

Recombinant Human MAN1B1

Catalog No: C918

Description	Recombinant Human Endoplasmic Reticulum Mannosyl-Oligosaccharide 1,2- α -Mannosidase/MAN1B1 is produced by our Mammalian expression system and the target gene encoding Asp106-Ala699 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Endoplasmic Reticulum Mannosyl-Oligosaccharide 1;2-Alpha-Mannosidase; ER Alpha-1;2-Mannosidase; ER Mannosidase 1; ERMan1; Man9GlcNAc2-Specific-Processing Alpha- Mannosidase; Mannosidase Alpha Class 1B Member 1; MAN1B1
Accession No.	Q9UKM7
Formulation	Supplied as a 0.2 μ m filtered solution of 50mM TrisHCL, 10mM reduced Glutathione, pH 8.0.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/ μ g (1 IEU/ μ g) as determined by LAL test.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at $< -20^{\circ}\text{C}$, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Amino Acid Sequence

DHWKALAFRLEEEQKMRPEIAGLKPANPPVLPAPQKADTDPENLPEISSQKTQRHIQRGPPHLQIRPPSQDL
KDGTQEEATKRQEAPVDPRPEGDPQRTVISWRGAVIEPEQGTELPSSRAEVPTKPLPPARTQGTPVHLN
YRQKGVIDVFLHAWKGYRKFAWGHDELKPVSRFSFWFGLGLTLIDALDTMWILGLRKEFEEARKWVSKKL
HFEKDVDVNLFFESTIRILGGLLSAYHLSGDSLFLRKAEDFGNRLMPAFRTPSKIPYSDVNIGTGVAHPPRWTS
DSTVAEVTISQLEFRELSTLTDGKKFQEAQVKTQHIHGLSGKKDGLVPMFINTHSGLFTHLGVFTLGLARAD
SYEYLLKQWIGGKQETQLLEDYVEAIEGVRTHLRHSEPSKLTFTVGEAHGRFSAKMDHLVCFLPGTLAL
GVYHGLPASHMELAQELMETCYQMNRQMETGLSPEIVHFNLYPQPGRRDVEVKPADRHNLRLPETVESLF
YLYRVTGDRKYQDWGWEILQSFSRFRTRVPSGGYSSINNVQDPQKPEPRDKMESFFLGETLKYLLFLLFSDDP
NLLSLDAYVFNTTEAH PLPIWTPAVDHHHHHH

Background

Endoplasmic Reticulum Mannosyl-Oligosaccharide 1,2- α -Mannosidase (MAN1B1) belongs to the glycosyl hydrolase 47 family. MAB1B1 is a single-pass type II membrane protein and widely expressed in many tissues. MAB1B1 is involved in glycoprotein quality control targeting of misfolded glycoproteins for degradation. MAB1B1 can be inhibited by both 1-deoxymannojirimycin (dMNJ) and kifunensine. Defects in MAN1B1 are the cause of mental retardation autosomal recessive type 15 (MRT15). Mental retardation is characterized by significantly below average general intellectual functioning, it is also associated with impairments in adaptive behavior and manifested during the developmental period.

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