

TrkB(Phospho-Tyr706) Antibody

Catalog No: #11328

Package Size: #11328-1 50ul #11328-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

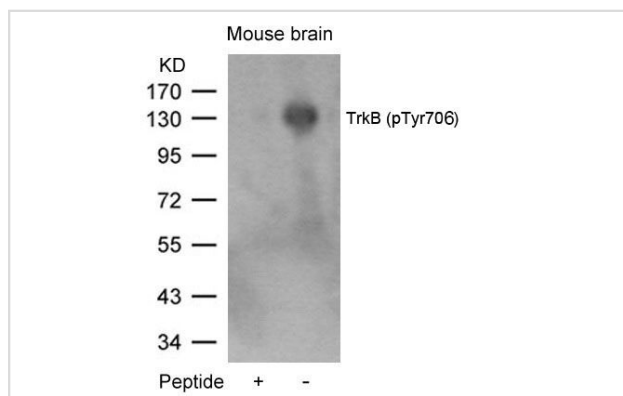
Product Name	TrkB(Phospho-Tyr706) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of TrkB only when phosphorylated at tyrosine 706.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 706 (T-D-Y P-Y-R) derived from Human TrkB.
Conjugates	Unconjugated
Target Name	TrkB
Modification	Phospho
Other Names	BDNF/NT-3 growth factors receptor precursor; EC 2.7.10.1; GP145-TrkB; GP145-TrkB/GP95-TrkB; NTRK2
Accession No.	Swiss-Prot: Q16620NCBI Protein: NP_001007098.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

Predicted MW: 140kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from mouse brain tissue using TrkB(Phospho-Tyr706) Antibody #11328 and the same antibody preincubated with blocking peptide.

Background

Receptor for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5 but not nerve growth factor (NGF). Involved in the development and/or maintenance of the nervous system. This is a tyrosine-protein kinase receptor. Known substrates for the TRK receptors are SHC1, PI-3 kinase, and PLC-gamma-1.

Woronowicz A, et al. *Glycobiology*. 2007 Jan;17(1):10-24.

Mojsilovic-Petrovic J, et al. *J Neurosci*. 2006 Sep 6;26(36):9250-63.

Lewis MA, et al. *Mol Pharmacol*. 2006 Apr;69(4):1396-404.

Cai D, et al. *Physiol Genomics*. 2006 Feb 14;24(3):191-7.

Published Papers

R. A. Hill, Y. W. C. Wu, P. Kwek et al., Modulatory Effects of Sex Steroid Hormones on Brain-Derived Neurotrophic Factor-Tyrosine Kinase B Expression during Adolescent Development in C57Bl/6 Mice, *Journal of Neuroendocrinology*, 24, 774η— C788(2012)

[PMID:22221196](#)

Rachel A. Hill, Maarten van den Buuse et al., Sex-dependent and region-specific changes in TrkB signaling in BDNF heterozygous mice., *Brain Research*, 1384:51-60(2011)

[PMID:21281620](#)

Rachel A. Hill, Yee-Wen Candace Wu, Andrea Gogos et al., Sex-dependent alterations in BDNF-TrkB signaling in the hippocampus of reelin heterozygous mice: a role for sex steroid hormones., *Neurochem.*, 126:389--399(2013)

[PMID:23414458](#)

et al., Altered Trk-1 Function in Sortilin Deficient Mice Results in Decreased Depressive-Like Behavior .In *Front Pharmacol*. On 2018 Aug 6 by Moreno S, Devader CM et al..PMID:30127743, , (2018)

[PMID:30127743](#)

et al., Sex-Dependent Effects of Environmental Enrichment on Spatial Memory and Brain-Derived Neurotrophic Factor (BDNF) Signaling in a Developmental Two-Hit Mouse Model Combining BDNF Haploinsufficiency and Chronic Glucocorticoid Stimulation.In *Front Behav Neurosci* On 2018 Oct 9 by Adrienne M. Grech, Udani Ratnayake et al..PMID: 30356704, , (2018)

[PMID:30356704](#)

et al., Sex- dependent alterations in BDNF TrkB signaling in the hippocampus of reelin heterozygous mice: a role for sex steroid hormones.In *J*

Neurochem on 2013 Aug by Rachel A Hill, Yee-Wen Candace Wu, et al..PMID:23414458, , (2013)

[PMID:23414458](#)

et al., A small molecule TrkB ligand reduces motor impairment and neuropathology in R6/2 and BACHD mouse models of Huntington's disease. In *J Neurosci* on 2013 Nov 27

by Tao Yang, Christina Condon, et al..PMID: 24285878, , (2013)

