Revision 1

Store at -20C

#5474

Diap2 Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R Mk	Endogenous	130	Rabbit	#O60879	1730

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Diap2 Antibody recognizes endogenous levels of total diap2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human diap2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Formins are a family of large multidomain actin nucleation/polymerization proteins characterized by their catalytic FH2 domains. The mammalian diaphanous-related formin (mDia/diap) subfamily, including mDia1/diap1, mDia2/diap3 and mDia3/diap2, are effectors of Rho family small GTPases. In response to Rho, mDia/diap proteins are involved in the regulation of multiple cell functions including cytoskeletal dynamics, migration, adhesion, polarity and cell shape (reviewed in 1,2).
mDia1/diap1 is activated by GTP-bound Rho, leading to Rho-associated kinase (ROCK)-dependent stress fiber formation (3,4). Rho activation of mDia1 has also been shown to regulate serum response factor (SRF)-dependent transcription (5), and has been implicated in human cancer phenotypes such as ras-mediated transformation, metastasis and invasion (reviewed in 6).
mDia3/diap2, activated by the Rho family small GTPase cdc42, regulates the attachment of microtubules to the kinetochore during mitosis in mammalian cells (7).
Rho-dependent activation of mDia2/diap3 is important in assembly of the contractile ring during cytokinesis (8,9).

Background References

1. Schönichen, A. and Geyer, M. (2010) *Biochim Biophys Acta* 1803, 152-63.
2. Chesarone, M.A. et al. (2010) *Nat Rev Mol Cell Biol* 11, 62-74.
3. Watanabe, N. et al. (1999) *Nat Cell Biol* 1, 136-43.
4. Ishizaki, T. et al. (2001) *Nat Cell Biol* 3, 8-14.
5. Copeland, J.W. and Treisman, R. (2002) *Mol Biol Cell* 13, 4088-99.
6. Narumiya, S. et al. (2009) *Cancer Metastasis Rev* 28, 65-76.
7. Yasuda, S. et al. (2004) *Nature* 428, 767-71.
8. Watanabe, S. et al. (2010) *Mol Biol Cell* 21, 3193-204.
9. Watanabe, S. et al. (2008) *Mol Biol Cell* 19, 2328-38.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.