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Product Information

Anti-MIB1 (C-terminal)
produced in rabbit, affinity isolated antibody

Catalog Number **M5948**

Product Description

Anti-MIB1 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 924-939 of human MIB1 (GeneID: 57534), conjugated to KLH. The corresponding sequence is identical in rat and mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MIB1 (C-terminal) specifically recognizes human, rat, and mouse MIB1. The antibody may be used in several immunochemical techniques including immunoblotting (~110 kDa). Staining of the MIB1 band in immunoblotting is specifically inhibited with the immunizing peptide.

MIB1 (also known as Mindbomb homology 1, DIP-1, DAPK interacting protein 1) are E3 ubiquitin ligases highly conserved from flies to humans. They ubiquitinate the Notch ligand, Delta, and promote its endocytosis.[1, 2] Mouse Mib1 and Mib2 share 52% similarity in their amino acid sequences and contain a similar domain organization, including two herc2/mib domains, one ZZ zinc finger, one mib repeat, ankyrin repeats, and two RING domains.[1]

MIB1 is abundantly expressed in both embryos and adult tissues, whereas MIB2 is highly expressed in adult tissues, but almost not at all in embryos.[1] Knockout of *MIB1* in mice results in embryonic mortality with many defects observed in somitogenesis, neurogenesis, vasculogenesis, and cardiogenesis. Conditional knockout of *MIB1* in various tissues revealed the repressive Notch phenotypes as abnormal cerebellum and skin development and arterial specifications. This reveals the significance of MIB1 in mammalian development and cellular differentiation.[2, 3] MIB1 also plays a role in neuronal morphogenesis partially through physical interaction with CDK5/p35.[4]

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 antibody concentration of 0.5-1 µg/mL is recommended using lysates of A549 or PC12 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. Itoh, M., et al., *Dev. Cell*, **4**, 67-82 (2003).
2. Koo, B.K., et al., *Development*, **132**, 3459-3470 (2005).
3. Koo, B.K., et al., *PloS One*, **2**, e1221 (2007).
4. Choe, E.A., et al., *J. Neurosci.*, **27**, 9503-9012 (2007).

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