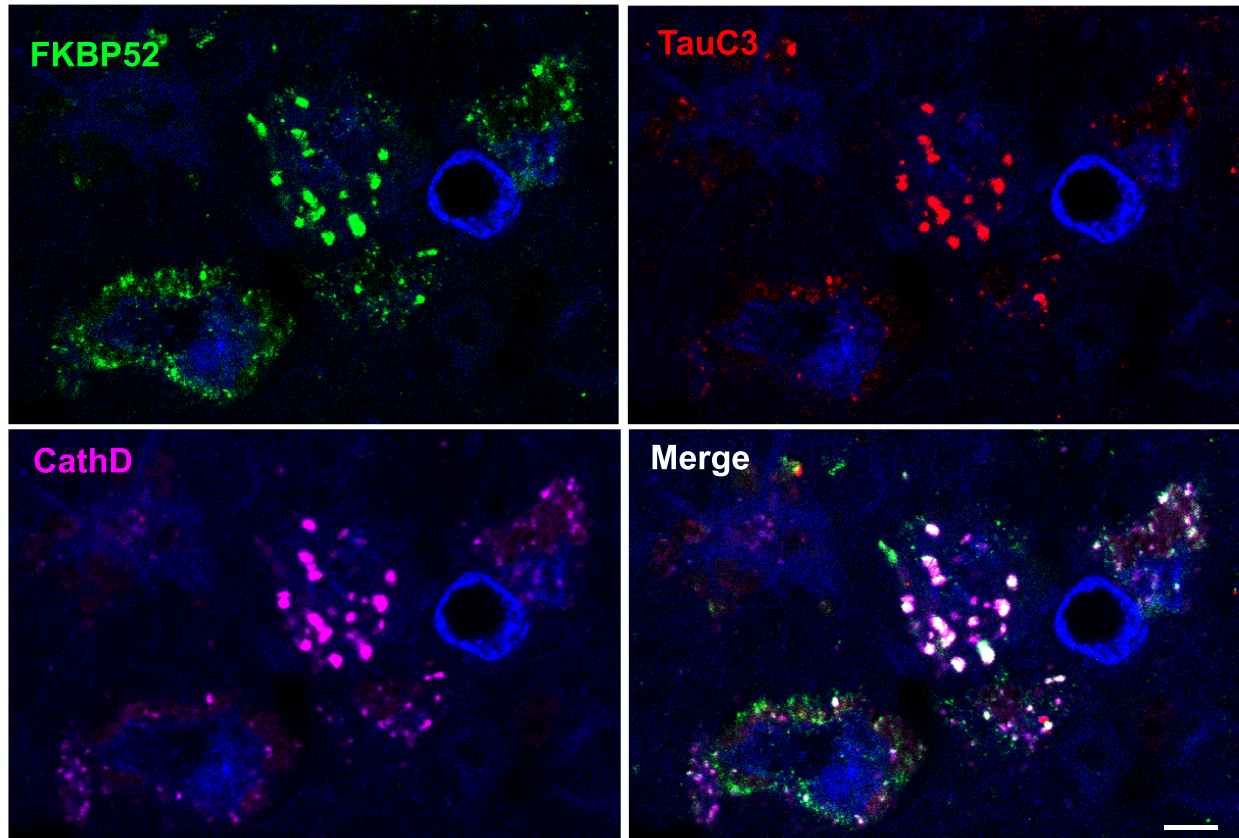


Supplementary Material

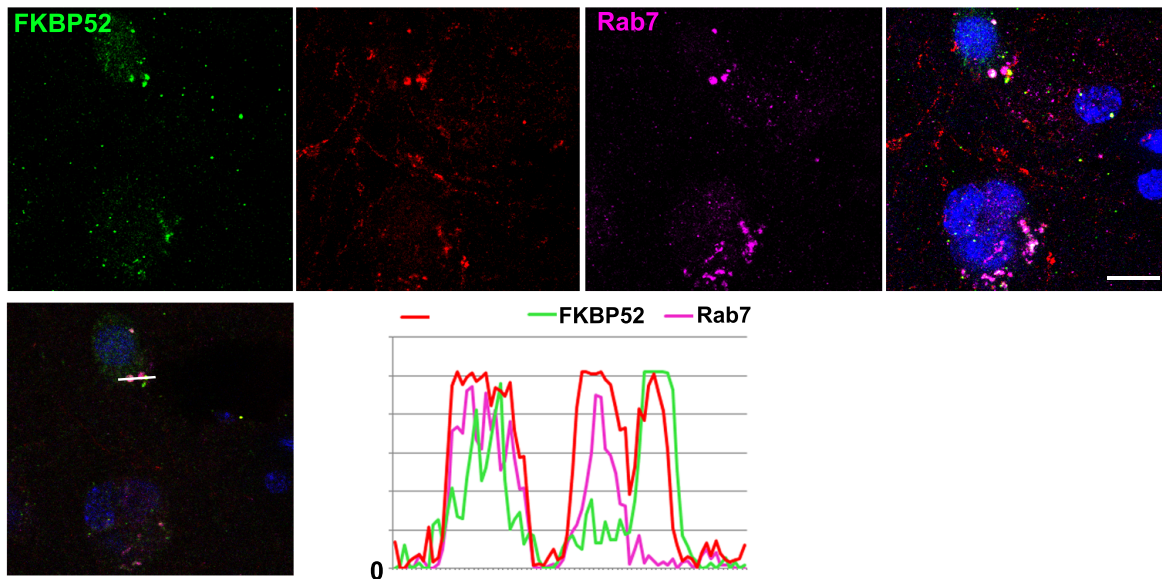
Concomitant Neuronal Tau Deposition and FKBP52 Decrease Is an Early Feature of Different Human and Experimental Tauopathies

Supplementary Figure 1. Triple labeling experiment on a FTLD-Tau frontal cortex section. FKBP52 (green) colocalizes with pathological Tau-D421 deposits (red) in enlarged cathepsin D positive (magenta) lysosomal vesicles.

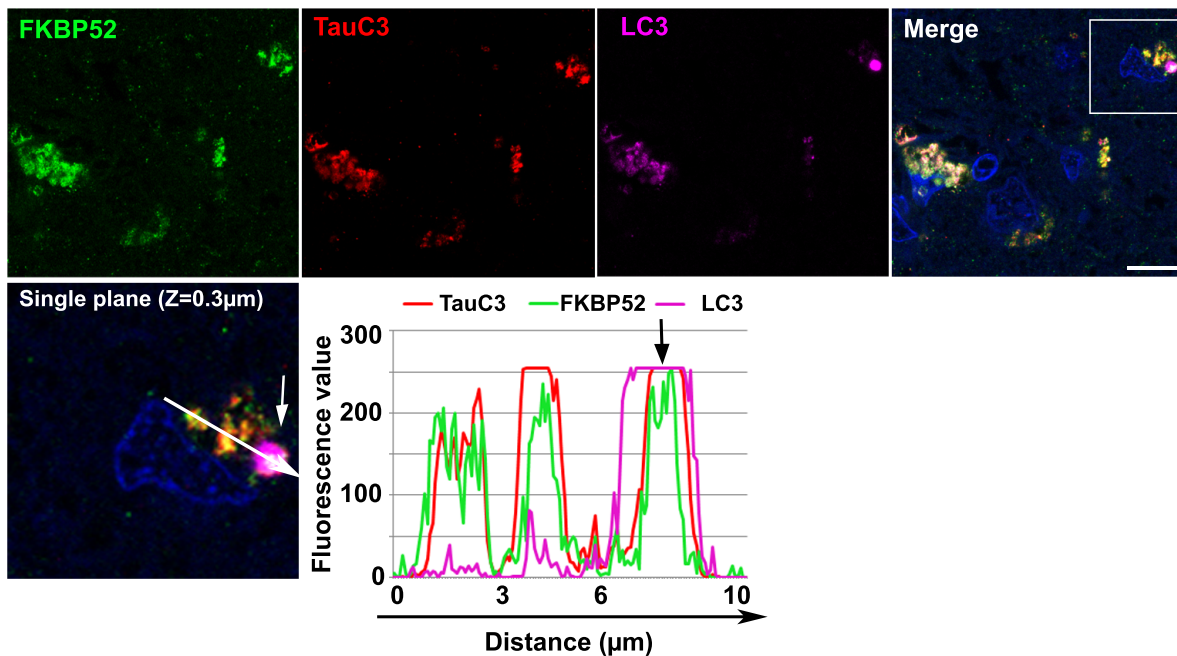


Supplementary Figure 2. Colocalization of FKBP52 and a truncated Tau isoform recognized by the TauC3 antibody with ALP markers. A) Triple labeling experiment of familial FTLD-Tau frontal cortex showing (above) the colocalization of FKBP52 (green) and the caspase-cleaved Tau-D421 (red) with Rab7 (magenta), a late endosome-lysosome associated small GTPase, and the corresponding immunofluorescence profiles with the colocalization of the three respective signals (below). B) Triple labeling experiment of a familial FTLD-Tau frontal cortex section showing the colocalization of FKBP52 (green) and the caspase-cleaved TauC3 (red) with the autophagosome marker LC3 (magenta, above) and the associated immunofluorescence profiles showing the colocalization of the three respective signals (below). Scale bar =10 μ m.

