

PATHOLOGIES ASSOCIATED WITH DOPAMINE RECEPTORS

Cognitive Dysfunctions
Parkinson's Disease

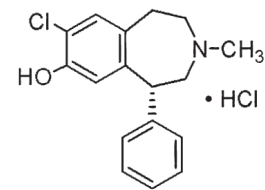
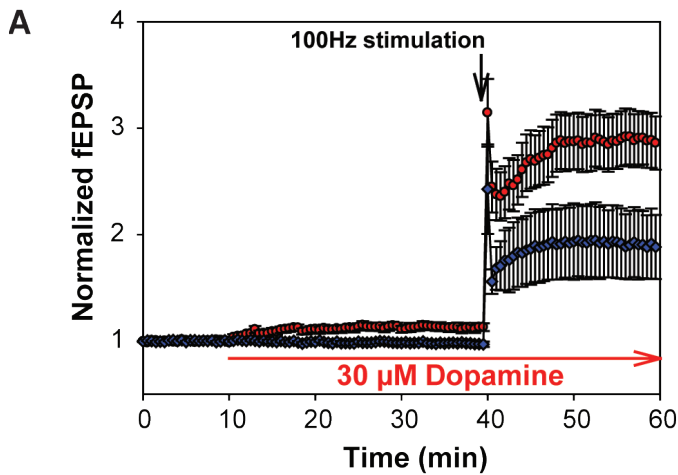
BIBLIOGRAPHY

Frey U, Matthies H, Reymann KG, Matthies H (1991). Neurosci Lett 129:111-114.
Huang YY, Kandel ER (1995). Proc Natl Acad Sci U S A 92:2446-2450.
Lemon N, Manahan-Vaughan D (2006). J Neurosci 26:7723-7729.

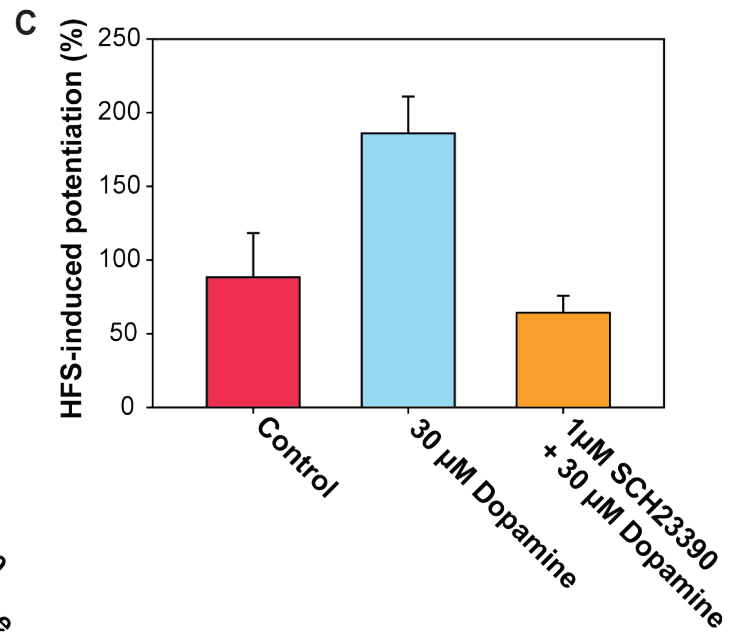
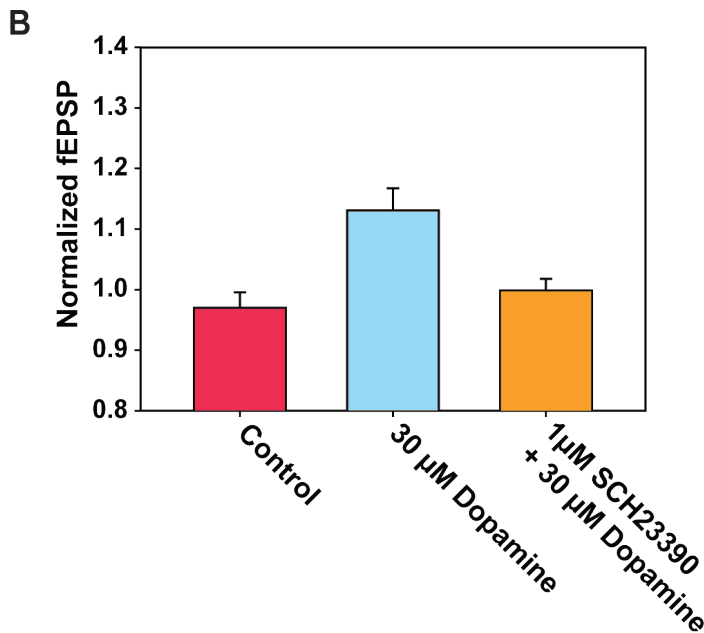
Last update: March, 6, 2009

P-015 ● ● **DOPAMINE-INDUCED INCREASE OF SYNAPTIC TRANSMISSION AND PLASTICITY**

● ● **SCH23390** ● ● **D1/D5 DOPAMINE RECEPTORS**



SCH23390



BIOLOGY

In the CA1 region of the hippocampus, Dopamine strongly enhances fEPSP as well as LTP amplitude (see panel A, B, C). Dopamine potentiation is mediated by D1/D5 dopamine receptors sub-type since the specific D1/D5 antagonist SCH23390 abolishes dopamine-induced increase of synaptic transmission (see panel B) and LTP potentiation (see panel C).