

Fig S1: Only β 1 Integrin shows a correlation between holoAPP and APP α /holoAPP

For co-transfection of candidate ligands with APP751 (human, wild-type) with HEK293 cells, the levels of percent change in APP α /holoAPP was graphed as a function of holoAPP for each replicate. A regression correlation was performed, and p values represent statistical significance of the slope deviating from 0.

Fig S2: APP α /APP β is dramatically higher and more variable with overexpressed relative to endogenous APP.

The ratio of APP α to APP β is shown for HEK293 cells with endogenous APP (human) or HEK293 cells transiently transfected with APP751 (human, wild-type).

Fig S3: Quantitative Western blot analysis of candidate ligand expression levels

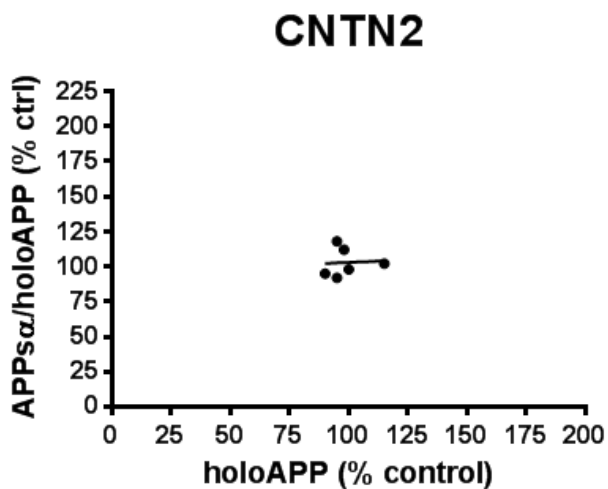
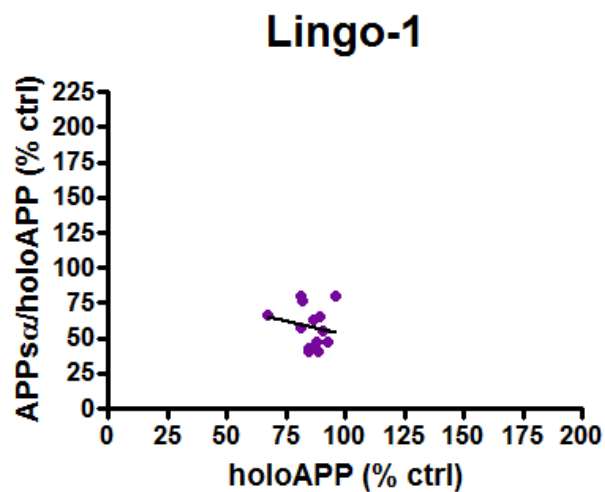
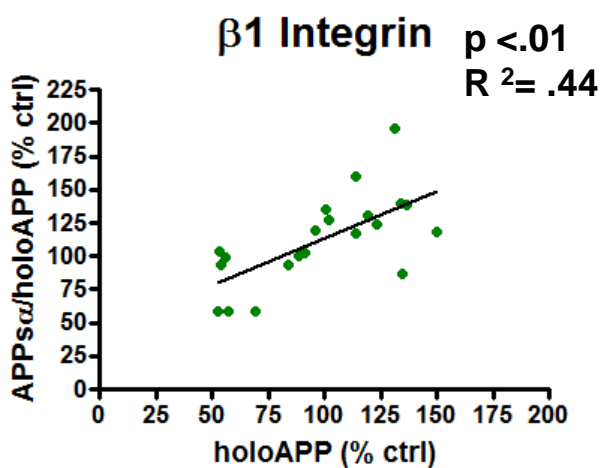
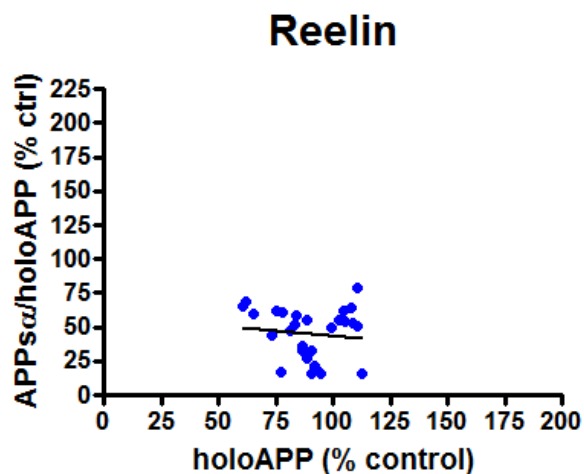
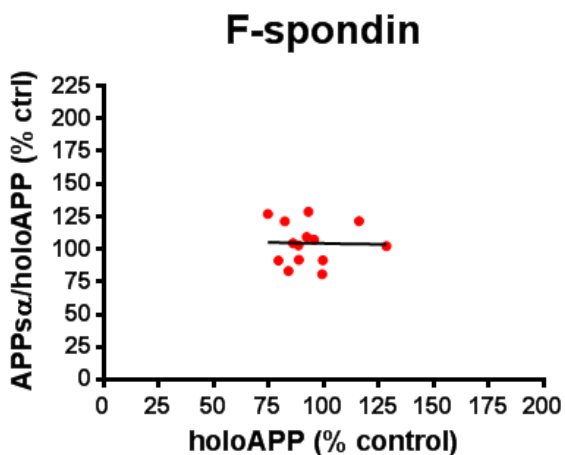
Relative levels of (A) F-spondin and (B) Pancortins expressed in the lysates and (C) Reelin secreted in the CM of HEK293 cells were determined by quantitative Western blot with recombinant proteins for each used as standards. 20 μ g of cell lysates (A,B) or 10 μ L of CM (C) were loaded for quantification.

