

## Datasheet: MCA358GT

|                      |                          |
|----------------------|--------------------------|
| <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>     | 50 µg                    |

## 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 |     |    | ▪              |                    |
| 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.

|                                       |   |
|---------------------------------------|---|
| <b>Target Species</b>                 | Human   |
| <b>Species Cross Reactivity</b>       | Reacts with: Rabbit, Rat, Mouse<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |
| <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>        | <b>UniProt:</b>   |

[P60709](#) [Related reagents](#)

[P63261](#) [Related reagents](#)

**Entrez Gene:**

[60](#) ACTB [Related reagents](#)

[71](#) ACTG1 [Related reagents](#)

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**Synonyms**

ACTB, ACTG

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**Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

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**Specificity**

**Mouse anti Human F-Actin antibody, clone NH3** recognizes human Filamentous actin (F-actin). The antibody binds to the N-terminal region of actin, but not to the extreme N-terminal 40 amino acids.

In tissue sections the antibody stains the cytoplasm of macrophages strongly, and gives granular, localised nuclear staining of all cell types.

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**References**

1. Dransfield, I. *et al.* (1988) Initial characterization of an anti-actin monoclonal antibody (NH3). [Biochem. Soc. Trans. 16: 163-164.](#)
2. Allen, K.M. & Haworth, S.G. (1989) Cytoskeletal features of immature pulmonary vascular smooth muscle cells: the influence of pulmonary hypertension on normal development. [J Pathol. 158 \(4\): 311-7.](#)
3. McCarthy, A.M. *et al.* (2006) Loss of cortical actin filaments in insulin-resistant skeletal muscle cells impairs GLUT4 vesicle trafficking and glucose transport. [Am J Physiol Cell Physiol. 291: C860-8.](#)
4. Bhonagiri, P. *et al.* (2011) Evidence coupling increased hexosamine biosynthesis pathway activity to membrane cholesterol toxicity and cortical filamentous actin derangement contributing to cellular insulin resistance. [Endocrinology. 152: 3373-84.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

18 months from date of despatch.

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

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

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

## Recommended Negative Controls

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

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