

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 product 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 product 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 (Prasanna 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. 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: 672-9. 3. 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. 4. Carey, R.G. <i>et al.</i> (2002) Pituitary adenylate cyclase activating polypeptide anti-mitogenic signaling in cerebral cortical progenitors is regulated by p57Kip2-dependent CDK2 activity. J Neurosci. 22 (5): 1583-91. 5. Vedin, V. <i>et al.</i> (2010) Organization of the chemosensory neuroepithelium of the

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9. 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.](#)
10. Rosito, M. *et al.* (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.](#)
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12. Alexiou, G.A. *et al.* (2013) Supratentorial ependymomas in children: Analysis of nine cases. [J Pediatr Neurosci. 8 \(1\): 15-8.](#)
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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: https://www.bio-rad-antibodies.com/SDS/MCA2047 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP

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 \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M437835:250319'

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