Supplementary Figure 2

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Rat    MAQAYWQCYPWLVLLCACAWSYPGPESLGREDVRDCSTNPPRLPVTAVNT 50
Mouse  MAQAYWQCYPWLVLLCACAWSYPEPKYLGREDVRNCSTSPERLPVTAVNT 50
Human  MARAHWGCCPWLVLLCACAWGHTKPVDLGGQDVRNCSTNPPYLPVTVVNT 50

Rat    TMRLAALRQQMEKSNLSAYIIPDTDAHMSEYIGKHDERRAWISGFTGSAG 100
Mouse  TMRLAALRQQMETWNLSAYIIPDTDAHMSEYIGKPDKRREWISGFTGSAG 100
Human  TMSLTALRQQMQTQNLSAYIIPGTDAHMNEYIGQHDERRAWITGFTGSAG 100

Rat    TAVVTKKKAAVWTDSRYWTQAERQMDCNWELHKEVSISSIVAWILAEVPD 150
Mouse  TAVVTMGKAAVWTDSRYWTQAERQMDCNWELHKEVSISSIVAWILAEVPD 150
Human  TAVVTMKKAAVWTDSRYWTQAERQMDCNWELHKEVGTTPIVTWLLTEIPA 150

Rat    GENVGFDPFLFSVGSWENYDQELQDSNRHLLSITTNLVDVAWGSERPPVP 200
Mouse  GQNVGFDPFLFSVDSWKNYDQGFQDSSRHLLSVTTNLVDVAWGSERPPVP 200
Human  GGRVGFDPFLLSIDTWESYDLALQGSNRQLVSITTNLVDLVWGSERPPVP 200

Rat    SQPIYALPKEFTGSTWQEKVSAIRSYMQNHTMAPTGVLLSALDETAWLFN 250
Mouse  SQPIYALPKEFTGSTWQEKVSAVRSYMEHHAKTPTGVLLSALDETAWLFN 250
Human  NQPIYALQEAFTGSTWQEKVSGVRSQMQKHQKVPTAVLLSALEETAWLFN 250

Rat    LRSSDIPYNPFFYSYTLLTDSSIRLFVNKSRFSLETLQYLNTNCTLPMCV 300
Mouse  LRSSDIPYNPFFYSYALLTNSSIRLFVNKSRFSLETLQYLNTNCTLPMCV 300
Human  LRASDIPYNPFFYSYTLLTDSSIRLFANKSRFSSETLSYLNSSCTGPMCV 300

Rat    QLEDYSQIRDGVKAYASGNVKILIGISYTTYGVYDVIPKEKLVTETYSPV 350
Mouse  QLEDYSQVRDSVKAYASGDVKILIGVSYTTYGVYEVIPKEKLVTDTYSPV 350
Human  QIEDYSQVRDSIQAYSLGDVRIWIGTSYTMYGIYEMIPKEKLVTDTYSPV 350

Rat    MLIKAVKNSKEQALLKASHVRDAVAVIQYLVWLEKNVPKGTVDEFSGAEH 400
Mouse  MLIKAVKNSKEQALLKSSHVRDAVAVIQYLVWLEKNVPKGTVDEFSGAEY 400
Human  MMTKAVKNSKEQALLKASHVRDAVAVIRYLVWLEKNVPKGTVDEFSGAEI 400

Rat    IDQLRRNENFSSGPSFETISASGLNAALAHYSPTKELHRKLSLDEMYLVD 450
Mouse  IDELRRNENFSSGPSFETISASGLNAALAHYSPTKELHRKLSSDEMYLVD 450
Human  VDKFRGEEQFSSGPSFETISASGLNAALAHYSPTKELNRKLSSDEMYLLD 450

Rat    SGGQYWDGTTDITRTVHWGTPTAFQKEAYTRVLMGNIDLSRLVFPAATSG 500
Mouse  SGGQYWDGTTDITRTVHWGTPTAFQKEAYTRVLMGNIDLSRLVFPAATSG 500
Human  SGGQYWDGTTDITRTVHWGTPSAFQKEAYTRVLIGNIDLSRLIFPAATSG 500

Rat    RVVEAFARRALWEVGLNYGHGTGHGIGNFLCVHEWPVGFQYNNMAMAKGM 550
Mouse  RVIEAFARRALWEVGLNYGHGTGHGIGNFLCVHEWPVGFQYNNIAMAKGM 550
Human  RMVEAFARRALWDAGLNYGHGTGHGIGNFLCVHEWPVGFQSNNIAMAKGM 550

Rat    FTSIEPGYYQDGEFGIRLEDVALVVEAKTKYPGTYLTFELVSFVPYDRNL 600
Mouse  FTSIEPGYYHDGEFGIRLEDVALVVEAKTKYPGDYLTFELVSFVPYDRNL 600
Human  FTSIEPGYYKDGEFGIRLEDVALVVEAKTKYPGSYLTFEVVSFVPYDRNL 600

Rat    IDVSLLSPEQLQYLNRYYQTIRENIGPELQRRQLLEEFAWLERHTEPLSA 650
Mouse  IDVRLLSPEQLQYLNRYYQTIRENVGPELQRRQLLEEFAWLEQHTEPLSA 650
Human  IDVSLLSPEHLQYLNRYYQTIREKVGPELQRRQLLEEFEWLQQHTEPLAA 650

Rat    SAPHTTSLASMWVASALAILSWSC 674
Mouse  RAPHIISWTSLWVGLCPCHPQLE  673
Human  RAPDTASWASVLVVSTLAILGWSV 674
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Supplementary Figure 2. Rat APP protein sequence and TX3.833 staining of cells induced to express APP. (A) Amino acid sequence alignment of rat, mouse, and human APP. Gray boxes, amino acids differing from rat sequence. **(B, C)** Untransfected CHO cells (CHO) or cells stably transfected with rat APP cDNA (CHO/APP) were subjected to detergent solubilization for Western analysis with TX3.833 **(B)** or the intact cells immunostained with TX3.833 (green) and phalloidin (red; control for transfection efficiency). A representative transfected cell is shown in **(C)**. Bar = 10 μm