Human TrkA Alexa Fluor® 350-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 165126

Catalog Number: FAB175U

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TrkA in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody shows no cross-reactivity with recombinant human (rh) TrkB, rhTrkC, or rrTrkA.
Source	Monoclonal Mouse IgG_{2A} Clone # 165126
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TrkA Ala33-Glu407 Accession # AAA36770
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Trk A, the product of the proto-oncogene *trk,* is a member of the neurotrophic tyrosine kinase receptor family that has three members. Trk A, Trk B and Trk C preferentially bind NGF, NT-4 and BDNF, and NT-3, respectively. All Trk family proteins share a conserved complex subdomain organization consisting of a signal peptide, two cysteine-rich domains, a cluster of three leucine-rich motifs, and two immunoglobulin-like domains in the extracellular region, as well as an intracellular region that contains the tyrosine kinase domain. Two distinct Trk A isoforms that differ by virtue of a 6-amino acid insertion in their extracellular domain have been identified. The longer Trk A isoform is the only isoform expressed within neuronal tissues whereas the shorter Trk A is expressed mainly in non-neuronal tissues. NGF binds to Trk A with low affinity and activates its cytoplasmic kinase, initiating a signaling cascade that mediates neuronal survival and differentiation. Higher affinity binding of NGF requires the coexpression of Trk A with the p75 NGF receptor (NGFR), a member of the tumor necrosis factor receptor superfamily. NGFR binds all neurotrophins with low affinity and modulates Trk activity as well as alters the specificity of Trk receptors for their ligands. NGFR can also mediate cell death when expressed independent of Trk.

PRODUCT SPECIFIC NOTICES

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