

## Mouse monoclonal antibody to the human Tyrosine kinase receptor type B [4D3-F10]: IgG

Catalogue No.: M-853-100

Description: Tyrosine kinase receptor type B (TrkB) is a member of the neurotrophic tyrosine receptor

kinase family. It is a membrane-bound receptor and upon neurotrophin binding, it phosphorylates itself as well as MAPK pathways members. TrkB is the receptor for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5, but not nerve growth factor (NGF). It is involved in the development and/or maintenance of the nervous system. It exists in a dynamic equilibrium between monomeric (low affinity) and dimeric (high affinity) structures. It is a tran-membrane protein. There are 3 named isoforms produced by alternative splicing. Additional isoforms seem to exist. The different forms are differentially

expressed in various cell types including neurons and microglia.

Batch No.: See product label

Unit size: 100 ug

Antigen: Recombinant protein of human Tyrosine kinase receptor type B (isoform TrkB-T1) with a GST

tag.

Isotype: IgG2a, kappa
Clone: 4D3-F10

Other Names: Tropomyosin-related kinase receptor; BDNF/NT-3 growth factors receptor; Neurotrophic

tyrosine kinase receptor type 2; TrkB tyrosine kinase; GP145-TrkB; Trk-B; TrkB; NTRK2;

**TRKB** 

Accession: NTRK2\_HUMAN

Produced in: Mouse

Purity: Protein G purified immunoglobulin

Applications: This antibody is recommended for WB, sandwich ELISA and Flow Cytometry. Use 2 ug/10^6

cells for Flow Cytometry. Biosensis recommends optimal dilutions/concentrations should be

determined by the end user.

**Specificity:** Specificity has been confirmed by WB and direct ELISA against the antigen.

Cross-reactivity: Human. Other species have not been tested.

Form: Lyophilised from PBS pH 7.2

**Reconstitution:** Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.

Storage: After reconstitution keep aliquots at -20C for higher stability or at 2-8C with an appropriate

antibacterial agent. Glycerol (1:1) may be added for additional stability. Avoid repetitive

freeze/thaw cycles.

**Expiry Date:** 12 months after purchase

General References: 1. Mizoguchi Y et al., J Immunol. 2009 Dec 15;183(12):7778-86. 2. Spencer-Segal JL et al. J

Neurosci. 2011 May 4;31(18):6780-90. 3. Nakajima K et al. Glia. 1998 Nov;24(3):272-89.

## FOR RESEARCH USE ONLY



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Left: Western blot detection of Tyrosine kinase receptor type B (TrkB) expression in human osterogenic sarcoma cell lysate. Right: Analysis of TrkB expression in human prostate cancer DU145 cell line by Flow Cytometry. DU145 cells washed twice using PBS, Blocking: 200 ug/mL Normal Sheep IgG (20 minutes), Primary antibody: Mouse Monoclonal antibody to TrkB (cat # M-853-100, 2 μg per ~10^6 cells) for 30 minutes on ice, Secondary antibody: Goat anti-mouse PE labeled secondary antibody (1:100 fold dilution) with incubation for 20 minutes in dark at room temperature. Non-specific Control IgG, clone X63 (cat # M-1249-100) was used as negative control under same conditions (black dashed). Flow cytometry data and results were generated using Orflo MoxiflowTM instrument and protocols.

