



**Supplementary Figure S4. Analysis of the intracellular localization of X $\Delta$ 2-4 and XA4 mutants and of their impact on mitochondria morphology.** Primary cortical neurons were transduced with lentiviral vectors expressing wild type or mutated X proteins. The subcellular distribution of X and mitochondria network were analyzed using immunofluorescence analysis of BDV X protein and Tom20 (in green and red respectively, upper panel) or X and the neuronal marker  $\beta$ III-tubulin (respectively X in green and  $\beta$ -tub in red, bottom panel). Scale bars: 10  $\mu$ m.