

Datasheet: MCA5780GA

BATCH NUMBER 1801

Description:	MOUSE ANTI WIP12
Specificity:	WIP12
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2A2
Isotype:	IgG1
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	▪			
Immunofluorescence	▪			

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 the appropriate negative/positive controls.

Target Species	Human
Species Cross Reactivity	Reacts with: 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 IgG - liquid
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Synthetic peptide corresponding to the C-terminus of WIPI2b (CSALRLDEDESEHPPMILRTD)
External Database Links	UniProt: Q9Y4P8 Related reagents Q80W47 Related reagents Entrez Gene: 26100 WIPI2 Related reagents 74781 Wipi2 Related reagents
RRID	AB_10845951
Specificity	Mouse anti Human WIPI2 antibody, clone 2A2 recognises WD repeat domain phosphoinositide-interacting protein 2 (WIPI-2), also known as WIPI49-like protein 2. WIPI2 is a 454 amino acid ~54 kDa autophagosomal marker containing three WD repeats. WIPI2 is a mammalian orthologue of the yeast protein Atg18 and is similarly recruited to early autophagosomal structures and is required for their maturation into mature autophagosomes (Polson et al. 2010). Human WIPI2 exists in multiple isoforms including WIPI2A, the canonical 454 amino acid isoform and WIPI2B with deletions towards both the N and C terminal regions. Mouse anti Human WIPI2 antibody, clone 2A2 was generated using a C-terminal sequence and recognizes both WIPI2A and WIPI2B by western blotting (Pantoom et al. 2020) Mouse anti Human WIPI2 antibody, clone 2A2 has been used for the immunofluorescent detection of WIPI2 in the human retinal epithelial cell line RPE1 (MacVicar and Lane 2014).
References	1. Polson, H.E. <i>et al.</i> (2010) Mammalian Atg18 (WIPI2) localizes to omegasome-anchored phagophores and positively regulates LC3 lipidation. Autophagy. 6 (4): 506-22. 2. Dooley, H.C. <i>et al.</i> (2014) WIPI2 links LC3 conjugation with PI3P, autophagosome formation, and pathogen clearance by recruiting Atg12-5-16L1. Mol Cell. 55 (2): 238-52. 3. MacVicar, T.D. and Lane, J.D. (2014) Impaired OMA1-dependent cleavage of OPA1 and reduced DRP1 fission activity combine to prevent mitophagy in cells that are dependent on oxidative phosphorylation. J Cell Sci. 127: 2313-25. 4. Karanasios, E. <i>et al.</i> (2014) Imaging autophagy. Curr Protoc Cytom. 69: 12.34.1-12.34.16. 5. Gomez-Sanchez, J.A. <i>et al.</i> (2015) Schwann cell autophagy, myelinophagy, initiates

- myelin clearance from injured nerves. [J Cell Biol. 210 \(1\): 153-68.](#)
6. Kjos, I. *et al.* (2017) Rab7b modulates autophagic flux by interacting with Atg4B. [EMBO Rep. 18 \(10\): 1727-39.](#)
7. Nascimbeni, A.C. *et al.* (2017) ER-plasma membrane contact sites contribute to autophagosome biogenesis by regulation of local PI3P synthesis. [EMBO J. 36 \(14\): 2018-33.](#)
8. Pantoom, S. *et al.* (2020) RAB33B recruits the ATG16L1 complex to the phagophore via a noncanonical RAB binding protein. [Autophagy. : 1-15.](#)
9. Deitersen, J. *et al.* (2021) High-throughput screening for natural compound-based autophagy modulators reveals novel chemotherapeutic mode of action for arzanol. [Cell Death Dis. 12 \(6\): 560.](#)
10. Boukhalfa, A. *et al.* (2020) PI3KC2α-dependent and VPS34-independent generation of PI3P controls primary cilium-mediated autophagy in response to shear stress. [Nat Commun. 11 \(1\): 294.](#)

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/MCA5780GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

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'M385956:210513'

Printed on 01 Aug 2024