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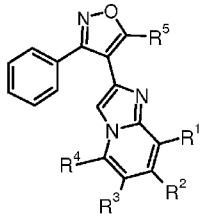
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(54) Title: ARYL-ISOXAZOL-4-YL-IMIDAZO[1,2-A]PYRIDINE USEFUL FOR THE TREATMENT OF ALZHEIMER'S DISEASE VIA GABA RECEPTORS



(I)

(57) Abstract: The present invention is concerned with aryl-isoxazol-4-yl-imidazo[1,2-a]pyridine derivatives of formula (I): wherein R^1 is hydrogen, halogen, hydroxy, lower alkyl, benzyloxy or -O-(CH_2)-(CO)-5 or 6 membered heteroaryl optionally substituted by aryl or by lower alkyl; R^2 is hydrogen, halogen, lower alkyl, lower alkynyl, amino, -NHC(O)-R^a or -(CO)-R^a; R^3 is hydrogen, halogen, cyano, lower alkyl, lower alkynyl, amino, -NHC(O)-R^a, -(CO)-R^a, -5 or 6-membered heterocycloalkyl in 1-position, optionally substituted 10 by =O or is a -5 or 6-membered heteroaryl in 1-position; R^4 is hydrogen or -5 or 6-membered heteroaryl; R^5 is lower alkyl or cycloalkyl; R^a is lower alkoxy or NR'R", wherein R' and R" are each independently hydrogen, lower alkyl optionally substituted by hydroxy, lower alkynyl, -$(CH_2)_n$-cycloalkyl, 15 -$(CH_2)_n$-5 or 6-membered heterocycloalkyl or -$(CH_2)_n$-5 or 6-membered heteroaryl; n is 0 to 3; as well as pharmaceutically acceptable acid addition salts thereof. It has been found that this class of compounds show high affinity and selectivity for GABA A α5 receptor binding sites and might be useful as cognitive enhancer or for the treatment of cognitive disorders like Alzheimer's disease.

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