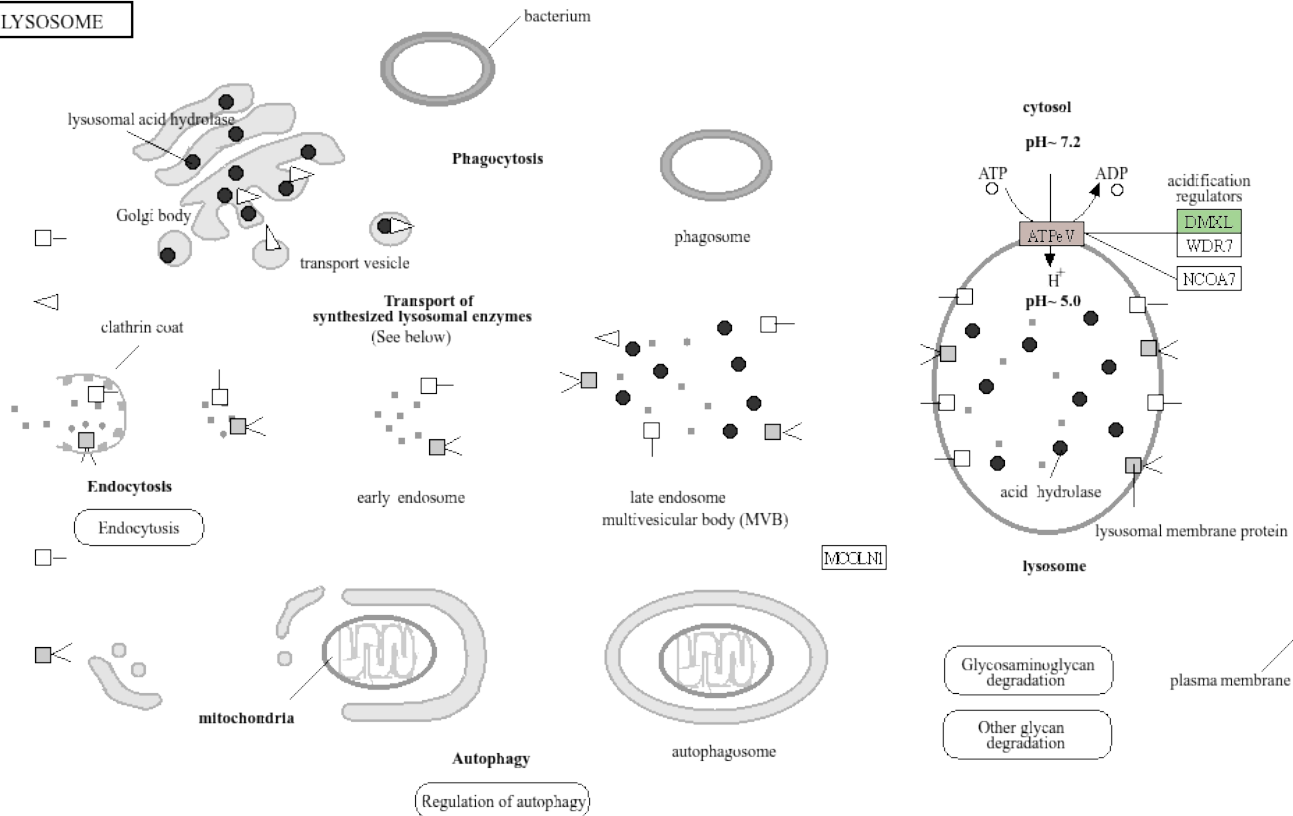


## LYSOSOME



## Lysosomal acid hydrolases

### proteases

cathepsins napsin LGMN TPP1

### glycosidases

GLA GLE GAA GBA IDUA  
NAGA NAGLU GALC GUSB FUC1  
HEXA/B MANB LAMAN NEU1 HYAL1

### sulfatases

ARS GALNS GNS IDS SGSH

### lipases

LIPA LYPLA3

### nuclease

DNase II

### phosphatase

ACP2 ACP5

### sphingomyelinase

SMPD1

### ceramidase

ASAHI

### aspartylglucosaminidase

AGA

## Other lysosomal enzymes and activators

saposin GM2A CLN1

## Lysosomal membrane proteins

### major lysosomal membrane proteins

LAMP LIMP

### minor lysosomal membrane proteins

NPC cystosin sialin NFAMF LAPTM  
ABCA2 ABCB9 ACP2 endolyn LALP70  
sortilin CLN3 CLN5 CLN7 HGNAT  
MDCLN1 LITAF mEAK7

