

Product Information

Anti-MIB2 (C-terminal)

produced in rabbit, IgG fraction of antiserum

Catalog Number: **M5698**

Product Description

Anti-MIB2 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 950-966 of human MIB2 (GeneID: 142678) conjugated to KLH. The corresponding sequence differs by one amino acid in mouse. Whole antiserum is fractionated and then further purified by ion-exchange chromatography to provide the IgG fraction of antiserum that is essentially free of other rabbit serum proteins.

Anti-MIB2 (C-terminal) specifically recognizes human and rat MIB2. The antibody may be used in several immunochemical techniques including immunoblotting (~110 kDa). Staining of the MIB2 band in immunoblotting is specifically inhibited with the immunizing peptide.

MIB1 and MIB2 (also known as Mindbomb homology 2, DIP-1, skeletrphin, novelzin) 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 While *MIB1* knock-out in mice results in embryonic lethality,³ targeted disruption of *MIB2* results in exencephaly and appears to be less essential in mouse development.⁴

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

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 dilution of 1:500-1:1,000 is recommended using lysates of rat skeletal muscle.

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. Wu, J.I., et al., *Genesis*, **45**, 722-727 (2007).

SG,YD,KAA,PHC 01/09-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications.

Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply.

Please see reverse side of the invoice or packing slip.