Supplementary Figure 1.

Model of endocannabinoid regulation during DSI. Ca^{2+} influx into the hippocampal pyramidal cell triggers production of an endocannabinoid, which is likely to be 2-AG. 2-AG is inactivated by COX-2, presumably near the production site of 2-AG before it is released. Inhibition of COX-2 by nimesulide or meloxicam enhances the supply of 2-AG, and hence, prolongs DSI. The possibility that MGL, which is in the axon terminals, inactivates released 2-AG is not excluded. Whether 2-AG is transported into the pyramidal cell and then inactivated by other mechanisms remains to be tested. The ineffectiveness of URB-597 on DSI implies either that anandamide is not produced during DSI or that the FAAH-mediated hydrolysis of anandamide does not limit the time course of DSI.