

Datasheet: MCA2703

Description:	MOUSE ANTI PIG TUBULIN BETA (N-TERMINAL)
Specificity:	TUBULIN BETA (N-TERMINAL)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	TU-13
Isotype:	IgM
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			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1.0ug/ml

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.

Target Species	Pig
Species Cross Reactivity	Reacts with: Human, Plants, Mouse, Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgM - liquid
Preparation	Purified IgM prepared by ion exchange chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Tubulin beta from porcine brain.

**External Database
Links**

UniProt:

[P02554](#)

[Related reagents](#)

Specificity

Mouse anti Pig Tubulin beta antibody, clone TU-13 recognizes an epitope within the N-terminal region (NT) of tubulin beta, a ~50 kDa globular protein and major constituent of microtubules within the cytoskeleton, involved in meiosis, mitosis, intracellular transport and maintaining cell shape.

The evolutionarily conserved heterodimer tubulin, made up of a tubulin alpha and beta chain, binds two molecules of GTP, one at a non-exchangeable site on the alpha chain and one at an exchangeable site on the beta chain. Only the beta chain possesses GTPase activity however, hydrolysing GTP to GDP, and influencing the stability of the dimer within the microtubule.

Mouse anti Pig Tubulin beta antibody, clone TU-13 partially inhibits microtubule assembly *in vitro* ([Draber, P. et al.](#)). Mouse anti Pig Tubulin beta antibody, clone TU-13 has also been successfully employed for the demonstration of neuronal cells in mouse brain by immunohistochemistry on floating sections ([Nováková et al. 1997](#)).

Western Blotting

MCA2703 detects a band of approximately 50kDa in human RAJI and mouse EL4 cell lysates.

References

1. Dráber, P. *et al.* (1990) Inhibition of microtubule assembly *in vitro* by anti-tubulin monoclonal antibodies. [FEBS Lett. 262 \(2\): 209-11.](#)
2. Bataveljić D *et al.* (2012) Changes in the astrocytic aquaporin-4 and inwardly rectifying potassium channel expression in the brain of the amyotrophic lateral sclerosis SOD1(G93A) rat model. [Glia. 60 \(12\): 1991-2003.](#)

Further Reading

1. Krauhs, E. *et al.* (1981) Complete amino acid sequence of beta-tubulin from porcine brain. [Proc Natl Acad Sci U S A. 78 \(7\): 4156-60.](#)

Storage

Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...) [Alk. Phos.](#)

Goat Anti Mouse IgM (STAR86...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Human Anti Mouse IgM (HCA040...) [FITC](#), [HRP](#)

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