

phospho-b-Tubulin (Ser-172) Peptide

phospho-beta-Tubulin (Ser-172) Peptide

CATALOG #
AAA71540

PRODUCT SYNONYMS

phospho-b-Tubulin (Ser-172) Peptide; phospho-beta-Tubulin (Ser-172) Peptide; phospho-b-Tubulin (Ser-172) Peptide peptide

PRODUCT SPECIFICATIONS

Specificity	The peptide is specifically recognized by beta -Tubulin (Ser -172) phospho-specific antibody (TP1721) in ELISA, and has been shown to block the reactivity of TP1721 in Western blot and immunocytochemistry.
Form/Format	Blocking Peptide is supplied in 50ul phosphate-buffered saline and 0.05% sodium azide.
Sequence	PeptideSeq uence:Phos pho-betall I-Tubulin(Ser-172)sy ntheticpep tidecontai nsaminoaci dresiduesa roundserin e172ofhuma nbIII-tubu lin.This se quenceisid enticaltos imilarregi onsinbetal ,betall,an dbetaIII-t ubulinisot ypes,andis wellconser vedintubul insfrommos teukaryoti cspecies.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

ADDITIONAL INFORMATION

Related Product Information for phospho-b-Tubulin (Ser-172) Peptide peptide	Microtubules (MTs) are cytoskeletal elements that play an essential role in cell division and cytoplasmic organization. MTs are dynamic polymers of alpha / beta-tubulin heterodimers. At least two populations of MTs, called dynamic and stable according to their rates of turnover, are readily distinguishable in cells. The proteins associated with MTs (MAPs) are among the best-known factors that regulate MT dynamics and stability. In addition, a variety of different post-translational modifications may also regulate MT dynamics and stability. Phosphorylation is one of these modifications and it can occur on serine, threonine, and tyrosine residues in b-tubulin isoforms. Multiple kinases can phosphorylate Ser-444 at the C-terminus of beta-III-tubulin in vitro. Unphosphorylated Ser-444 in beta-III-tubulin is an early marker for cells of neuronal lineage, while phosphorylation of Ser-444 is upregulated after neuronal maturation and may preferentially occur in assembled MTs. By contrast, Cdk1 phosphorylation of Ser-172 in beta-tubulin occurs in mitotic cells and may impair tubulin incorporation into microtubules.
References	• Fourest-Lieuvin, A. et al. (2006) Mol. Biol. Cell. 17(3):1041 • Westermann, S. & Weber, K. (2003) Nat. Rev. Mol. Cell. Biol. 4:938. • Fanarraga, M.L. et al. (1999) Eur. J. Neurosci. 11:517. • Diaz-Nido, J. et al. (1990) J Biol. Chem. 265(23):13949

NCBI AND UNIPROT INFORMATION

NCBI GI #	400423
UniProt Accession #	Q91240
Molecular Weight	49,776 Da
NCBI Official Full Name	B-tubulin
UniProt Protein Name	Tubulin beta chain
UniProt Entry Name	TBB_PSEAM

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

