

Mouse mAb to hBDNF (clone 4C8)

Catalogue # 328-100

Immunogen: Human BDNF

Immunogen Recombinant human BDNF protein purified from

Description: E. coli

Alternative Names: Abrineurin

Uniprot ID: P23560

Clonality: Mouse monoclonal

Clone: 4C8

Class: mlgG1

Reactivity: Human, mouse, rat. guinea pig

Application: ELISA, WB, IF

ELISA: $0,05-0,1 \mu g/ml$

IF: 20 μg/ml (weak signal)

Purification: Protein G purification

Buffer: PBS with 0.1% sodium azide

Shipping: This product is shipped in non-frozen liquid form

in ambient conditions

Storage: Store at -20... -70 °C upon receipt. Divide

antibody into aliquots prior usage. Avoid multiple

freeze-thaw cycles.

Background: Brain-derived neurotrophic factor (BDNF) plays

an important role in activity-dependent synaptic plasticity such as long-term potentiation. BDNF acts on certain neurons of the central nervous system and the peripheral nervous system, helping to support the survival of existing neurons, and encourage the growth and differentiation of new neurons and synapses

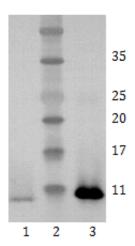


Figure 1. Western Blot analysis of anti-BDNF monoclonal antibody 4C8. Lanes 1 and 3: 50 ng of purified hBDNF protein was loaded into the gel under non-reducing and reducing conditions, respectively. Antibody concentration 1 ?g/ml. Lane 2: Protein size marker

A. B.

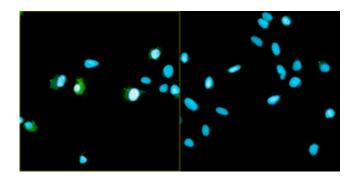


Figure 2. Immunofluorescence detection of hBDNF expression in U2OS cells by anti-BDNF monoclonal antibody 4C8. Antibody concentration 20 ?g/ml. Goat anti-mouse AlexaFluor488 was used as

secondary antibody. For nuclear staining DAPI was used. ArrayScan VTI platform (Thermo Scientific) was used for image acquisition (10x objective). Composite picture was generated using pseudocolors green for BDNF specific signal and blue for nuclei. A. proBDNF-expressing U2OS cells; B. Negative control (non-transfected U2OS cells).

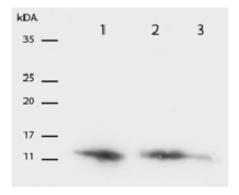


Figure 3. Western Blot testing of anti-BDNF monoclonal antibody 4C8. Antibody concentrations of 1 μ g/ml was used. 2 Lanes 1 recombiant BDNF 1 μ g, Lines 2 and 3 – neuron lysates. Photo courtesy of Indrek Koppel and Tõnis Timmusk, Tallinn Technical University, Institute of Gene Technology.