Datasheet for ABIN6253484

anti-Tubulin antibody

Go to Product page

Overview

Quantity:	100 µg
Target:	Tubulin (TUB)
Reactivity:	Human, Mouse, Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Tubulin antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Purpose:	anti-Tubulin (glycylated), pAb (Gly-pep1)
Immunogen:	Synthetic peptide corresponding to D431EQGEFE(G-COOH*)EEEG441-NH2 of human Tubulin beta-2A chain (*secondary glycine branched from gamma-carboxyl group of glutamate as isopeptide bond).
Characteristics:	Polyclonal Antibody. This antibody recognizes mono or bi-glycylated Tubulins. The activity of glycylating enzymes (TTLL3 and TTLL8) in cultured cells leads mainly to the modification of alpha- and beta-tubulin, but also of other, yet unidentified protein substrates also detected by the antibody Gly-pep1. In immunofluorescence labeling, the antibody strongly labels glycylated microtubules. Source: Rabbit. Applications: ICC, IP, WB. Liquid. In PBS containing 0.02 % sodium azide. Microtubules are key cytoskeletal elements that are found in all eukaryotic cells. Microtubules fulfil a large range of different functions, which are thought to be controlled by the 'tubulin code' - mechanism to generate distinct microtubule identities. One mechanism to label specific microtubules are tubulin posttranslational modifications (PTMs), of which a large

Product Details

	variety exists. One of these modifications is glycylation, which is generated by the addition of secondary (branched) glycine chains to the main (primary) peptide chain of the protein. The length of these branch chains can vary from one to more than 20 glycine residues. Glycylation is catalysed by the enzymes TTLL3, TTLL8 and TTLL10 from the tubulin tyrosine ligase-like (TTLL) family. Especially TTLL3 and TTLL8 are essential for the initiation of the glycylation because the generate the nascent glycine chain. The Gly-pep1 antibody was raised against a peptide mimicking beta2-tubulin (TUBB2A) with a single glycine branch on E437. The antibody specifically detects glycylated tubulin, and also other yet unknown glycylation substrates in cells as well as in tissues. As glycyation of microtubules is particularly found in cilia and flagella, Gly-pep1 labels motile cilia as well as primary cilia.
Purity:	>95 % (SDS-PAGE)

Target Details

Target:	Tubulin (TUB)
Alternative Name:	Tubulin (TUB Products)
Background:	Product Description: Microtubules are key cytoskeletal elements that are found in all eukaryotic cells. Microtubules fulfil a large range of different functions, which are thought to be controlled by the 'tubulin code' - mechanism to generate distinct microtubule identities. One mechanism to label specific microtubules are tubulin posttranslational modifications (PTMs), of which a large variety exists. One of these modifications is glycylation, which is generated by the addition of secondary (branched) glycine chains to the main (primary) peptide chain of the protein. The length of these branch chains can vary from one to more than 20 glycine residues. Glycylation is catalysed by the enzymes TTLL3, TTLL8 and TTLL10 from the tubulin tyrosine ligase-like (TTLL) family. Especially TTLL3 and TTLL8 are essential for the initiation of the glycylation because the generate the nascent glycine chain. The Gly-pep1 antibody was raised against a peptide mimicking beta2-tubulin (TUBB2A) with a single glycine branch on E437. The antibody specifically detects glycylated tubulin, and also other yet unknown glycylation substrates in cells as well as in tissues. As glycyation of microtubules is particularly found in cilia and flagella, Gly-pep1 labels motile cilia as well as primary cilia (Gadadhar et al. 2017)

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. In PBS containing 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	After opening, prepare aliquots and store at -20 °C. Avoid freeze/thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Use & Stability: Stable for at least 1 year after receipt when stored at -20°C.