

## Datasheet: MCA77G

**BATCH NUMBER 165568**

<b>Description:</b>	RAT ANTI TUBULIN ALPHA
<b>Specificity:</b>	TUBULIN ALPHA
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YL1/2
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.5 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/100 - 1/1000
Immunoprecipitation	▪			
Western Blotting	▪			1/200 - 1/2000
Immunofluorescence	▪			
Radioimmunoassays	▪			

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

### Target Species

Yeast

### Species Cross Reactivity

Reacts with: Ashbya, Human, Mouse, Dog, Rat, Pig, Drosophila, Saccharomyces, Pleurobrachia, Caenorhabditis, Dictyostelium discoideum, Xenopus, Pig-tailed macaque, Clytia sp., Arabidopsis, Strongylocentrotus purpuratus, Dendroaster excentricus, Trypanosoma brucei, Potorous tridactylis, Bovine, Hemicentrotus pulcherrimus, Potato, Bombyx mori, Rhodnius prolixus, Beroe abyssicola, Candida sp.

Does not react with: Nephrotoma suturalis

Based on sequence similarity, is expected to react with: Birds, Echinoderm, Plants, Amphibia

**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.

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<b>Product Form</b>	Purified IgG - liquid
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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% Sodium Azide
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<b>Carrier Free</b>	Yes
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<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
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<b>Immunogen</b>	Yeast tubulin.
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<b>RRID</b>	AB_325003
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<b>Fusion Partners</b>	Spleen cells from immunized LOU rats were fused with cells of the Y3.Ag.1.2.3 rat myeloma cell line.
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<b>Specificity</b>	<p><b>Rat anti tubulin alpha antibody, clone YL1/2</b> recognizes the alpha subunit of tubulin, specifically binding tyrosylated Tubulin (Tyr-Tubulin) (<a href="#">Wehland et al. 1983</a>). The epitope recognized by this antibody has been extensively studied and would appear to be a linear sequence requiring an aromatic residue at the C terminus, with the two adjacent amino acids being negatively charged (represented by Glu-Glu-Tyr in Tyr-Tubulin).</p> <p>The antibody has been used in epitope tagging procedures to detect proteins tagged with a C-terminal Gly-Gly-Phe epitope. These sequence requirements have been reported to result in some cross-reactivity with other proteins in certain circumstances, including <i>E. coli</i> rec A and oxidized actin (<a href="#">Burns 1987</a>).</p> <p>Rat anti tubulin alpha antibody, clone YL1/2 is routinely tested in ELISA on tubulin.</p>
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<b>Western Blotting</b>	Rat anti tubulin alpha antibody, clone YL1/2 recognizes a band of ~55 kDa in cell lysate from a wide range of species. Rat anti tubulin alpha antibody, clone YL1/2 is suitable for use as a western blotting loading control.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Kilmartin, J.V. <i>et al.</i> (1982) Rat monoclonal anti tubulin antibodies derived by using a new nonsecreting rat cell line. <a href="#">J Cell Biol. 93 (3): 576-82.</a></li><li>2. Wehland, J. <i>et al.</i> (1983) A rat monoclonal antibody reacting specifically with the tyrosylated form of alpha-tubulin. I. Biochemical characterization, effects on microtubule polymerization <i>in vitro</i>, and microtubule polymerization and organization <i>in vivo</i>. <a href="#">J Cell Biol. 97 (5 Pt 1): 1467-75.</a></li></ol>
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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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA77G>  
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**Regulatory** For research purposes only

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## Related Products

## Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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Printed on 04 Jun 2024