

# Memo (N-terminal region)

Cat. # MP3721

Host Rabbit Polyclonal

Size 100 µl

## 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 $\gamma$ 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.

## Immunogen:

Memo synthetic peptide (coupled to KLH) 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.

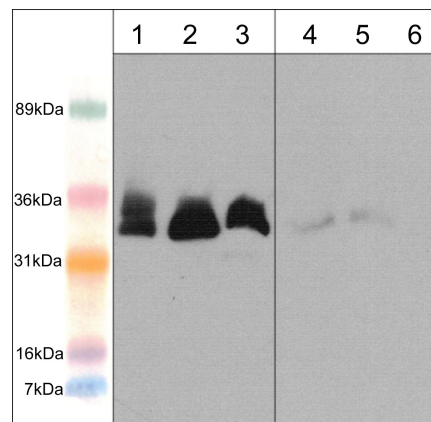
## Applications:

WB 1:1000  
 ELISA 1:2000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

## Related Products:

- AK6060 Actin & Tubulin Antibody Sampler Kit  
 RP1361 RhoA (Ser-188), phospho-specific Rabbit Polyclonal  
 RP1501 Rho (Central Region) Rabbit Polyclonal  
 DP3491 mDia2 (C-terminal region) Rabbit Polyclonal  
 PM1561 PLC $\gamma$ 1 (N-terminal Region) Mouse Monoclonal  
 PP1491 PLC $\gamma$ 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:

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at  $-20^{\circ}\text{C}$ . Do not aliquot. Stable for 1 year.

## Specificity:

This antibody was affinity purified using Memo (N-terminal region) peptide (without carrier). The antibody detects a significant 33 kDa\* protein corresponding to the molecular mass of Memo on SDS-PAGE immunoblots of mouse heart, mouse C2C12, and rabbit spleen fibroblasts.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

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