
Supplementary information

PLA2G15 is a BMP hydrolase and its targeting ameliorates lysosomal disease

In the format provided by the
authors and unedited

Supplementary Information guide

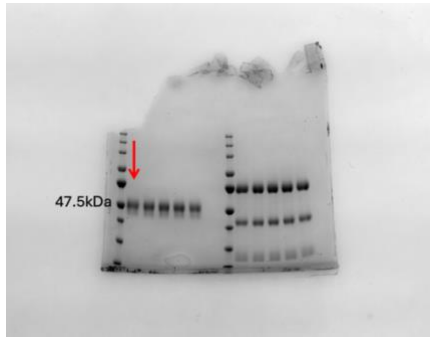
Nyame et al. PLA2G15 is a BMP Hydrolase and its Targeting Ameliorates Lysosomal Disease

Table of Contents

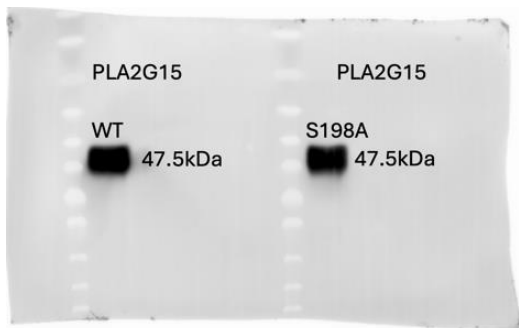
Supplementary Fig. 1	2-4
Uncropped Coomassie stain of Extended Data Fig. 1a	2
Uncropped Western blot of Extended Data Fig. 1b	2
Uncropped Western blot of Extended Data Fig. 3b	2
Uncropped Coomassie stain of Extended Data Fig. 3a	2
Uncropped Coomassie stain of Extended Data Fig. 3d	3
Uncropped Western blot of Extended Data Fig. 3d	3
Uncropped Western blots of Extended Data Fig. 6i	4
Supplementary Table Legends	5

Supplementary Fig. 1

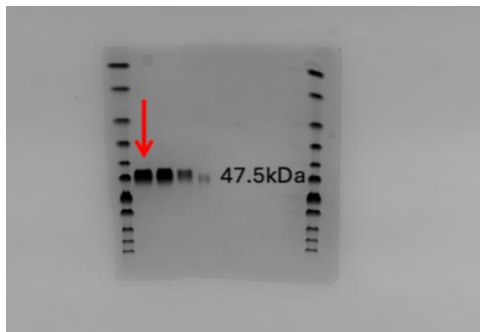
The unprocessed coomassie stains and immunoblots associated with the data presented in the main figures and extended data figures.



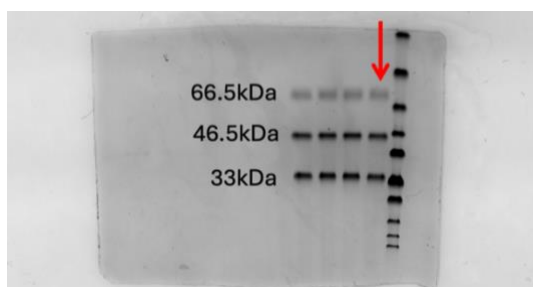
Uncropped Coomassie stain of Extended Data Fig. 1a (PLA2G15- His WT)



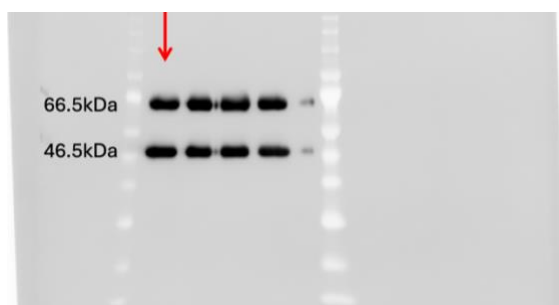
Uncropped Western blot of Extended Data Fig. 1b (left; PLA2G15- His WT) and Extended Data Fig. 3b (right PLA2G15-His S918A) using anti-His



