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(54) Title: TRI-ARYL ACID DERIVATIVES AS PPAR RECEPTOR LIGANDS

(57) Abstract

This invention is directed to triaryl acid derivatives of formula (I) and their pharmaceutical compositions as PPAR ligand receptor binders. The PPAR ligand receptor binders of this invention are useful as agonists or antagonists of the PPAR receptor. In formula (I), (a), (b), and (c) are independently aryl, fused arylcycloalkenyl, fused arylcycloalkyl, fused arylheterocyclenyl, fused arylheterocyclyl, heteroaryl, fused heteroarylcycloalkenyl, fused heteroarylcycloalkyl, fused heteroarylheterocyclenyl, or fused heteroarylheterocyclyl; A is –O–, –S–, –SO–, $-SO_2$–, $-NR_{13}$–, $-C(O)$–, $-N(R_{14})C(O)$–, $-C(O)N(R_{15})$–, $-N(R_{14})C(O)N(R_{15})$–, $-C(R_{14})=N$–, (d), (e), (f) a chemical bond, (g) or (h); B is –O–, –S–, –SO–, $-SO_2$–, $-NR_{17}$–, a chemical bond, ethynylene, $-C(O)$–, $-N(R_{18})C(O)$–, or $-C(O)NR_{18}$–; D is –O–, –S–, $-NR_{19}$–, a chemical bond, ethynylene, $-C(O)$–, $-N(R_{20})C(O)$–, or $-C(O)N(R_{20})$–; E is a chemical bond or an ethylene group; Z is $R_{21}O_2C$–, $R_{21}OC$–, cyclo-imide, –CN, $R_{21}O_2SHNCO$–, $R_{21}O_2SHN$–, $(R_{21})_2NCO$–, $R_{21}O$–2,4–thiazolidinedionyl, or tetrazolyl.

