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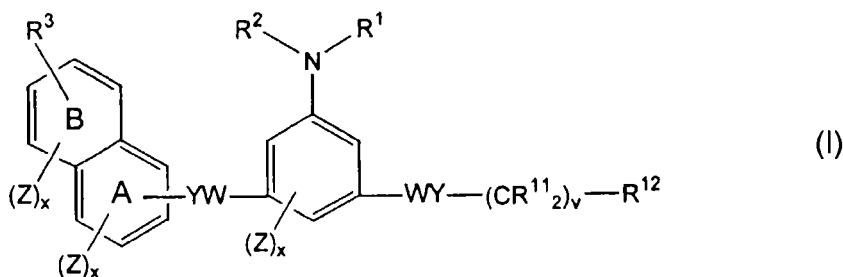
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(54) Title: NOVEL NAPHTHYLSULFONIC ACIDS AND RELATED COMPOUNDS AS GLUCOSE UPTAKE AGONISTS



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(57) Abstract: Methods for treating conditions associated with hyperglycemia, especially Type II diabetes, with novel naphthyl-sulfonic acids and related compounds are provided. Compounds of formula (1) where: R¹ and R² are, independently, hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, R³ is a substituent on the B ring; and is -SO₂OR⁶, -C(O)OR⁶, -SO₂NR⁶, -C(O)NR⁶, or tetrazolyl; the linker -WY- between the naphthyl and phenyl intersects the A ring of the naphthyl and is, independently, -C(O)NR⁷-, -NR⁷C(O)-, -C(O)O-, -OC(O)-, -CH=CH-, -NR⁷CH₂-, -CH₂NR⁷-, -NR⁷C(O)NR⁷-, -NR⁷C(O)O-, -OC(O)NR⁷-, -NR⁷SO₂O-, -OSO₂NR⁷-, -OC(O)O-, -SO₂NR⁷-, -NR⁷SO₂-, -OSO₂-, or -SO₂O-; each R⁶ and R⁷ is, independently, hydrogen or lower alkyl; optionally in the form of single stereoisomers or mixtures of stereoisomers, or the pharmaceutically acceptable salts thereof; are useful in methods of stimulating the kinase activity of the insulin receptor, enhancing the activation of the insulin receptor by insulin, and stimulating the uptake of glucose into cells. A variety of antidiabetic compounds and pharmaceutical compositions comprising the antidiabetic compounds are also disclosed.



ACTION

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