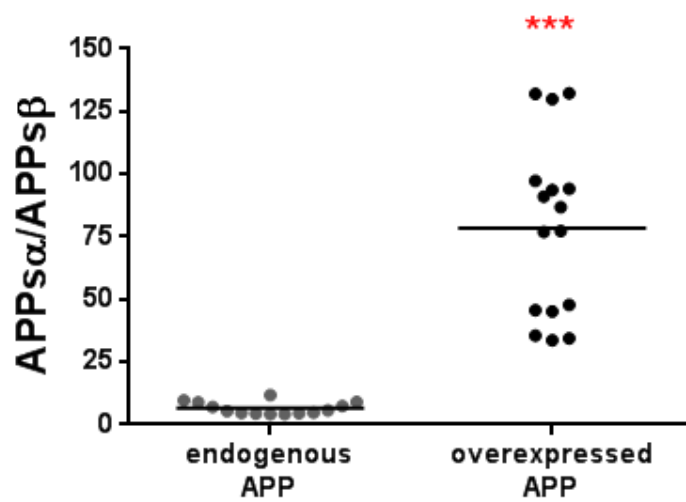
Fig S4: FBS and BSA increase the detection of APP α

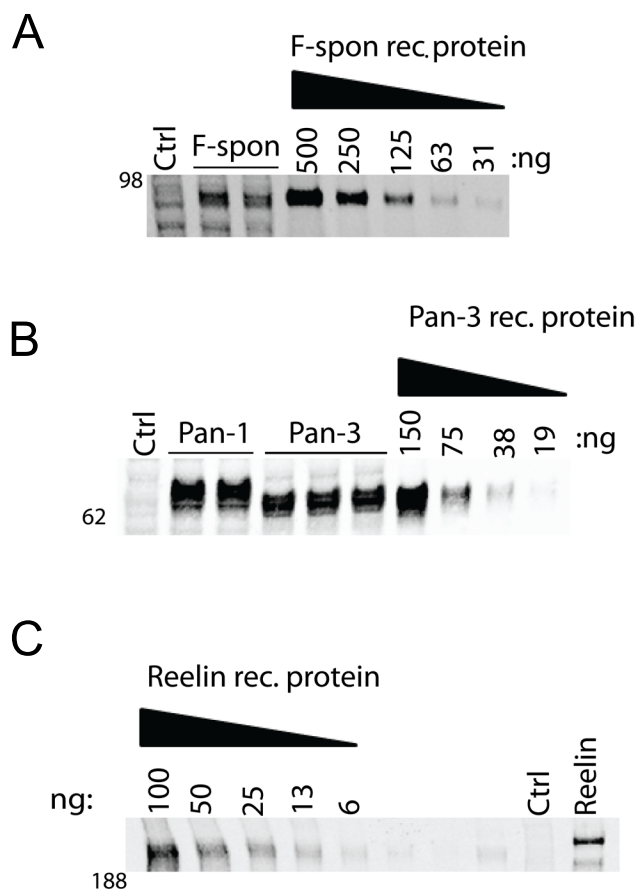
(A) HEK293-APP695 stable cell lines were cultured in serum-free media (SF), media supplemented with 1%, 5%, or 10% fetal bovine serum (FBS) or 0.25, 0.5 or 1.0 mg/mL bovine serum albumin (BSA). (B) HEK293 cells with endogenous APP were transfected with Reelin and cultured in SF media, media with 10% FBS, or SF media supplemented with 1mg/mL BSA.

Fig S5: Effect of Reelin CM treatment on COS7 cells overexpressing APP751

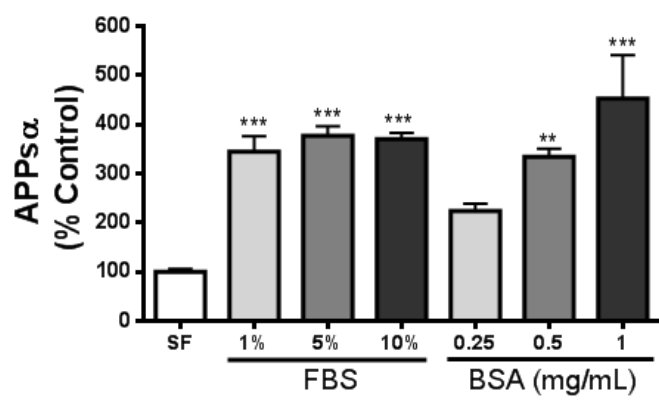
COS7 cells transfected with APP were treated with CM from either control or Reelin stable cell lines, and APP α levels were quantified by ELISA.







A



B

