

## Product datasheet

# Anti-beta Tubulin antibody [TU-12] ab24385

### 概述

<b>产品名称</b>	Anti-beta Tubulin抗体[TU-12]
<b>描述</b>	小鼠单克隆抗体[TU-12] to beta Tubulin
<b>宿主</b>	Mouse
<b>经测试应用</b>	<b>适用于:</b> WB, ICC
<b>种属反应性</b>	The epitope recognised by this antibody is highly conserved and therefore the antibody cross reacts with a wide range of species.
<b>免疫原</b>	Full length native protein (purified) of brain microtubule protein MTP-1 (Pig)
<b>表位</b>	The antibody reacts with an epitope located within amino acids 345-430 of C-terminal domain of beta-tubulin subunit.
<b>阳性对照</b>	porcine brain lysate

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>存储溶液</b>	Preservative: 15mM Sodium Azide Constituents: PBS, pH 7.4
<b>纯度</b>	>95% by SDS-PAGE
<b>纯化说明</b>	Purified from ascites by precipitation methods.
<b>克隆</b>	单克隆
<b>克隆编号</b>	TU-12
<b>同种型</b>	IgM

### 应用

Our [Abpromise guarantee](#) covers the use of **ab24385** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB		
ICC		
<b>应用说明</b>	ICC: Use at an assay dependent dilution. Ab46814 is suitable for ICC/IF as it is the same clone directly fluorescent labelled. WB: Use at a concentration of 2 µg/ml. Predicted molecular weight: 38 kDa.	
	Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.	
<b>靶标</b>		
<b>功能</b>	Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain.	
<b>组织特异性</b>	Ubiquitously expressed with highest levels in spleen, thymus and immature brain.	
<b>疾病相关</b>	Cortical dysplasia, complex, with other brain malformations 6 Skin creases, congenital symmetric circumferential, 1	
<b>序列相似性</b>	Belongs to the tubulin family.	
<b>结构域</b>	The highly acidic C-terminal region may bind cations such as calcium.	
<b>翻译后修饰</b>	Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group (PubMed:26875866). Polyglutamylation plays a key role in microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this glutamylation threshold (PubMed:26875866). Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TLL10 in human. Monoglycylated tubulin is mainly limited to tubulin incorporated into axonemes (cilia and flagella). Both polyglutamylation and monoglycylated tubulin can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of monoglycylated tubulin is still unclear. Phosphorylated on Ser-172 by CDK1 during the cell cycle, from metaphase to telophase, but not in interphase. This phosphorylation inhibits tubulin incorporation into microtubules.	
<b>细胞定位</b>	Cytoplasm, cytoskeleton.	

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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