

Datasheet: MCA5780GA

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|----------------------|---------------------|
| 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

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

Preparation

Antibody purified from tissue culture supernatant

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 | <p>UniProt:</p> <p>Q9Y4P8 Related reagents</p> <p>Q80W47 Related reagents</p> <p>Entrez Gene:</p> <p>26100 WIPI2 Related reagents</p> <p>74781 Wipi2 Related reagents</p> |
| RRID | AB_10845951 |
| Specificity | <p>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).</p> <p>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)</p> <p>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).</p> |
| References | <ol style="list-style-type: none"> 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) PI3KC2 α -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: 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 (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#), [DyLight@650](#), [DyLight@680](#), [DyLight@800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

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To

America Fax: +1 919 878 3751

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

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