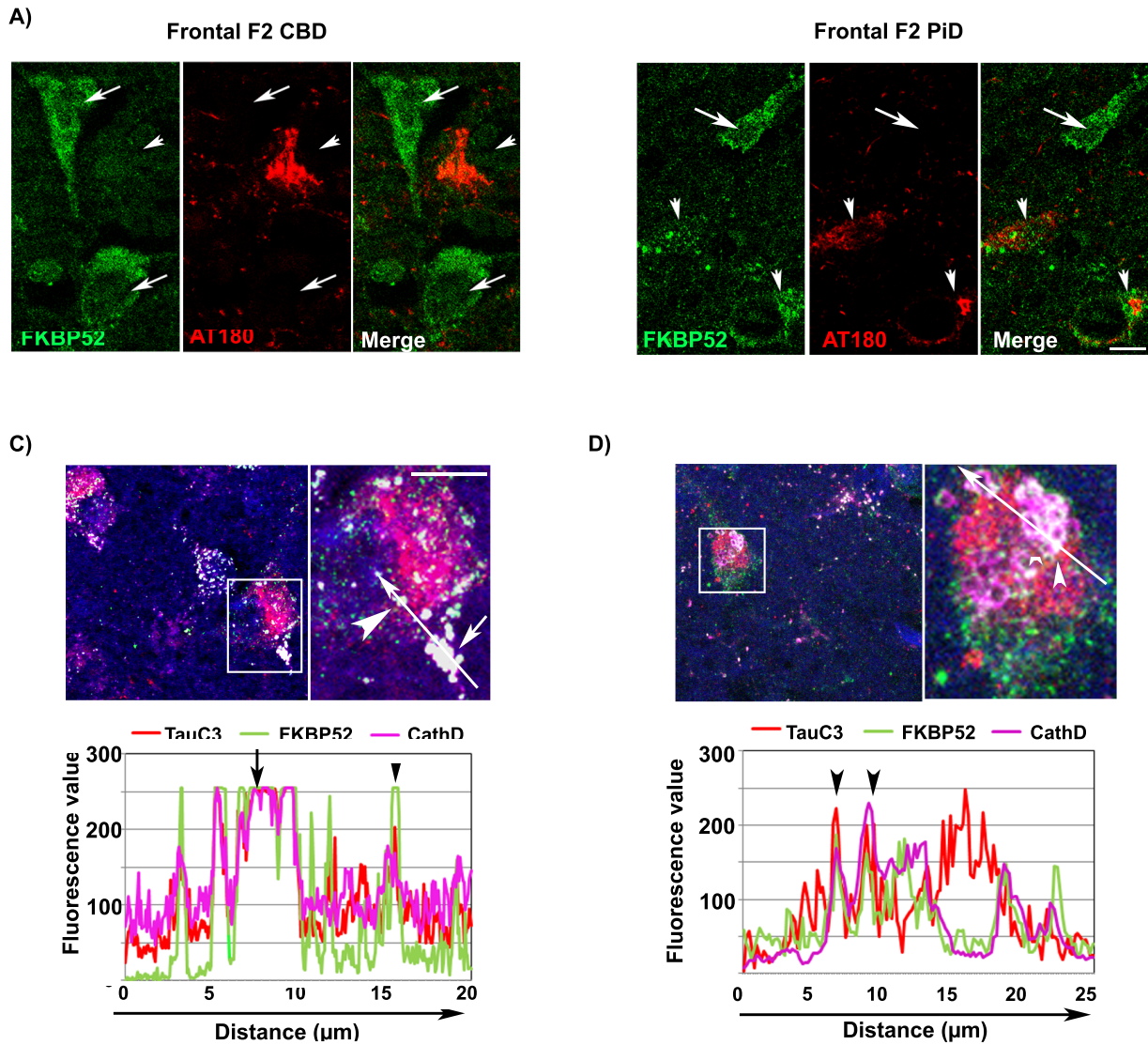
A) Frontal F2 familial FTLD-Tau



B)



