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Product Information

Anti- JMY
produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200379**

Product Description

Anti-JMY is produced in rabbit using as immunogen a synthetic peptide corresponding to the C-terminal region of human JMY (GeneID: 133746), conjugated to KLH. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-JMY recognizes human JMY. The antibody may be used in several immunochemical techniques including immunoblotting (~120 kDa), immunoprecipitation and immunofluorescence. Detection of the JMY band by immunoblotting is specifically inhibited by the immunizing peptide.

JMY (Junction mediating and regulatory protein, p53 cofactor), a protein first identified as a transcriptional co-activator of p53, is a multifunctional actin nucleation factor. JMY contains WH2 [Wiskott Aldrich Syndrome protein (WASp)-homology 2] domains in its C-terminus, which activate Arp2/3. Thus, JMY acts as a nucleation-promoting factor by activating Arp2/3, creating branched filament networks, and also by assembling unbranched filaments directly through a Spire-like mechanism. Over-expression of JMY increases motility while its loss slows cell migration. DNA damage causes JMY to accumulate in the nucleus, where it enhances p53-dependent transcription of pro-apoptotic genes. The activities of JMY as a p53 co-factor or as an actin nucleation factor are regulated by its sub-cellular localization.[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, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.5-1.0 μg/mL is recommended using whole extracts of human WiDr cells.

Immunoprecipitation: a working amount of 5-10 μg is recommended using lysates of human WiDr cells.

Immunofluorescence: a working concentration of 1-2 μg/mL is recommended using human HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Zuchero, J.B., et al., *Nat. Cell Biol.*, **11**, 451-459 (2009).
2. Coutts, A.S., et al., *Proc. Natl. Acad. Sci. USA*, **106**, 19872-19877 (2009).
3. Coutts, A.S., et al., *EMBO Rep.*, **8**, 84-90 (2007).

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