Datasheet: MCA358G

BATCH NUMBER 167020

Description:	MOUSE ANTI HUMAN F-ACTIN
Specificity:	ACTIN F TYPE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	NH3
Isotype:	IgM
Quantity:	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.

	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.

Target Species

Human

Species Cross Reactivity

Reacts with: Rabbit, Rat, Mouse

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 IgM - liquid

Preparation

Purified IgM prepared from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgM concentration 1.0 mg/ml
Immunogen	Human monocytes and U937 cell line.
External Database Links	**UniProt:** P60709 Related reagents P63261 Related reagents **Entrez Gene:** 60 ACTB Related reagents 71 ACTG1 Related reagents
Synonyms	ACTB, ACTG
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Human F-Actin antibody, clone NH3** 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. In tissue sections the antibody stains the cytoplasm of macrophages strongly, and gives granular, localized nuclear staining of all cell types.
References	1. Dransfield, I. *et al*. (1988) Initial characterization of an anti-actin monoclonal antibody (NH3). Biochem Soc Trans. 16: 163-4. 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. 5. Chen, X. *et al.* (2013) Molecular characterization of severin from *Clonorchis sinensis* excretory/secretory products and its potential anti-apoptotic role in hepatocarcinoma PLC cells. PLoS Negl Trop Dis. 7 (12): e2606. 6. Grice, B.A. *et al.* (2019) Excess membrane cholesterol is an early contributing reversible aspect of skeletal muscle insulin resistance in C57BL/6NJ mice fed a Western-style high-fat diet. Am J Physiol Endocrinol Metab. 317 (2): E362-E373.

7. Fang, S.H. *et al.* (2019) Relationship of α2-Macroglobulin with Steroid-Induced Femoral Head Necrosis: A Chinese Population-Based Association Study in Southeast China. Orthop Surg. 11 (3): 481-486.

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/MCA358G 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...)	Alk. Phos.
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL (MCA692)

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

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

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