



Figure S2

Figure S2. Inhibition of 5-HT_{2A} receptor/PDZ protein interactions by a cell penetrating peptidyl mimetic of the 5-HT_{2A} receptor C-terminus

(a) Spinal cord extracts were incubated with the 5-HT_{2ASCVCt} peptide immobilized on activated CH-sepharose beads in the absence or presence of the TAT-2ASCV or the TAT-2ASCA control peptide (10-100 μM). PSD-95 and SAP97 retained by affinity were detected by Western blotting. (b) Visualization of intraneuronal accumulation in the spinal cord of TAT-2ASCV peptide (30 ng/rat) and of the corresponding peptide lacking the Tat protein transduction domain (TAT-empty-2ASCV, 30 ng/rat), labelled N-terminally with MTS-4-fluorescein, 30 and 60 min after intrathecal injection. Scare bar, 50 μm. (c) Rats were injected with either vehicle (NaCl, 10 μl/rat i.t.), the TAT-2ASCV peptide or the TAT-2ASCA peptide (30 ng/rat i.t., each). Rats were sacrificed 30 min after injection. Dorsal spinal cord 5-HT_{2A} receptors were immunoprecipitated with the polyclonal anti-5-HT_{2A} receptor antibody. Immunoprecipitates were probed with the anti-5-HT_{2A} receptor, anti-PSD-95 and anti-SAP97 antibodies. Inputs represent 5% of the total protein amount used for immunoprecipitation. The data illustrated in (a) and (c) are representative of three experiments performed independently. Note the decrease in PSD-95 and SAP97 co-immunoprecipitated with 5-HT_{2A} receptors in the spinal cord from TAT-2ASCV-treated animals.