LTD-inducing stimuli promote cleavage of the synaptic adhesion molecule NGL-3 through NMDA receptors, matrix metalloproteinases, and presenilin/γ-secretase
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Supplementary figures

Figure S1. The same 22 kDa band corresponding to NGL-3-CTFs is recognized by three independent antibodies.
(a) A schematic diagram showing the cytoplasmic regions of NGL-3 against which the indicated antibodies were raised (horizontal red lines). LRRNT, leucine-rich repeat N-terminal domain; LRRCT, leucine-rich repeat C-terminal domain; LRR, leucine-rich repeats; Ig, immunoglobulin domain; TM, transmembrane domain; PDZ binding motif, PDZ domain-binding motif; aa, amino acid. The numbers (#1948, #1583, #2020, #2021) represent numbers of NGL-3 antibodies.
(b) The same 22 kDa band (NGL-3-CTF) is recognized by three independent NGL-3 antibodies, supporting the authenticity of the band. Rat hippocampal neurons at DIV 18-21 were stimulated with NMDA (20 µM, 30 min), followed by immunoblotting with the indicated NGL-3 antibodies.
Figure S2. Glutamate- and KCl-induced generations of NGL-3-CTFs are inhibited by the blockade of NMDA receptors.

(a and b) NMDA receptor blockade inhibits glutamate- or KCl-induced generation of NGL-3-CTFs. Rat hippocampal neurons pretreated with APV (NMDA receptor antagonist; 50 µM, 30 min) were stimulated with L-glutamate (50 µM, 1 min) or KCl (30 mM, 1 min), followed by immunoblot analysis. n = 3, *p < 0.05, **p < 0.01, n.s., not significant, one-way ANOVA.