

mDia2 (C-terminal region) Peptide

Cat. # DX3495

Size 50 µg

Background:

Formins include several families of proteins that regulate actin cytoskeletal dynamics via two conserved formin homology domains, FH1 and FH2. The FH1 region contains poly-proline stretches that promote interactions with profilin. The FH2 domain, located C-terminally to the FH1 domain, is highly conserved in formin proteins and possesses actin nucleation and polymerization activities. Through cooperation of FH1 and FH2, formins construct actin-based structures comprising linear, unbranched filaments that are used in stress fibers, actin cables, microspikes, and contractile rings. A subgroup of the formins is the diaphanous (Dia) family, which includes mDia1, mDia2, and mDia3. The mDia2 protein has been implicated in cell migration and cytokinesis. This Dia protein can nucleate actin polymerization, as well as bind and stabilize microtubules. mDia2 may also have functions in the nucleus, since it is continually shuttled between the cytoplasm and nucleus.

References

Alberts, A.S. (2001) J Biol Chem. 276:2824.
Bartolini, F. et al. (2008) J Cell Biol. 181:523.
Miki, T. et al. (2009) J Biol Chem. 284:5753.

Peptide Sequence:

mDia2 synthetic peptide corresponding to amino acid residues in the C-terminal region of mouse mDia2. This peptide sequence is highly conserved in rat and human mDia2, and has low homology to other formins.

Buffer and Storage:

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

Applications:

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

Specificity:

The peptide is specifically recognized by mDia2 (C-terminal region; DP3491) antibody in ELISA, and has been shown to block the reactivity of DP3491 in Western blot. In addition, the peptide is recommended for use in blocking DP3491 reactivity in immunocytochemistry.

Related Products:

DP3491 mDia2 (C-terminal region) Rabbit Polyclonal
FP3481 FHOD1 (Thr-1141), phospho-specific Rabbit Polyclonal
FX3485 phospho-FHOD1 (Thr-1141) Peptide
AK6060 Actin & Tubulin Antibody Sampler Kit
AP1671 Actin (Tyr-53), phospho-specific Rabbit Polyclonal
RP1361 RhoA (Ser-188), phospho-specific Rabbit Polyclonal

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