

## Datasheet: MCA358G

<b>Description:</b>	MOUSE ANTI HUMAN F-ACTIN
<b>Specificity:</b>	ACTIN F TYPE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	NH3
<b>Isotype:</b>	IgM
<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	▪			1 / 10
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1 / 10
Immunoprecipitation			▪	
Western Blotting	▪			1/100 - 1/500

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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Rabbit, Rat, Mouse</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgM - liquid
<b>Preparation</b>	Purified IgM prepared from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgM concentration 1.0 mg/ml
<b>Immunogen</b>	Human monocytes and U937 cell line.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P60709</a>    <a href="#">Related reagents</a></p> <p><a href="#">P63261</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">60</a>    ACTB    <a href="#">Related reagents</a></p> <p><a href="#">71</a>    ACTG1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	ACTB, ACTG
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human F-Actin antibody, clone NH3</b> recognizes human Filamentous actin (F-actin), the polymeric form of actin.. Mouse anti Human F-Actin antibody, clone NH3 binds to the N-terminal region of actin, but not to the extreme N-terminal 40 amino acids.</p> <p>In tissue sections the antibody stains the cytoplasm of macrophages strongly, and gives granular, localized nuclear staining of all cell types.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Dransfield, I. <i>et al.</i> (1988) Initial characterization of an anti-actin monoclonal antibody (NH3). <a href="#">Biochem. Soc. Trans. 16: 163-164.</a></li> <li>2. Allen, K.M. &amp; Haworth, S.G. (1989) Cytoskeletal features of immature pulmonary vascular smooth muscle cells: the influence of pulmonary hypertension on normal development. <a href="#">J Pathol. 158 (4): 311-7.</a></li> <li>3. McCarthy, A.M. <i>et al.</i> (2006) Loss of cortical actin filaments in insulin-resistant skeletal muscle cells impairs GLUT4 vesicle trafficking and glucose transport. <a href="#">Am J Physiol Cell Physiol. 291: C860-8.</a></li> <li>4. Bhonagiri, P. <i>et al.</i> (2011) Evidence coupling increased hexosamine biosynthesis pathway activity to membrane cholesterol toxicity and cortical filamentous actin derangement contributing to cellular insulin resistance. <a href="#">Endocrinology. 152: 3373-84.</a></li> <li>5. Fang, S.H. <i>et al.</i> (2019) Relationship of <math>\alpha</math>2-Macroglobulin with Steroid-Induced Femoral Head Necrosis: A Chinese Population-Based Association Study in Southeast China. <a href="#">Orthop Surg. 11 (3): 481-486.</a></li> <li>6. Chen, X. <i>et al.</i> (2013) Molecular characterization of severin from <i>Clonorchis sinensis</i> excretory/secretory products and its potential anti-apoptotic role in hepatocarcinoma PLC cells. <a href="#">PLoS Negl Trop Dis. 7 (12): e2606.</a></li> <li>7. Grice, B.A. <i>et al.</i> (2019) Excess membrane cholesterol is an early contributing reversible aspect of skeletal muscle insulin resistance in C57BL/6NJ mice fed a</li> </ol>

Western-style high-fat diet. [Am J Physiol Endocrinol Metab. 317 \(2\): E362-E373.](#)

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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/MCA358G>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

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

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

### Recommended Negative Controls

[MOUSE IgM NEGATIVE CONTROL \(MCA692\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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

'M384495:210513'

Printed on 25 Mar 2023

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