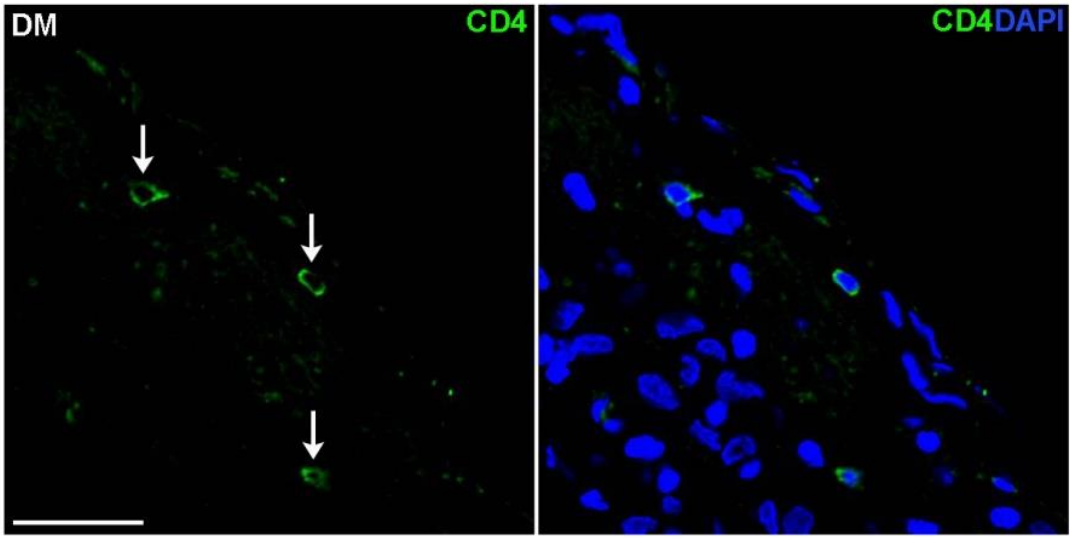
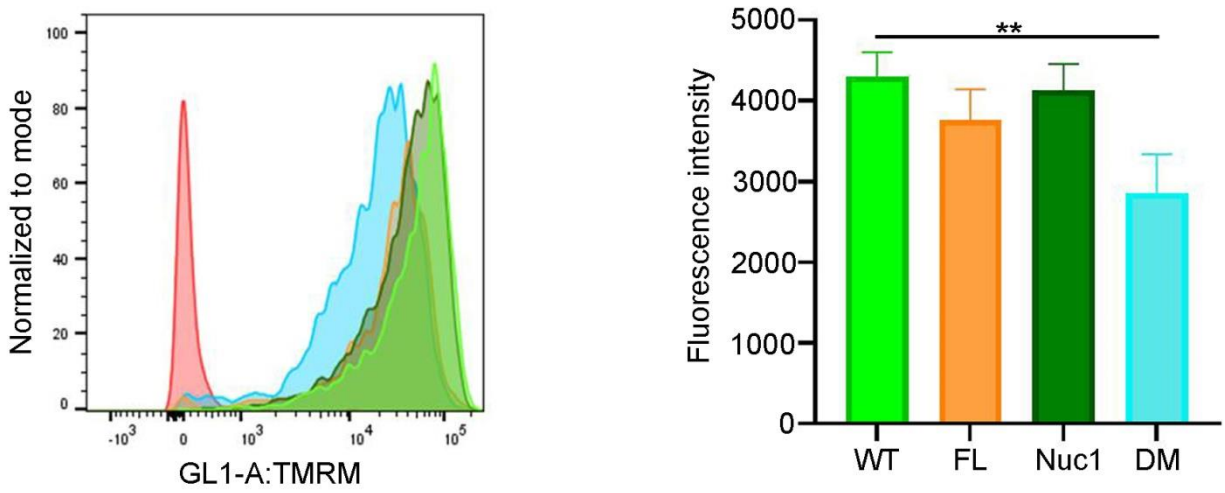
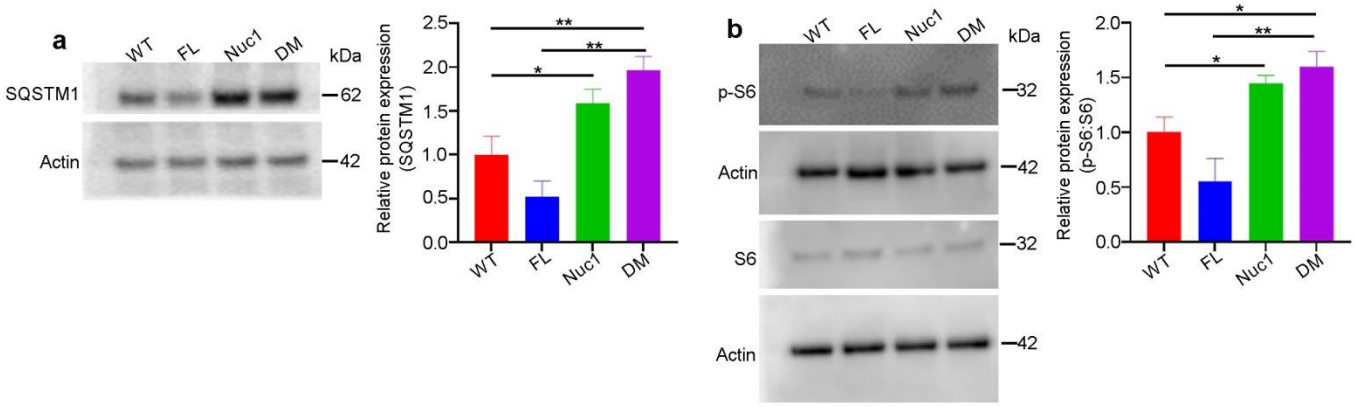
**Supplementary Figures and Legends**



