10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAN1B1 Rabbit pAb

Catalog # AP97549

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9UKM7
Other Accession	Q9UKM7
Predicted	Rat, Pig, Human, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79580
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MAN1B1
Epitope Specificity	211-320/699
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glycosyl hydrolase 47 family.
DISEASE	Mental retardation, autosomal recessive 15 (MRT15) [MIM:614202]: A disorder characterized by significantly below average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. Note: The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an enzyme belonging to the glycosyl hydrolase 47 family. This enzyme functions in N-glycan biosynthesis, and is a class I alpha-1,2-mannosidase that specifically converts Man9GlcNAc to Man8GlcNAc isomer B. It is required for N-glycan trimming to Man5-6GlcNAc2 in the endoplasmic-reticulum-associated degradation pathway. Mutations in this gene cause autosomal-recessive intellectual disability. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 11. [provided by RefSeq, Dec 2011]

Additional Information

Gene ID	11253
Other Names	ERMAN1; ERManI; MANA-ER; MRT15; E430019H13Rik; Gm108; MA1B1_HUMAN; MAN1B1; ER alpha-1, 2-mannosidase; ER mannosidase 1 (ERMan1); Man9GlcNAc2-specific-processing alpha-mannosidase; Mannosidase alpha class 1B member 1; 3.2.1.113; mannosidase, alpha, class 1B, member 1; endoplasmic reticulum alpha-mannosidase 1; alpha 1, 2-mannosidase; endoplasmic reticulum mannosyl-oligosaccharide 1, 2-alpha-mannosidase 1; ER alpha 1, 2-mannosidase; Man9GlcNAc2-specific processing alpha-mannosidase; endoplasmic Reticulum Class I alpha-mannosidase

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	MAN1B1
Function	Involved in glycoprotein quality control targeting of misfolded glycoproteins for degradation. It primarily trims a single alpha-1,2-linked mannose residue from Man(9)GlcNAc(2) to produce Man(8)GlcNAc(2), but at high enzyme concentrations, as found in the ER quality control compartment (ERQC), it further trims the carbohydrates to Man(5-6)GlcNAc(2).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein
Tissue Location	Widely expressed.

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