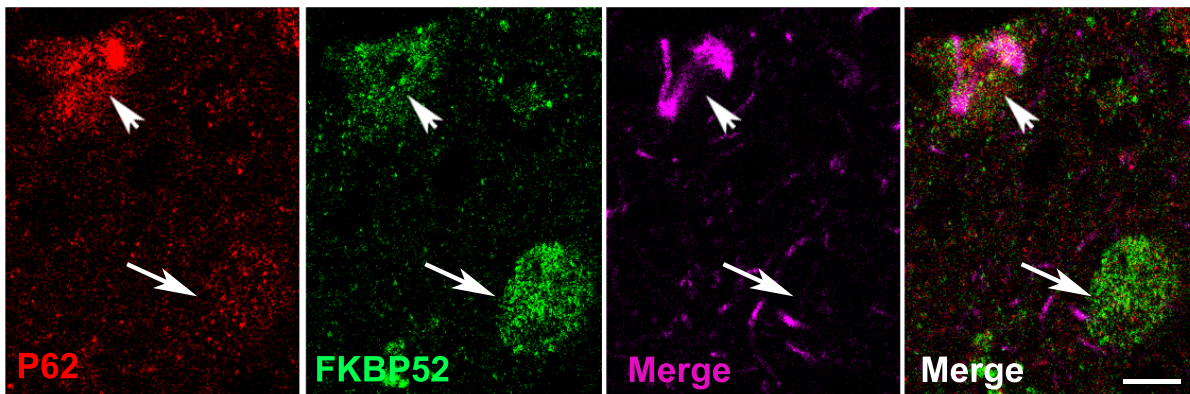
Supplementary Figure 3. Decrease of FKBP52 in frontal cortex neurons of CBD and PiD patient. A, B) Triple labeling experiments showing the decrease of FKBP52 (green) in Tau AT180 positive (red) frontal cortex neurons (arrowheads), compared to neurons without apparent AT180 deposition (arrows), of a CBD (A) and a PiD (B) patient respectively. C, D) Triple labeling experiment showing the colocalization of FKBP52 and TauC3 with the lysosomal marker Cathepsin D in CBD (C) and PiD (D) frontal cortex neurons, and the respective immunofluorescence profiles on a single plane in a neuron with Tau deposits showing the superposition of the three signals. Scale bar =10 μ m.



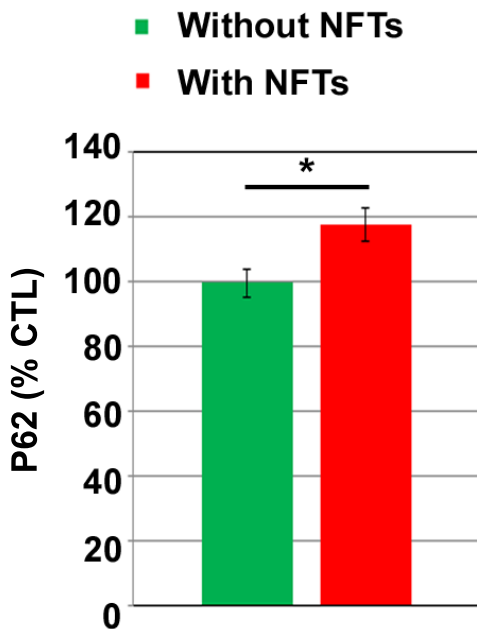
Supplementary Figure 4. Image analysis results showing the decrease of FKBP52 expression in neurons with Tau deposits in frontal cortex neurons of patients with AD Braak VI. A) FKBP52 (green) and P62 expression (red) in Tau (Total Tau, magenta) positive neurons of AD Braak VI (arrowheads) compared with adjacent neurons devoid of evident Tau deposits (arrows). B) Image analysis results show a significant increase of P62 expression in the Tau-positive neurons of AD Braak VI patients. Statistical analysis was performed using Student's t-test, $n = 4$; $*p < 0.05$; \pm SEM. C) Scatter diagram showing P62 labeling intensity levels in single frontal cortex neurons of AD Braak VI patients without and with Tau deposits. Scale bar = 10 μ m.

A)

Frontal F2 AD Braak VI



B)



C)