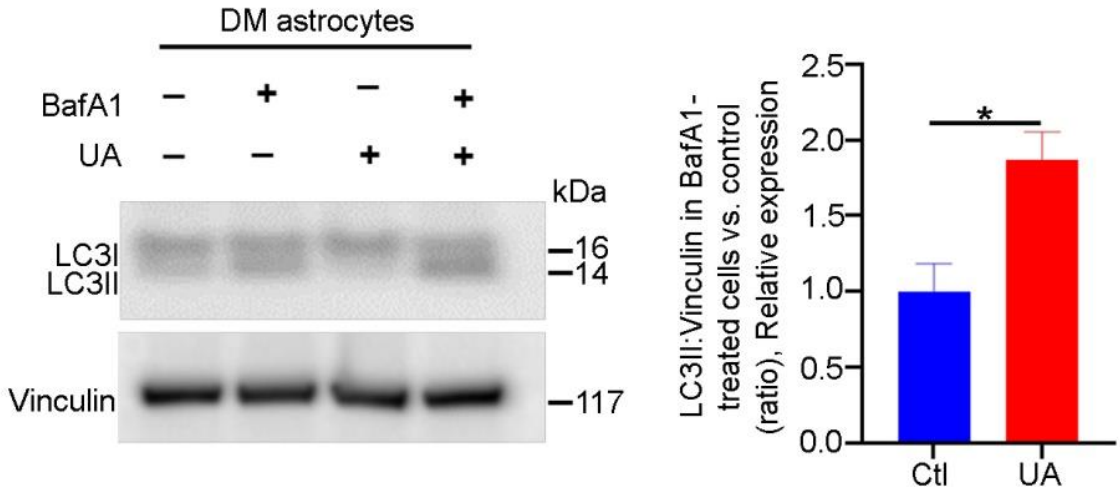

**<u>Supplementary Figure S1</u>**. Inflammation is activated in DM optic nerve. Immunohistochemical analysis of the DM optic nerve showed the presence of CD4-positive T lymphocytes (arrows). Scale bar: 50 μm.




**Supplementary Figure S2**. The mitochondrial membrane potential is reduced in DM astrocytes. Representative TMRM fluorescence intensity histogram from a flow cytometric analysis shows significantly lower fluorescence intensity in DM astrocytes corresponding to lower membrane potential. Data are mean ± SEM. n = 3, ** P < 0.01.




**Supplementary Figure S3**. mTORC1 is overactivated in DM optic nerves. (**a**,**b**) Optic nerves from all 4 genotypes were dissected and protein lysates were analyzed by immunoblotting. The representative immunoblotting images showed that the level of SQSTM1/p62, and the ratio of PS6:S6 are increased in the optic nerves of DM rats. Data are mean ± SEM from 3 independent experiments repeated in triplicate. * $P < 0.05$, ** $P < 0.01$.




**Supplementary Figure S4**. UA treatment induces autophagy in DM astrocytes. DM astrocytes were treated with UA (25 μM) for 24 h. In the last 3 h of culture, 50 nM BafA1 was added and the levels of autophagosome-positive LC3II isoform were analyzed by immunoblotting. A significant increase in the accumulation of autophagosomes positive for the LC3II isoform was observed in UA-treated cells relative to those untreated after BafA1 treatment. * $P < 0.05$.