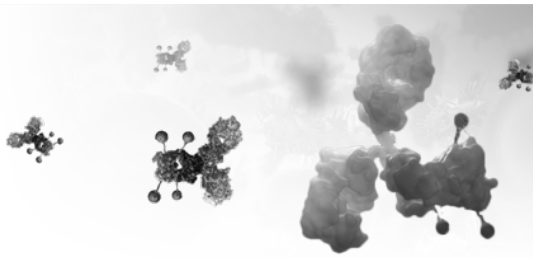

Mouse Anti-Human TrkA monoclonal antibody, clone NN13 (CABT-ZB536)

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

PRODUCT INFORMATION

Specificity	It reacts with Human TrkA
Target	NTRK1
Immunogen	Recombinant Human TrkA/NTRK1 Protein
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	NN13
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) This antibody will detect TrkA in antibody pair set. [ABPR-ZB112]
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 TrkA / NTRK1. 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, 200 µL, 1 mL

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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	TRKA is a member of the neurotrophic tyrosine kinase receptor (NTKR) family. It is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Isoform TrkA-III promotes angiogenesis and has oncogenic activity when overexpressed. Isoform TrkA-I is found in most non-neuronal tissues. Isoform TrkA-II is primarily expressed in neuronal cells. TrkA-III is specifically expressed by the pluripotent neural stem and neural crest progenitors. The presence of NTRK1 leads to cell differentiation and may play a role in specifying sensory neuron subtypes. Mutations in the TRKA gene have been associated with congenital insensitivity to pain, anhidrosis, self-mutilating behavior, mental retardation, and cancer. It was originally identified as an oncogene as it is commonly mutated in cancers, particularly colon and thyroid carcinomas. TRKA is required for high-affinity binding to nerve growth factor (NGF), neurotrophin-3 and neurotrophin-4/5 but not brain-derived neurotrophic factor (BDNF). Known substrates for the Trk receptors are SHC1, PI 3-kinase, and PLC-gamma-1. NTRK1 has a crucial role in the development and function of the nociceptive reception system as well as the establishment of thermal regulation via sweating. It also activates ERK1 by either SHC1- or PLC-gamma-1-dependent signaling pathway. Defects in NTRK1 are a cause of congenital insensitivity to pain with anhidrosis and thyroid papillary carcinoma.
Keywords	NTRK1; neurotrophic tyrosine kinase; receptor; type 1

GENE INFORMATION

Synonyms	NTRK1; neurotrophic tyrosine kinase; receptor; type 1; MTC; TRK; TRK1; TRKA; Trk-A; p140-TrkA; high affinity nerve growth factor receptor; gp140trk; Oncogene TRK; tyrosine kinase receptor A; tropomyosin-related kinase A; TRK1-transforming tyrosine kinase protein; MNAC13; MNACI3
Entrez Gene ID	4914
UniProt ID	P04629

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