

Product Information

Monoclonal Anti-WIPI-1, Clone WIPI1-4

produced in mouse, purified immunoglobulin

Product Number **W4769**

Product Description

Monoclonal Anti-WIPI-1 (mouse IgG1 isotype) is derived from the hybridoma WIPI1-4 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a fragment of human WIPI-1 (GeneID: 55062), conjugated to KLH. The corresponding sequence is identical in mouse and rat. The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Monoclonal Anti-WIPI-1 reacts with human, mouse, rat, and bovine WIPI-1. The antibody may be used in various immunochemical techniques including immunoblotting (49 kDa) and immunoprecipitation.

WIPI-1, the mammalian orthologue of Atg18 in *S. cerevisiae* and *A. thaliana*, is a member of the WIPI subfamily of WD-repeat proteins which are key components of many essential biological functions including signal transduction, transcription regulation and apoptosis. WD-repeat proteins regulate the assembly of multiprotein complexes by presenting a beta-propeller platform for simultaneous and reversible protein-protein interactions. WIPI-1 has a 7-bladed propeller structure and contains a conserved motif for interaction with phospholipids. WIPI-1 is ubiquitously expressed in normal human tissues with highest levels in skeletal muscle, heart and testis. WIPI-1 is aberrantly expressed in human cancer and is linked to starvation-induced autophagy. Endogenous WIPI-1 partially colocalizes with the autophagosomal marker LC3 and induction of autophagy leads to the accumulation of WIPI-1 in large vesicular and cup-shaped structures that are characteristic for autophagy-linked proteins.¹⁻³

Reagent

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

Antibody concentration: ~1.5 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, 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 antibody concentration of 2-4 µg/mL is recommended using a whole extract of G361 cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Proikas-Cezanne, T. et al., *Oncogene*, **23**, 9314-9325 (2004).
2. Proikas-Cezanne, T. et al., *FEBS Lett.*, **581**, 3396-3404 (2007).
3. Mizushima, N. et al., *Cell Struct. Funct.*, **27**, 421-429 (2002).

VS,ST,TD,KAA,PHC,MAM 03/19-1