

Product Information

Anti-MAN1C1

produced in rabbit, affinity isolated antibody

Product Number **SAB4200242**

Product Description

Anti-MAN1C1 is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human MAN1C1 (GeneID: 57134), conjugated to KLH. The corresponding sequence is identical in monkey, mouse, rat, bovine, and canine. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MAN1C1 recognizes human and rat MAN1C1. The antibody may be used in various immunochemical techniques including immunoblotting (~71 kDa). Detection of the MAN1C1 band by immunoblotting is specifically inhibited by the immunizing peptide.

Mannosidase, alpha, class 1C, member 1 (MAN1C1), also known as MAN1A3, is a member of the glycosyl hydrolase 47 family. MAN1C1 is a type II membrane protein with sequence similarity to class I alpha1,2-mannosidases, that localizes to the Golgi apparatus membrane. It is involved in the maturation of Asn-linked oligosaccharides and quality control.

MAN1C1 trims alpha-1,2-linked mannose residues from Man₉GlcNAc₂ to produce the Man₅GlcNAc₂ processing intermediate. MAN1C1 overexpression was found to accelerate endoplasmic reticulum-associated protein degradation (ERAD) of terminally misfolded human null Hong Kong α 1-antitrypsin.¹⁻³

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

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.1-0.2 μ g/mL is recommended using whole extracts of HEK-293 cells overexpressing human MAN1C1 and 5-10 μ g/mL using whole extracts of rat liver.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Tremblay, L.O., and Herscovics, A., *J. Biol. Chem.*, **275**, 31655-31660 (2000).
2. Mast, S.W., and Moremen, K.W., *Methods Enzymol.*, **415**, 31-46 (2006).
3. Hosokawa, N., et al., *Biochem. Biophys. Res. Commun.*, **362**, 626-632 (2007).

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