



## Mouse Anti-Human TrkB monoclonal antibody, clone NN12 (CABT-ZB941)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human TrkB
<b>Target</b>	NTRK2
<b>Immunogen</b>	Recombinant Human TrkB/NTRK2 Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN12
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(det) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB589 - CABT-ZB941 This antibody will detect TrkB in antibody pair set. [ABPR-ZB166]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human TrkB / NTRK2. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 $\mu$ L, 100 $\mu$ L, 200 $\mu$ L, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	TrkB receptor also known as TrkB tyrosine kinase or BDNF/NT-3 growth factors receptor or neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) is a single transmembrane catalytic receptor with intracellular tyrosine kinase activity. TrkB/NTRK2 is a member of the neurotrophic tyrosine receptor kinase (NTRK) family. TrkB tyrosine kinase (TrkB) or NTRK2 is coupled to the Ras, Cdc42/Rac/RhoG, MAPK, PI3-K, and PLCgamma signaling pathways. There are four members of the Trk family; TrkA, TrkB, and TrkC and a related p75NTR receptor. Each family member binds different neurotrophins with varying affinities. TrkB/NTRK has the highest affinity for brain-derived neurotrophic factor (BDNF) and is involved in neuronal plasticity, long-term potentiation, and apoptosis of CNS neurons. Other neurotrophins include nerve growth factor(NGF), neurotrophin-3 and neurotrophin-4. TrkB/NTRK is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Signaling through this kinase leads to cell differentiation. Mutations in TrkB/NTRK have been associated with obesity and mood disorders.
<b>Keywords</b>	NTRK2; Neurotrophic receptor tyrosine kinase 2; TRKB; trkB

## GENE INFORMATION

<b>Synonyms</b>	NTRK2; Neurotrophic receptor tyrosine kinase 2; TRKB; trkB; GP145-TrkB; BDNF/NT-3 growth factors receptor; tyrosine kinase receptor B; tropomyosin-related kinase B; BDNF-tropomyosine receptor kinase B
<b>Entrez Gene ID</b>	<a href="#">4915</a>
<b>UniProt ID</b>	<a href="#">Q16620</a>