



## Fig S3. Gene Set Enrichment Analysis, top 30 activated/suppressed enriched pathways for all conditions.

(A) Enriched pathways, both activated and suppressed, determined by GSEA for AD cases. (B) Enriched pathways, both activated and suppressed, determined by GSEA for PSP cases. None of the enriched pathways fall below FDR-corrected p-value < 0.05. (C) Enriched pathways, both activated and suppressed, determined by GSEA for LV-3R4R with A $\beta$  cases. (D) Enriched pathways, both activated and suppressed, determined by GSEA for LV-3R4R with DMSO cases. (E) Enriched pathways, both

activated and suppressed, determined by GSEA for LV-4R with A $\beta$  cases. (F) Enriched pathways, both activated and suppressed, determined by GSEA for LV-4R with DMSO cases. (G) Enriched pathways, both activated and suppressed, determined by GSEA for LV-3R with A $\beta$  cases. (H) Enriched pathways, both activated and suppressed, determined by GSEA for LV-3R with DMSO cases. GSEA was done with settings set to 1000 permutations, a minimum gene set size of 15, a maximum gene set size of 200, and FDR-adjusted p-values.