?2-Adrenoceptor modulation of long-term potentiation elicited in vivo in rat occipital cortex

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Pretreatment with the ?2-adrenoceptor agonist clonidine (31.25, 62.5, or 125 ?g/kg, i.p.) dose-dependently reduced long-term potentiation (LTP) elicited in vivo in the occipital cortex of anesthetized rats, whereas pretreatment with the ?2-adrenoceptor antagonist yohimbine (0.133, 0.4, or 1.2 mg/kg, i.p.) increased neocortical LTP in a dose-dependent fashion. These effects could be related to the reported disruptive and facilitatory actions induced on memory formation by pretreatment with ?2-adrenoceptor agonists and antagonists, respectively. © 2004 Elsevier B.V. All rights reserved.