



Mouse Anti-Human TrkB monoclonal antibody, clone NN23 (CABT-ZB589)

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

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Specificity | It reacts with Human TrkB It has no cross-reactivity in ELISA with Human Trk-A/NTRK1/TRK, Human Trk-C/NTRK3/TRKC, Mouse Trk-C/NTRK3/TRKC. |
| Target | NTRK2 |
| Immunogen | Recombinant Human Trk-B protein |
| Isotype | IgG1 |
| Source/Host | Mouse |
| Species Reactivity | Human |
| Clone | NN23 |
| Purification | Protein A purified |
| Conjugate | Unconjugated |
| Applications | ELISA, ELISA(cap), FC We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB589 - CABT-ZB941 This antibody will detect TrkB in antibody pair set. [ABPR-ZB166] |
| Preparation | 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 NTRK2 / Trk-B extracellular domain. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography |

| | |
|----------------------|--|
| Format | Purified, Liquid |
| Concentration | Lot specific |
| Size | 50 µL, 100 µL, 1 mL |
| Buffer | PBS |
| Preservative | None |
| Storage | 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. |
| Ship | Wet ice |

BACKGROUND

| | |
|---------------------|--|
| Introduction | 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. |
| Keywords | NTRK2; Neurotrophic receptor tyrosine kinase 2; TRKB; trk-B |

GENE INFORMATION

| | |
|-----------------------|---|
| Synonyms | NTRK2; Neurotrophic receptor tyrosine kinase 2; TRKB; trk-B; GP145-TrkB; BDNF/NT-3 growth factors receptor; tyrosine kinase receptor B; tropomyosin-related kinase B; BDNF-tropomyosine receptor kinase B |
| Entrez Gene ID | 4915 |
| UniProt ID | Q16620 |