

Datasheet: MCA5780GA

Description:	MOUSE ANTI WIPI2
Specificity:	WIPI2
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	<p>Reacts with: Mouse</p> <p>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.</p>
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

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 recognizes 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. *et al.* (2010) Mammalian Atg18 (WIPI2) localizes to omegasome-anchored phagophores and positively regulates LC3 lipidation. [Autophagy. 6 \(4\): 506-22.](#)
2. Dooley, H.C. *et al.* (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. *et al.* (2014) Imaging autophagy. [Curr Protoc Cytom. 69: 12.34.1-12.34.16.](#)
5. Gomez-Sanchez, J.A. *et al.* (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.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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
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