Acta Neuropathologica

Low molecular weight species of TDP-43 generated by abnormal splicing

Shangxi Xiao, Teresa Sanelli, Helen Chiang, Yulong Sun, Avijit Chakrabartty, Julia Keith, Ekaterina Rogaeva, Lorne Zinman and Janice Robertson¹

¹ Corresponding author: <u>jan.robertson@utoronto.ca</u>, Tanz Centre For Research in Neurodegenerative Diseases, Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada, M5T 2S8

Electronic Supplementary Material 1

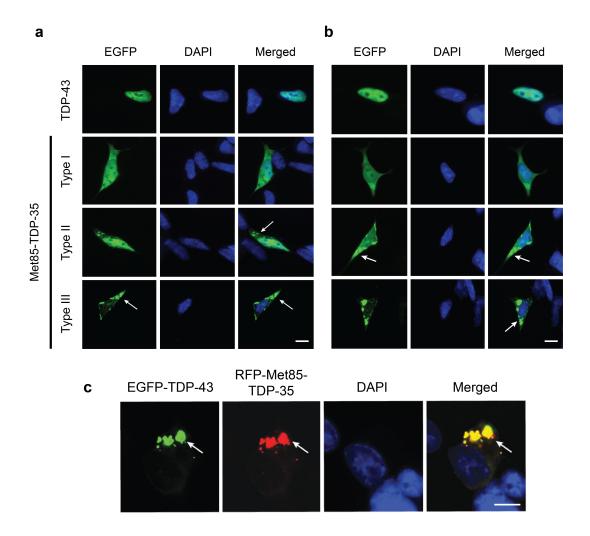


Fig. S1 Expression pattern of full-length TDP-43 and Met⁸⁵-TDP-35 in transfected SH-SY5Y cells. Cterminally tagged (a) and N-terminally tagged (b) EGFP-TDP-43 and EGFP-Met⁸⁵-TDP-35 demonstrated different subcellular localizations, with TDP-43 in the nucleus and Met⁸⁵-TDP-35 exhibiting three types of expression patterns. In type I, Met⁸⁵-TDP-35 was diffuse throughout the whole cell (including both nucleus and cytoplasm); in type II, Met⁸⁵-TDP-35 was diffuse throughout the whole cell but also formed cytoplasmic aggregates (arrow); and in type III, Met⁸⁵-TDP-35 formed large cytoplasmic aggregates (arrow) and was absent from the nucleus. (c) In SH-SY5Y cells coexpressing EGFP-TDP-43 and RFP-Met⁸⁵-TDP-35, TDP-43 redistributed from the nucleus to the cytoplasm and colocalized to the same inclusion bodies (arrow) as Met⁸⁵-TDP-35. Scale bars = 10 μ m