Fenfluramine is a sigma-1 receptor positive modulator in mice

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Abstract
Fenfluramine acts as a sigma-1 receptor agonist in mice, suggesting that sigma-1 receptors may mediate its therapeutic effects.

Figure 1
Fenfluramine potentiates BzR-DB-induced dissociation of BFP from S1R in FC2 cells

Figure 2
Fenfluramine attenuates discipline-induced learning deficits; (a) spontaneous alternation, (b) passive avoidance

Figure 3
NorFIA does not attenuate discipline-induced learning deficits; (a) spontaneous alternation, (b) passive avoidance

Figure 4
NorFIA antagonizes the effect of PRE-088 in discipline-treated mice; (a) spontaneous alternation and (c), (d) passive avoidance

Figure 5
Combination of PRE-088 and FFA in discels-treated mice; (a) spontaneous alternation and (c), (d) passive avoidance

Figure 6
Combination of PRE-088 and (+)-FFA in discels-treated mice; (a), (b) spontaneous alternation and (c), (d) passive avoidance

Figure 7
Mathematical calculations of combination index for a mix of PRE-088 + FFA or (+)-FFA

Figure 8
Behavioral responses of (+)-FFA and isomers and (b) norfia and isomers in the forced swimming test – antinociceptive studies

Comments
Fenfluramine has recently been shown to have anticonvulsant activity in a chemonotopic model. Selective anticonvulsant activity was observed in mice treated with fenfluramine. These data suggest that fenfluramine has potential therapeutic effects.

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