[PMID:24285878](#)

et al., Sex-specific and region-specific changes in BDNF TrkB signalling in the hippocampus of 5-HT1A receptor and BDNF single and double mutant mice. In *Brain Res*

on 2012 May 3 by YeeWen Candace Wu, Rachel A Hill, et al..PMID:22464183, , (2012)

[PMID:22464183](#)

et al., Sex-dependent and region-specific changes in TrkB signaling in BDNF heterozygous mice. In *Brain Res* on 2011 Apr 12 by Rachel A Hill, Maarten van den Buuse et al..PMID: 21281620, , (2011)

[PMID:21281620](#)

et al., Chronic Intermittent Hypobaric Hypoxia Pretreatment Ameliorates Ischemia-Induced Cognitive Dysfunction Through Activation of

ERK1/2-CREB-BDNF Pathway in Anesthetized Mice. In Neurochem Res on 2017 Feb by Jintian Wang , Shixiao Zhang, et al.. PMID: 27822668, , (2017)

[PMID:27822668](#)

et al., ERK5 Signaling Is Required for TrkB-Mediated Hippocampal Neuroprotection in Female Neonatal Mice after Hypoxic Ischemic Encephalopathy. In eNeuro on 2016 Jan 28 by Ulas Cikla, Vishal Chanana, et al.. PMID: 26839918, , (2016)

[PMID:26839918](#)

et al., A small molecule TrkB/TrkC neurotrophin receptor co-activator with distinctive effects on neuronal survival and process outgrowth. In Neuropharmacology on 2016 Nov by Tao Yang, Stephen M Massa, et al.. PMID:27334657, , (2016)

[PMID:27334657](#)

et al., High stress hormone levels accelerate the onset of memory deficits in male Huntington's disease mice. In Neurobiol Dis on 2014 Sep by Christina Mo, Terence Y Pang, et al.. PMID:24825316, , (2014)

[PMID:24825316](#)

et al., Long-term effects of combined neonatal and adolescent stress on brain-derived neurotrophic factor and dopamine receptor expression in the rat forebrain. In Biochim Biophys Acta on 2014 Nov by Rachel A Hill, Szerenke Kiss Von Soly , et al.. PMID:25159716, , (2014)

[PMID:25159716](#)

et al., Sex-specific disruptions in spatial memory and anhedonia in a 3D rat model correspond with alterations in hippocampal brain-derived neurotrophic factor expression and signaling. In Hippocampus on 2014 Oct by Rachel A Hill, Maren Klug, et al.. PMID:24802968, , (2014)

[PMID:24802968](#)

et al., Brain-derived neurotrophic factor heterozygous mutant rats show selective cognitive changes and vulnerability to chronic corticosterone treatment. In Neuroscience on 2015 Jan 22 by A Gururajan, R A Hill, et al.. PMID:25445195, , (2015)

[PMID:25445195](#)

et al., 17 β -estradiol activation of dorsal hippocampal TrkB is independent of increased mature BDNF expression and is required for enhanced memory consolidation in female mice. In Psychoneuroendocrinology on 2021 Mar by Kellie S Gross, Randie L Alf, et al.. PMID:33352471, , (2021)

[PMID:33352471](#)

et al., VPS13A knockdown impairs corticostriatal synaptic plasticity and locomotor behavior in a new mouse model of chorea-acanthocytosis. In Neurobiol Dis on 2023 Oct 15 by Esther Garc a-Garc a , Alba Ram n-Lainez et al.. PMID:37714309, , (2023)

[PMID:37714309](#)

et al., Neuron-derived extracellular vesicles contain synaptic proteins, promote spine formation, activate TrkB-mediated signalling and preserve neuronal complexity. In J Extracell Vesicles on 2023 Sep by Julia Solana-Balaguer , Gen s Campoy-Campos et al.. PMID:37743539, , (2023)

[PMID:37743539](#)

et al., Investigating 7, 8-Dihydroxyflavone to combat maternal immune activation effects on offspring gene expression and behaviour. In Prog Neuropsychopharmacol Biol Psychiatry on 2024 Aug 30 by Brendan Gillespie, Ariel Dunn, et al.. PMID:38950841, , (2024)

[PMID:38950841](#)

Geraghty Anna C; Ghanem Reem A; Gibson Erin M; Goldstein Andrea K; Greenberg Michael E; Greene Jacob J; Longo Frank M; Marton Rebecca M; Monje Michelle; Ni Lijun; Ocampo Alfonso; Pa ca Sergiu P; Yang Tao et al., Loss of Adaptive Myelination Contributes to Methotrexate Chemotherapy-Related Cognitive Impairment, , (2019)

[PMID:31122677](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.