Two *de novo* SNV proteins of Top3β from autism and schizophrenia patients have nuclear and cytoplasmic localization similar to that of the wildtype protein

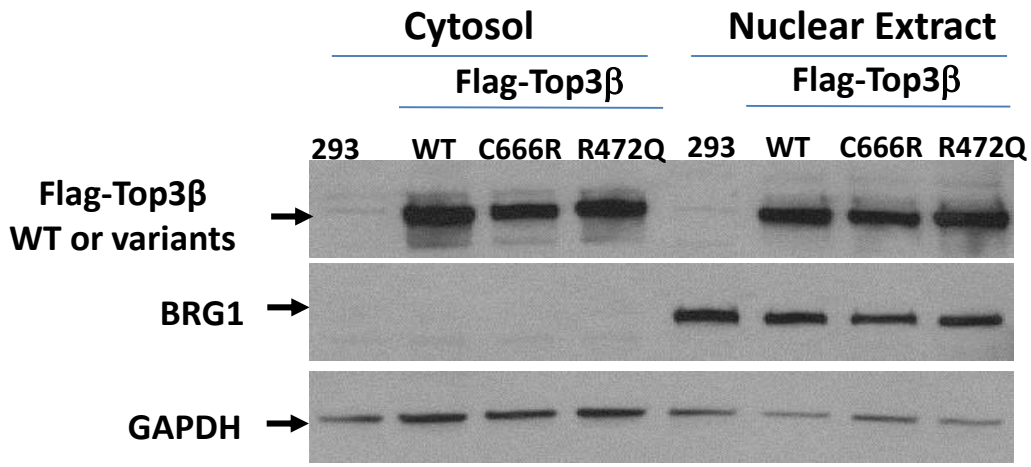

Fig. S1: Two *de novo* SNV proteins of Top3β from autism and schizophrenia patients have nuclear and cytoplasmic localization similar to that of the wildtype protein. Immunoblotting shows that both Top3b variant proteins, C666R and R472Q, are present in nuclear and cytosolic fractions of human HEK293 cells; and their distribution is similar to that of the wildtype protein. All three Top3b proteins are tagged with the Flag-epitope and transiently expressed in HEK293 cells. They were detected by immunoblotting with a Flag antibody. BRG1 is a chromatin-remodeling protein and used here to mark the nuclear fraction. GAPDH is a marker for cytosol. A small amount of GAPDH was detected in the nuclear extract, which suggests that there may some contamination of nuclear extract by the cytosolic proteins.