

# Supporting Information

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## SI Materials and Methods

A 200-bp fragment of mGluR5 was cloned from total RNA isolated from *Aplysia* central nervous system using the following primers (mGluR5 F2: 5'-GAT CAT CGG CGC TCT GTT CCC TCT ACA CGA-3' and mGluR5 R2: 5'-CCA GCA GGA ATC TCT GAT GTC CCA ACC-3'). The resulting fragment was cloned into a PCR II TOPO vector (Invitrogen). To make

ApmGluR5 antisense probe, the plasmid was linearized with XhoI and transcribed with SP6 RNA polymerase (Roche Diagnostics) in the presence of digoxigenin RNA labeling mix following the manufacturer's instructions. For the sense probe, ApmGluR5-PCR TOPO II was linearized with HindIII and transcribed with T7 RNA polymerase. About 1 ng of labeled RNA/mL of hybridization solution was used per culture dish.