

# Rabbit Anti-MAN1B1 antibody

## SL18644R

Product Name:	MAN1B1
Chinese Name:	内质网α-甘露糖苷酶1抗体
Alias:	Alpha 1 2 mannosidase; Endoplasmic reticulum alpha mannosidase 1; Endoplasmic reticulum mannosyl oligosaccharide 1 2 alpha mannosidase 1; Endoplasmic reticulum mannosyl oligosaccharide 1 2 alpha mannosidase; ER alpha 1 2 mannosidase; Man9GlcNAc2 specific processing alpha mannosidase; MANA ER; Mannosidase alpha class 1B member 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	80kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAN1B1:211-320/699
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	PubMed
Product Detail:	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]

### Function:

Involved in glycoprotein quality control targeting of misfolded glycoproteins for degradation. It primarily trims a single alpha-1,2-linked mannose residue from Man9GlcNAc2 to produce Man8GlcNAc2, but at high enzyme concentrations, as found in the ER quality control compartment (ERQC), it further trims the carbohydrates to Man5-6GlcNAc2.

#### **Subcellular Location:**

Endoplasmic reticulum membrane; Single-pass type II membrane protein.

## Tissue Specificity:

Widely expressed.

#### **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.

#### Similarity:

Belongs to the glycosyl hydrolase 47 family.

# SWISS:

Q9UKM7

#### Gene ID:

11253

#### Database links:

Entrez Gene: 11253 Human

Entrez Gene: 227619 Mouse

Omim: 604346 Human

SwissProt: Q9UKM7 Human

Unigene: 591887 Human

Important Note:
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