

Product Information

Anti- WIPI-1 (C-terminal)

produced in rabbit, affinity isolated antibody

Product Number **W2394**

Product Description

Anti-WIPI-1 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 406-421 of human WIPI-1 (GeneID: 55062), 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-1 (C-terminal) recognizes human, mouse and rat WIPI-1. The antibody may be used in various immunochemical techniques including immunoblotting (~ 49 kDa) and immunoprecipitation. Detection of the WIPI-1 band by immunoblotting is specifically inhibited by the immunizing peptide.

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 β -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: ~ 1.0 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 2.5-5.0 μ g/mL is recommended using a whole extract of human G-361 cells.

Immunoprecipitation: a working amount of 5-10 μ g is recommended using lysates of mouse 3T3 or 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. 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).

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