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TTBK2 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP12162a

Specification

TTBK2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q6IQ55

TTBK2 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 146057

Other Names
Tau-tubulin kinase 2, TTBK2, KIAA0847

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TTBK2 Antibody (N-term) Blocking peptide - Protein Information

Name TTBK2

Synonyms KIAA0847

Function
Serine/threonine kinase that acts as a key regulator of ciliogenesis: controls the initiation of ciliogenesis by binding to the distal end of the basal body and promoting the removal of CCP110, which caps the mother centriole, leading to the recruitment of IFT proteins, which build the ciliary axoneme. Has some substrate preference for proteins that are already phosphorylated on a Tyr residue at the +2 position relative to the phosphorylation site. Able to phosphorylate tau on serines in vitro (PubMed:23141541). Phosphorylates MPHOSPH9 which promotes its ubiquitination and proteasomal degradation, loss of MPHOSPH9 facilitates the removal of the CP110-CEP97 complex (a negative regulator of ciliogenesis) from the mother centrioles, promoting the initiation of ciliogenesis (PubMed:30375385).

Cellular Location
Cell projection, cilium. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cytoplasm, cytosol. Nucleus. Note=Localizes to the transition zone in primary cilia in response to cell cycle signals that promote ciliogenesis (By

similarity). May also be present in cytosol and, at lower level in the nucleus.

TTBK2 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

TTBK2 Antibody (N-term) Blocking peptide - Images

TTBK2 Antibody (N-term) Blocking peptide - Background

This gene encodes a serine-threonine kinase thatputatively phosphorylates tau and tubulin proteins. Mutations inthis gene cause spinocerebellar ataxia type 11 (SCA11); aneurodegenerative disease characterized by progressive ataxia andatrophy of the cerebellum and brainstem.

TTBK2 Antibody (N-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Xu, Q., et al. Neurol. Sci. 31(1):107-109(2010)Edener, U., et al. J. Neurol. 256(11):1856-1859(2009)Houlden, H., et al. Nat. Genet. 39(12):1434-1436(2007)Kitano-Takahashi, M., et al. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 63 (PT 7), 602-604 (2007) :