

Memo (N-terminal region) Peptide

Cat. # MX3725

Size 50 µg

Background:

During cell migration, actin assembly drives cell membrane protrusion, while microtubules (MTs) extend within protrusions to promote adhesion site turnover. Memo (mediator of ErbB2-driven cell motility) is an effector of the ErbB2 receptor tyrosine kinase involved in breast carcinoma cell migration. This effector may be important for mediating ErbB2-regulated changes in actin and MT dynamics during cell motility. Memo, a 297-amino-acid protein, has homology to class III nonheme iron-dependent dioxygenases, however it has not been shown to display metal binding or enzymatic activity. It has been shown to bind ErbB2 (Tyr-1227) phosphopeptide via its putative enzymatic active site. Memo and PLC γ 1 interaction with ErbB2 is essential for HRG-induced chemotaxis. Furthermore, organization of the lamellipodial actin network is coordinated by signaling from Memo to the RhoA–mDia1 pathway localized to the plasma membrane. In addition, Memo may regulate actin dynamics by promoting cofilin depolymerizing and severing of F-actin.

References

- Meira, M. et al. (2009) J. Cell Sci. 122:787.
Zaoui, K. et al. (2008) J. Cell Biol. 183:401.
Qiu, C. et al. (2008) J. Biol. Chem. 283:2734.

Peptide Sequence:

Memo synthetic peptide corresponding to amino acid residues in the N-terminal region of human Memo. This peptide sequence is highly conserved in rat, mouse, and chicken Memo.

Applications:

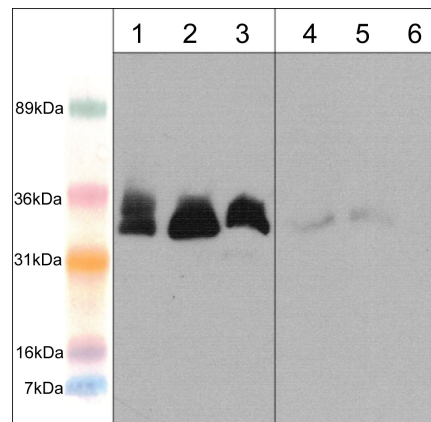
Blocking 1:1000

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.

Related Products:

- MP3721 Memo (N-terminal region) Rabbit Polyclonal
CK6040 Cofilin Phospho-Regulation Antibody Sampler Kit
RP1361 RhoA (Ser-188), phospho-specific Rabbit Polyclonal
DP3491 mDia2 (C-terminal region) Rabbit Polyclonal
PM1561 PLC γ 1 (N-terminal Region) Mouse Monoclonal
PP1491 PLC γ 1 (Tyr-775), phospho-specific Rabbit Polyclonal



Western blot analysis of Memo expression in adult mouse heart (lane 1 & 4), mouse C2C12 cells (lane 2 & 5), and rabbit spleen fibroblast cells (lane 3 & 6). The blot was probed with anti-Memo (N-terminal region) (MP3721; lanes 1-6) in the presence (lanes 4-6) or absence (lanes 1-3) of Memo blocking peptide (MX3725).

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.

Specificity:

The peptide is specifically recognized by Memo (N-terminal) antibody (MP3721) in ELISA, and has been shown to block the reactivity of MP3721 in Western blot. In addition, the peptide is recommended for use in blocking MP3721 reactivity in immunocytochemistry.

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