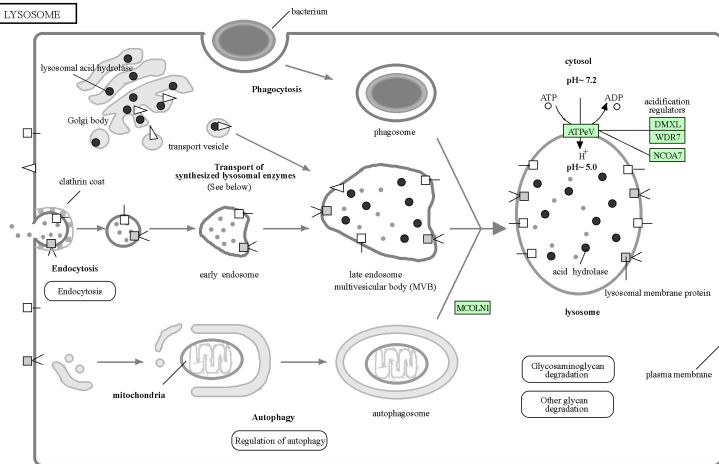


# LYSOSOME



## Lysosomal acid hydrolases

### proteases

cathepsins, trypsin, LGMN, TPP1

### glycosidases

GLA, GLB, GAA, GBA, IDUA, NAGA, NAGLU, GALC, GUSB, FUCAL, HEXA/B, MANB, LAMAN, NEU1, HYAL1

### sulfatases

ARS, GALNS, GNS, IDS, SGSH

### lipases

LIPA, LYPLA3, DNaseII, ACP2, ACP5

### sphingomyelinase

SMPD1, ASAH1, aspartylglucosaminidase

## Other lysosomal enzymes and activators

asposin, GM2A, CLN1

## Lysosomal membrane proteins

### major lysosomal membrane proteins

LAMP, LIMP

### minor lysosomal membrane proteins

NPC, cystinosin, sialin, NRAM, LAPTM, ABCA2, ABCB9, ACP2, endolym, LALP70, sortilin, CLN3, CLN5, CLN7, HGSNAT, MCOLN1, LITAF

