Title (en)

SUBSTITUTED PIPERAZINE DERIVATIVES AND THEIR USE AS INHIBITORS OF THE MICROSOMAL TRIGLYCERIDE TRANSFER PROTEIN (MTP)

Title (de)

SUBSTITUIERTE PIPERAZINDERIVATE UND IHRE VERWENDUNG ALS INHIBITOREN DES MIKROSOMALEN TRIGLYZERID-TRANSFERPROTEINS (MTP)

Title (fr)

DERIVES DE PIPERAZINE SUBSTITUES, LEUR PRODUCTION ET LEUR UTILISATION COMME MEDICAMENTS

Publication

EP 1255736 A2 20021113 (DE)

Application

EP 00991607 A 20001216

Priority

- DE 19963234 A 19991227
- EP 0012843 W 20001216

Abstract (en)

[origin: DE19963234A1] N,N-Disubstituted piperazine and diazacycloheptane derivatives (I) are new. N,N-disubstituted piperazine and diazacycloheptane derivatives of formula (I) and their isomers and salts are new. m = 1-2; n = 1-5; X = C-C bond, O, -CH2-, -CH2-CH2-, -NH- or -N(1-3C alkyl)-; Ra = bi- or tricyclic aryl, C-bonded bi- or tricyclic heteroaryl comprising a 5-membered heteroaryl containing 1-2 N fused via a vinylene group with a cyclopentadiene group optionally containing N in place of 1 CH, a 5-membered heteroaryl containing O, S, NH or N(Rx) fused via 1-2 vinylene groups either with phenyl and/or 6-membered heteroaryl containing 1-3 N or via 1-2 vinylene groups with naphthyl, or a 5-membered heteroaryl containing O, S, NH or N(Rx) and 1-2 N fused via a vinylene group with phenyl, naphthyl, pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl, naphthyl or 6-membered heteroaryl containing 1-3 N fused via a vinylene group with pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl, phenyl fused via 1-2 vinylene groups with 6-membered heteroaryl containing 1-3 N, or pyridyl, pyrazinyl or pyridazinyl fused via 2 vinylene groups with phenyl or 6-membered heteroaryl containing 1-3 N; Rx = 1-3C alkyl, phenyl-1-3C alkyl, phenyl, pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl; Rb, Rc = H or 1-3C alkyl; Rf, Rg = H, or 1-6C alkyl optionally containing 1 or more F, 3-7C cycloalkyl, Ar, 1-3C alkoxy-CO-1-2C alkyl, COOH-1-2C alkyl, methoxy-2-3C alkyl, or Ar-1-3C alkyl; or NRfRg = 3-7 membered cycloalkyleneimino optionally containing O, S, SO, SO2, NH or N(1-3C alkyl) in the 4-position when 6- or 7-membered; Ar = phenyl or heteroaryl (both optionally C-substituted with 1-3 F, Cl, Br, 1-3C alkyl or 1-3C alkoxy (each optionally substituted with 1 or more F), OH, COOH, 1-3C alkoxycarbonyl, CONH2, CONH(1-3C alkyl), CON(1-3C alkyl)2, NO2 and/or NH2 and (when heteroaryl) optionally substituted on 1 N by 1-3C alkyl (optionally substituted with 1 or more F), 1-3C alkyl-CO or 1-4C alkoxy-CO; provided that an angular CH in Ra is optionally replaced with N; bi- and tricyclic groups are optionally C-substituted with 1-2 F, Cl, Br, I, 1-3C alkyl, OH, 1-3C alkoxy, COOH, 1-3C alkoxycarbonyl, CONH2, CONH(1-3C alkyl) and/or CON(1-3C alkyl)2; and alkyl and alkoxy are optionally substituted with 1 or more F; and the tricyclic group containing X is optionally substituted with 1-2 F, Cl, CH3 and/or OCH3. An Independent claim is included for the preparation of compounds (I).

IPC 1-7

C07D 215/38

IPC 8 full level

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CPC (source: EP US)

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