

New findings on how ketamine prevents depression

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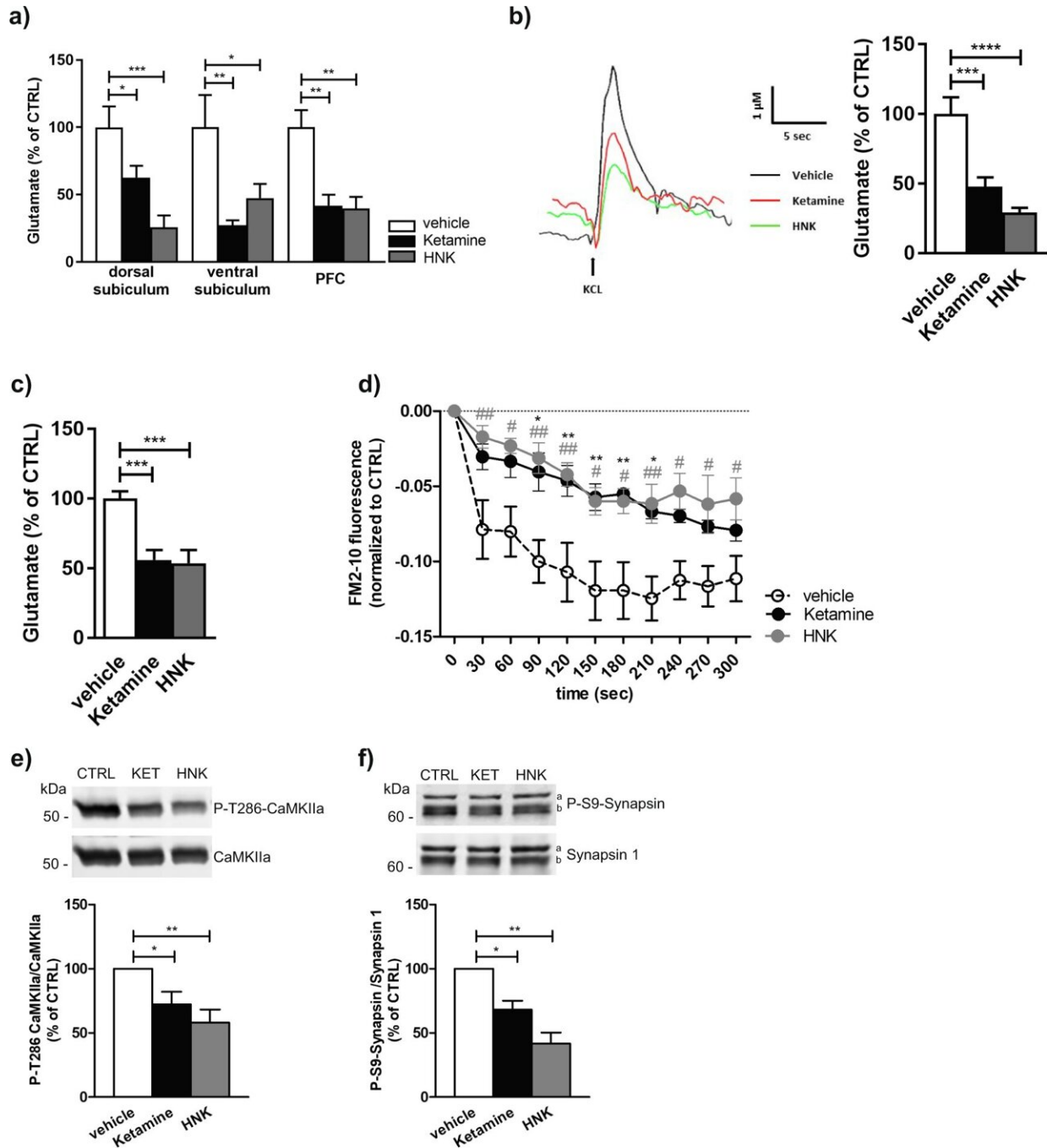


Fig. 1: Acute local and systemic administration of ketamine and (2 R, 6 R)-HNK reduces the presynaptic glutamate release. a Reduction of KCl-evoked glutamate release upon local application of ketamine or (2 R, 6 R)-HNK (100 μ M) into dorsal subiculum, ventral subiculum or prefrontal cortex (PFC) of isoflurane anesthetized mice. Statistical significance was assessed using one-way ANOVA followed by Fisher's LSD. Dorsal subiculum N = 7 animals per each group; F (2,

18) = 10.44, $p = 0.001$; ventral subiculum $N = 6$ vehicle; $N = 5$ ketamine; $N = 6$ (2 R, 6 R)-HNK treated mice; $F = (2, 13) = 5.15$, $p = 0.022$; PFC $N = 6$ vehicle; $N = 6$ ketamine; $N = 5$ (2 R, 6 R)-HNK treated animals; $F (2, 14) = 11.41$, $p = 0.001$. * p

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