

Datasheet: MCA2047

Description:	MOUSE ANTI TUBULIN BETA 3
Specificity:	TUBULIN BETA 3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	TU-20
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			5 - 20 ug/ml
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting (2)	▪			1 - 10 ug/ml
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

(2) TU-20 recognizes tubulin beta 3 under reducing conditions

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Baboon, Rat, Hamster, Pig, Bovine

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Synthetic peptide, ESESQGPK, corresponding to amino acids 441-448 of human class III beta tubulin coupled to Keyhole Limpet Hemocyanin (KLH). This sequence is widely conserved across species.
External Database Links	UniProt: Q13509 Related reagents Entrez Gene: 10381 TUBB3 Related reagents
Synonyms	TUBB4
RRID	AB_2210682
Specificity	Mouse anti Tubulin beta 3 antibody, clone TU-20 recognizes class III beta-tubulin, restricted to neuronal tissue (Leandro-García 2010 ; Katsetos 2003). Mouse anti Tubulin beta 3 antibody, clone TU-20 has been used to investigate tumors of neuronal origin (Jirásek 2002) including neuroblastoma (Prasannan 2000) and ganglioneuroma (Dráberová 1998). Class III beta tubulin is highly expressed in tumors of neuronal origin rather than in non-neuronal tumors (Person 2017).
Histology Positive Control Tissue	Neuronal tissue
References	<ol style="list-style-type: none"> 1. Dráberová, E. <i>et al.</i> (1998) Expression of class III beta-tubulin in normal and neoplastic human tissues. Histochem Cell Biol. 109 (3): 231-9. 2. Hattermann, K. <i>et al.</i> (2010) The chemokine receptor CXCR7 is highly expressed in human glioma cells and mediates antiapoptotic effects. Cancer Res. 70: 3299-308. 3. Rosito, M. <i>et al.</i> (2012) CXCL16 Orchestrates Adenosine A3 Receptor and MCP-1/CCL2 Activity to Protect Neurons from Excitotoxic Cell Death in the CNS. J Neurosci. 32: 3154-63. 4. Nicot, A. and DiCicco-Bloom, E. (2001) Regulation of neuroblast mitosis is determined by PACAP receptor isoform expression. Proc Natl Acad Sci U S A. 98: 4758-63. 5. Pěkníková, J. <i>et al.</i> (2001) Differential subcellular distribution of tubulin epitopes in boar spermatozoa: recognition of class III beta-tubulin epitope in sperm tail. Biol Reprod. 65:

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12. Zhu, G. *et al.* (2012) Effects of neurotrophin-3 on the differentiation of neural stem cells into neurons and oligodendrocytes. [Neural Regen Res. 7 \(19\): 1483-7.](#)
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Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Rabbit Anti Mouse IgG (STAR9...)

[FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...)

[Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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