3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-WIPI-2 (C-terminal)
produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200400**

Product Description

Anti-WIPI-2 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to the C-terminal region of human WIPI-2 (GeneID: 26100), conjugated to KLH. The corresponding sequence is identical in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-WIPI-2 (C-terminal) recognizes human, rat and mouse WIPI-2. The antibody may be used in various immunochemical techniques including immunoblotting (~ 49 kDa) and immunoprecipitation. Detection of the WIPI-2 band by immunoblotting is specifically inhibited by the immunizing peptide.

WIPI-2 is a phosphatidylinositol-3-phosphate binding protein required for starvation induced autophagy. WIPI-1 and WIPI-2, the mammalian orthologues of Atg18 in *S. cerevisiae and A. thaliana*, are members of the WIPI subfamily of WD40 repeat proteins that are key components of many essential biological functions including signal transduction, transcription regulation and apoptosis. WD40 repeat proteins regulate the assembly of multiprotein complexes by presenting a beta-propeller platform for simultaneous and reversible protein-protein interactions. Members of the WIPI subfamily of WD40 repeat proteins, such as WIPI2, have a 7-bladed propeller structure and contain a conserved motif for interaction with phospholipids. WIPI-2 is ubiquitously expressed in a variety of cell lines. WIPI-1 and WIPI-2 are membrane components of autophagosomes and the plasma membrane. WIPI-1 is also found in membranes of the endoplasmic reticulum, while WIPI-2 is further detected in membranes close to the Golgi cisternae. WIPI-2 is required for LC3 lipidation and it is recruited to early autophagosomal structures together with Atg16L and ULK1.[1-3]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2-4 µg/mL is recommended using whole extracts of human G-361 and NIH-3T3 cells.

Immunoprecipitation: a working amount of 2.5-5.0 µg is recommended using lysates of rat NRK cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Polson, H.E.J., et al., *Autophagy*, **6**, 506-522 (2010).
2. Proikas-Cezanne, T., et al., *Oncogene*, **23**, 9314-9325 (2004).
3. Proikas-Cezanne, T., and Robenek, H., *J. Cell. Mol. Med.*, **15**, 2007-2010 (2011).

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