**Baudot and Wang et al, 2022, PNAS**

**Glycan degradation promotes macroautophagy**

**Readme file for raw data on Enlighten database**

**Figure1\_VW (folder)**

Figure 1a/b – schematics, no raw data

Figure 1c – raw qPCR data: Figure1c\_EFUD-QPCR.pzf

Figure 1d – FUCA1 activity assay raw data: Figure1d\_EFUD-activity assay.pzf

Figure 1e – H&E histopathology, raw TIF files in subfolder: Figure1e\_H&E

Figure 1f – AAL histopathology, raw TIF files in subfolder: Figure1f\_AAL

**Figure2\_VW (folder)**

Figure 2a – raw qPCR data: Figure 2a\_QPCR ctrl vs cre.pzf

Figure 2b – FUCA1 activity assay raw data: Figure 2b\_enzymatic activity ctrl vs cre.pzf

Figure 2c – LysoTracker flow cytometry raw data: Figure 2c\_LysoTracker\_X5\_AB330.pzf

Figure 2d – immunofluorescence images in subfolder: Figure 2d\_IF images 231012; quantification data: Figure 2d\_LC3 Lamp2 microscopy.pzf

Figure 2e – uncropped Western blots in subfolder: Figure 2e\_Western blots\_EXA215

Figure 2f – uncropped Western blots in subfolder: Figure 2f\_Western blots; quantification: Figure 2f\_LC3 WB quantifications.pzf

Figure 2g – LC3 histology in subfolder: Figure 2g\_LC3 histology; quantification: Figure 2g\_LC3 histology quantifications.pzf

**Figure3\_VW (folder)**

Figure 3a – uncropped Western blots in subfolder: Figure 3A Western blots LC3 actin; quantification: Figure 3A\_EXA292\_EXA293\_BafA1\_HCQ quantification.pzfx

Figure 3b – uncropped Western blots in subfolder: Figure 3B Western blots mitoprofile actin; quantification: Figure 3B\_EXA289 mitoprofile quantification after CCCP.pzfx

Figure 3c – uncropped Western blots in subfolder: Figure 3C Western blots LC3 actin; quantification: Figure 3C\_X5VWPNAS04 X5VWPNAS08 EBSS timecourse quantification.pzfx

Figure 3D – raw electron microscopy images in subfolder: Figure 3D EM images

**Figure4\_VW (folder)**

Figure 4a – uncropped Western blots in subfolder: Figure 4a\_X5\_JO1157\_GAA IP

Figure 4b – uncropped Western blots in subfolder: Figure 4b\_X5\_JO1161\_GBA IP

Figure 4c – uncropped Western blots in subfolder: Figure 4c\_X5\_JO1165\_GAA GBA ERK +- EBSS

Figure 4d – raw data on enzymatic activity: Figure 4d\_total enzymatic activity\_VW.pzf

Figure 4e – raw/unprocessed immunofluorescence images in subfolder: Figure 4e\_IF images LC3 Lamp2 DAPI

Figure 4f – uncropped Western blots in subfolder: Figure 4f\_Western blots Stx17 actin; quantification: Figure 4f\_X5VWPNAS04 X5VWPNAS08 EBSS timecourse quantification.pzfx

**Supp Figure1\_VW (folder)**

Figure S1a – raw TIF files of UEA-I staining in folder

**Supp Figure2\_VW (folder)**

Figure S2a/b/c – raw data on animal survival and weights in subfolders

**Supp Figure3\_VW (folder)**

Figure S3a – raw TIF files of VDAC staining of brain in subfolder: 20211104 EFUD Fuca1 brains VDAC staining

**Supp Figure4\_VW (folder)**

Figure S4a – raw data and quantification of DQ-BSA/dextran experiment: Figure S4a\_X5VWPNAS11-14-16 DQ-BSA and dextran quantifications.pzfx

Figure S4b/c – uncropped Western blots in subfolder: Figure S4bc Western blots LC3 actin; quantification: Figure S4bc\_X5VWPNAS04 X5VWPNAS08 EBSS timecourse quantification.pzfx

Figure S4d – raw TIF files of immunofluorescence in subfolder: Figure S4d IF images

**Supp Figure5\_VW (folder)**

Figure S5a – raw data of FUCA1 activity assay: Figure S5a\_total enzymatic activity\_VW.pzf

Figure S5b – raw TIF files of immunofluorescence in subfolder: Figure S5b Lamp2-LC3 IF images + quant; derived from data in **Figure4\_VW (folder)>** **Figure 4e\_IF images LC3 Lamp2 DAPI**

Figure S5c – uncropped Western blots in subfolder: Figure S5c Western blots Stx17 actin; quantification: Figure S5cd\_X5VWPNAS04 X5VWPNAS08 EBSS timecourse quantification.pzfx

Figure S5d – uncropped Western blots in subfolder: Figure S5d Western blots Stx17 actin; quantification: Figure S5cd\_X5VWPNAS04 X5VWPNAS08 EBSS timecourse quantification.pzfx

Figure S5e – uncropped Western blots in subfolder: Figure S5e Western blots Stx17 actin