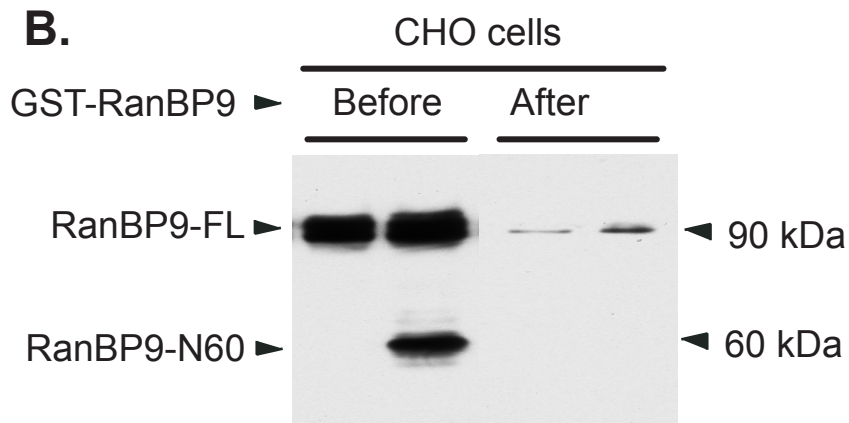
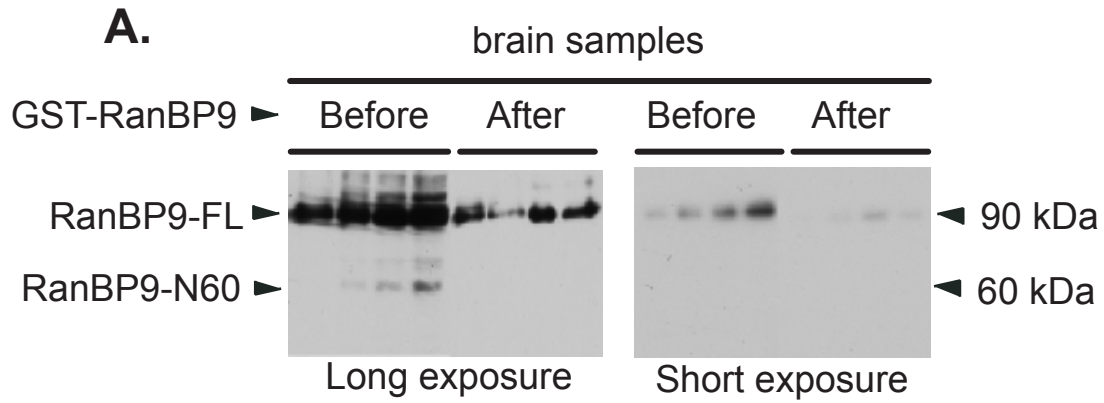


## Supplemental Fig. S1



**Supplemental Figure S1.** The N60 band is specific to RanBP9. To verify the specificity of N60 band to RanBP9, normal control (A: lanes 1,2, 5,6)) and AD brain samples (A: lanes 3,4,7,8) or lysates from CHO-APP751 cells (B: lanes 1,3) or CHO-APP751 cells transfected with RanBP9-FL (B: lanes 2,4) were immunoblotted with RanBP9 antibody solutions with or without depletion of antibody by recombinant GST-RanBP9 purified sepharose beads. Cut blots were placed back together after immunoblotting and subjected to ECL. Note that immunoreactivity for RanBP9-FL and RanBP9-N60 are similarly reduced after depletion of RanBP9 antibody by recombinant GST-RanBP9.

Supplemental Table 1. Potential functions of RanBP9 domains

Domain name	Amino acids	Functional implications
1. Proline Rich Domain (PRD)	5-121	Rapid recruitment of signaling components
2. Spla and the Ryanodine receptor (SPRY)	147-333	Protein-protein interactions (binding to cytoplasmic tail of membrane receptors)
3. Lissencephaly type 1 homology (LisH)	367-393	Involved in dimerization / oligomerization
4. C-terminal to LisH (CTLH)	403-460	Protein stability / degradation?
5. Nuclear localization signal (NLS)	635-649	Targets to nucleus
6. CT11 RanBPM (CRA)	616-728	Protein-protein interactions (binding to Fragile X Mental Retardation Protein)