

Product Information

Anti-MAN1B/ MAN1A2 (C-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200279**

Product Description

Anti-MAN1B/MAN1A2 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to a C-terminal sequence of human MAN1A2 (GeneID: 10905), conjugated to KLH. The corresponding sequence differs by a single amino acid in rat and by two amino acids in mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MAN1B/MAN1A2 (C-terminal) recognizes human MAN1B. The antibody may be used in several immunochemical techniques including immunoblotting (~70kDa) and immunofluorescence. Detection of the MAN1B band by immunoblotting is specifically inhibited by the immunizing peptide.

α -1,2-mannosidase IB (MAN1B), also known as mannosidase, alpha, class 1A, member 2 (MAN1A2), is a Golgi resident transmembrane protein that belongs to the glycosyl hydrolase family 47. MAN1B is a type II membrane protein of 73 kDa with a cytoplasmic region of about 35 amino acids, a Ca^{2+} binding consensus sequence, and a single N-glycosylation site. α -mannosidases function at different stages of N-glycan maturation in mammalian cells. MAN1B progressively trims α -1,2-linked mannose residues from $\text{Man}_9\text{GlcNAc}_2$, to form the processing intermediate $\text{Man}_5\text{GlcNAc}_2$.¹⁻⁴

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 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 0.5-1.0 $\mu\text{g/mL}$ is recommended using whole extracts of HEK-293T cells over-expressing human MAN1A2.

Immunofluorescence: a working concentration of 1-2 $\mu\text{g/mL}$ is recommended using HeLa cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Herscovics, A., et al., *J. Biol. Chem.*, **269**, 9864-9871 (1994).
2. Schneikert, J., and Herscovics, A., *Glycobiol.*, **4**, 445-450 (1994).
3. Tremblay, L.O., et al., *Glycobiol.*, **8**, 585-595 (1998).
4. Mast, S.W., and Moremen, K.W., *Methods Enzymol.*, **415**, 31-46 (2006).

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