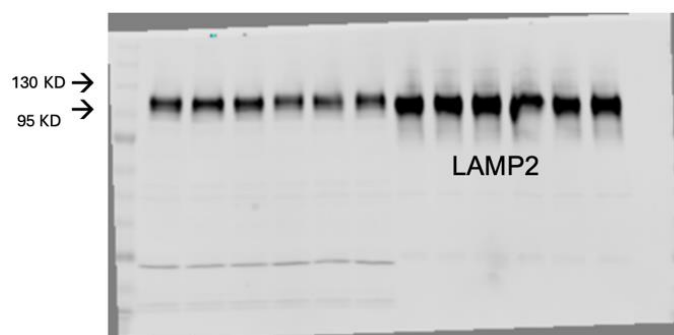
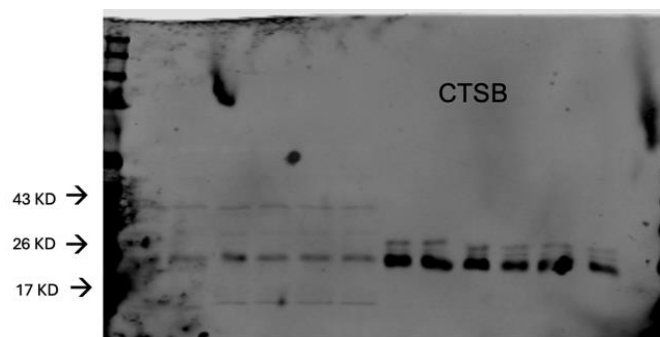
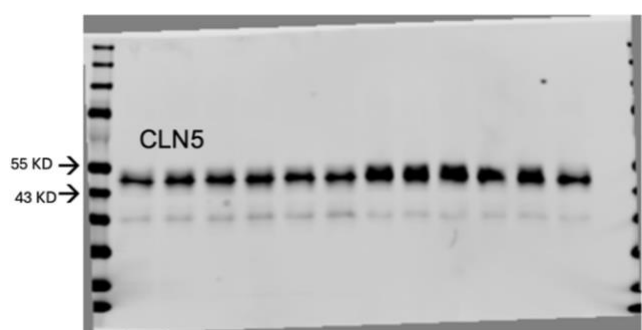
Uncropped Coomassie stain of Extended Data Fig. 3a (PLA2G15-His S198A protein)



Uncropped Coomassie stain of Extended Data Fig. 3d (PLBD2-His WT protein)



Uncropped Western blot of Extended Data Fig. 3d (PLBD2-His WT protein using anti-His)



Uncropped Western blot of Extended Data Fig. 6i

Lane 1-3 WT whole cell
 Lane 4-6 PLA2G15 KO whole cell
 Lane 7-9 WT LysolP
 Lane 10-12 PLA2G15 LysolP

Supplementary Tables

Supplementary Table 1: Targeted BMP analyses of lysosomes and whole cells from PLA2G15-deficient and wildtype HEK293T cells. Related to Extended Data Fig. 6a,b

Supplementary Table 2: Targeted BMP analyses from wildtype and PLA2G15-deficient HEK293T cells. Related to Fig. 3a,b

Supplementary Table 3: Targeted BMP analyses from PLA2G15-deficient and wildtype HeLa cells. Related to Extended Data Fig. 6g

Supplementary Table 4: Targeted BMP analyses from PLA2G15-deficient mouse tissues and their control counterparts. Related to Fig. 3d-f

Supplementary Table 5: Targeted lipidomic analyses from PLA2G15-deficient mouse tissues, cells and lysosomes, and their control counterparts. Related to Fig. 6h

Supplementary Table 6: Haploid genetic screening data for PFO staining in wildtype and NPC1-deficient cells. Related to Extended Data Fig. 9a-f

Supplementary Table 7: Targeted BMP and Hemi-BMP analyses from NPC1-deficient or/and PLA2G15-deficient mouse tissues and their control counterparts. Related to Extended Data Fig. 10a

Supplementary Table 8: Untargeted lipidomic analyses from NPC1-deficient or/and PLA2G15-deficient mouse tissues and their control counterparts. Related to Extended Data Fig. 10b-d

Supplementary Table 9: CNS Histopathological Evaluations of NPC1-deficient or/and PLA2G15-deficient mouse tissues and their control counterparts. Related to Extended Data Fig. 10e,f

Supplementary Table 10: Materials, reagents and multiple reaction monitoring (MRM) transitions table for targeted lipid and metabolite analyses. Related to methods