring Harb. Symp. Quant. Biol. 55, 371-379; Timmusk T et al (1993) Neuron 10 (3), 475-489; Halbook F et al (1991) Neuron 6 (5), 845-858

*This product is for In vitro research use only.

Related material available from GSI

Ant-NGF, NT-3, NT-4, BDNF, Trk receptors, EGF, FGF and other growth factors

BDNF12-A

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