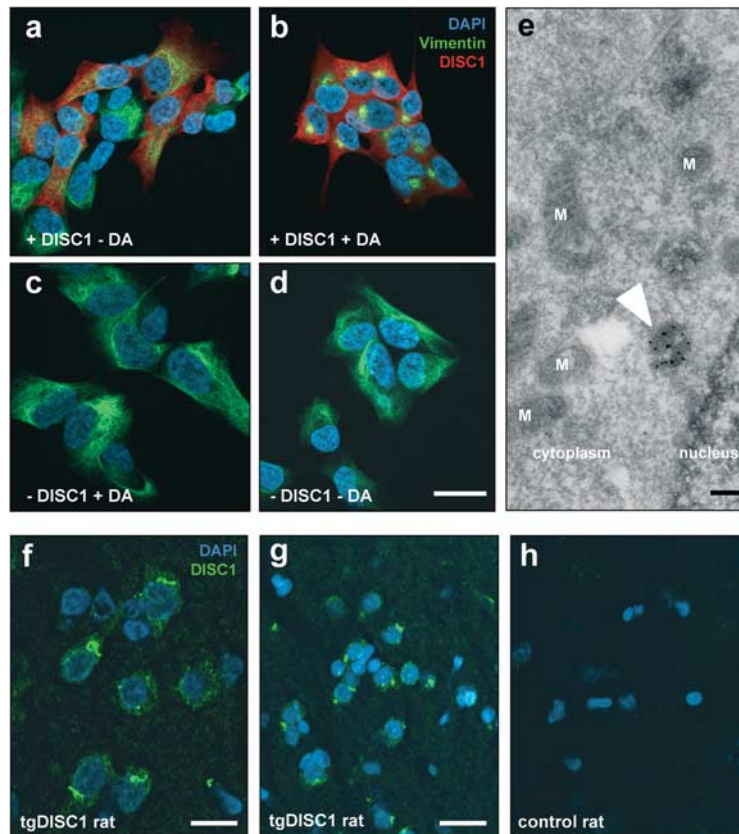


IMAGE

Misassembly of non-mutant full-length Disrupted-in-Schizophrenia 1 protein is induced by dopamine *in vitro* and *in vivo*

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Molecular Psychiatry (2016) **21**, 1487; doi:10.1038/mp.2016.190

Legend: Confocal immunofluorescence light microscopy of SH-SY5Y human neuroblastoma cells induced for expression of non-mutant full-length human Disrupted-in-Schizophrenia 1 (DISC1) protein (**a–d**). After induction, DISC1 was diffusely expressed throughout the cytoplasm (**a**). Upon dopamine (DA) treatment (100 μ M for 24 h), the previously diffusely distributed DISC1 (**a**) forms aggresomes inside the cell (**b**). Double-staining demonstrates that DA-induced DISC1 aggresomes are caged by the aggresomal marker vimentin. Of note, this effect is specific for the combination of DISC1 expression and DA treatment (**b**), since it did not occur in the control conditions (**a**, **c**, **d**). Red: DISC1; green: vimentin; blue: DAPI. Bar 20 μ m. (**e**) Cryo-immunogold electron microscopy for cells from (**b**). Arrow marks the perinuclear, immunolabeled DA-induced DISC1 aggresome. M, mitochondrion. Bar 100 nm. (**f–h**) Confocal immunofluorescence of striatal cryo sections of the transgenic DISC1 rat modestly overexpressing non-mutant full-length human DISC1 behind the Syrian hamster PrP promoter (**f**, **g**) and a negative control rat (**h**). Abundant punctuate, mainly perinuclear staining as evidence for the existence of misassembled DISC1 in DA-rich dorsal striatum. Green: DISC1; blue: DAPI. Bar 10 μ m (**f**), bar 40 μ m (**g**, **h**). For more information on this topic, please refer to the article by Trossbach *et al.* on pages 1561–1572.

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