

## **Supplementary Materials**

## Scopolamine causes delirium-like brain network dysfunction and reversible cognitive impairment without neuronal loss

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**Supplementary Figure S1 Purity testing of SDS-soluble synaptosome** Red boxes highlight sections of blots shown in indicated figures. P2: crude synaptosomes.



Supplementary Figure S2 Scans of uncropped blots

Red boxes highlight sections of blots shown in indicated figures. GluR1: α-amino-3-hydroxy-5-methyl-4-isoxazoleproprionate receptor subunits glutamate receptor 1, NR1: N-methyl-D-aspartate receptor subunit glutamate receptor 1, NR2A: N-methyl-D-aspartate receptor subunit glutamate receptor 2a, NR2B: N-methyl-D-aspartate receptor subunit glutamate receptor 2b, PSD95: postsynaptic density-95, CaMKII: calcium-calmodulin (CaM)-dependent protein kinase II, p-CaMKII, SYP: synaptophysin, and synapsin I.



## Supplementary Figure S3 Synaptic protein expression in total hippocampal extracts after treatment

A-C: Representative images (top) and quantifications (bottom) showing immunoblot analysis of synaptic proteins postsynaptic density-95 (PSD95), calcium-calmodulin (CaM)-dependent protein kinase II (CaMKII), p-CaMK II, synaptophysin (SYP), and synapsin I in hippocampus of mice after AS treatment for 6 h (A), LPS treatment for 2 h (B), and Scop treatment for 0.5 h (C). *P*-values were calculated with *t*-test (LPS and Scop) or one-way analysis of variance (ANOVA) with *post-hoc* Tukey's multiple comparisons test (AA and AS): ns: No significance; \*: P<0.05; \*\*: P<0.01. *n* is shown on bars. Error bars indicate SEM.