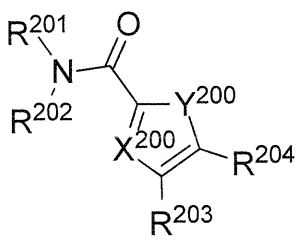
WO2013/019626, WO2013/019635, WO2013/019653, WO2013/019682, WO2013/036912, WO2013/041519, WO2013/042782, WO2013/045431 which are based upon other structural classes.

Summary ~~of the invention~~

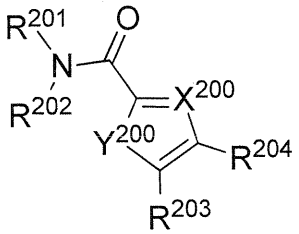
It is therefore the object of the present ~~invention~~ disclosure to provide compounds, which bind to the orphan nuclear receptors RORγ1 and/or RORγt and, thus, to open new methods for treating diseases associated with the modulation of RORγ, such as autoimmune diseases, inflammatory skin diseases or multiple sclerosis.

This object is solved by claims 1 to ~~38~~41.

In the first aspect, there is provided a compound represented by Formula (**200**) and Formula (**200'**)



(**200**)



(**200'**)

an enantiomer, diastereomer, tautomer, *N*-oxide, solvate, formulation and pharmaceutically acceptable salt thereof,

wherein

R^{201} and R^{202} are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-C_{3-10}-cycloalkyl, C_{1-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-(5-membered heteroaryl), C_{1-10}-alkylene-(6-membered aryl), C_{1-10}-alkylene-(6-membered heteroaryl), SO_2-C_{1-10}-alkyl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{211}, O-C_{2-6}-alkylene-OR^{211}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{211}, $CONR^{211}R^{212}$, $CONR^{211}SO_2R^{211}$, COR^{211}, SO_xR^{211}, SO_3H, $SO_2NR^{211}R^{212}$, $NR^{211}COR^{211}$, $NR^{211}SO_2R^{211}$, NR^{211}-CO-$NR^{211}R^{212}$, NR^{211}-SO_2-$NR^{211}R^{212}$, C_{3-10}-cycloalkyl, O-C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, O-C_{3-10}-heterocycloalkyl and $NR^{211}R^{212}$;

or R^{201} and R^{202} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ing is unsubstituted or substituted with 1 to 4

substitutents independently selected from the group consisting of halogen, oxo, CN, OR^{211}, SO_xR^{211}, SO_3H, $NR^{211}SO_2R^{211}$, $SO_2NR^{211}R^{212}$, C_{0-6}-alkylene-CO_2R^{211}, $CONR^{211}R^{212}$, $CONR^{211}SO_2R^{211}$, COR^{211}, NR^{211}-CO-R^{211}, NR^{211}-CO-$NR^{211}R^{212}$, NR^{211}-SO_2-$NR^{211}R^{212}$, $NR^{211}R^{212}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-8}-cycloalkyl, O-C_{3-8}-cycloalkyl, C_{3-8}-heterocycloalkyl and O-C_{3-8}-heterocycloalkyl,

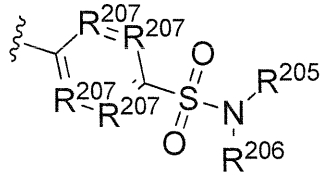
wherein cycloalkyl and heterocycloalkyl are unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of halogen, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, SO_2-C_{1-3}-alkyl, COOH and oxo;

R^{203} is selected from C_{1-10}-alkyl, fluoro-C_{1-10}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-(6- to 10-membered aryl), and C_{0-6}-alkylene-(5- to 10-membered heteroaryl),

wherein alkyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 6 substituents independently selected from the group consisting of oxo, halogen, CN, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, OR^{212}, CO_2R^{212}, $CONR^{212}R^{212}$ and COR^{212}; and

wherein optionally one CH_2 unit in alkyl or alkylene can be replaced by O, SO_x, NH or N(C_{1-3}-alkyl);

R^{204} is



, wherein

R^{205} and R^{206} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-8}-cycloalkyl, C_{0-6}-alkylene-C_{3-8}-heterocycloalkyl, 5- or 6-membered heteroaryl and 6-membered aryl, wherein alkyl, alkylene, cyclolalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 6 substituents independently selected from the group consisting of halogen, CN, OH, oxo, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl and SO_2-C_{1-3}-alkyl, $NR^{211}R^{212}$, CO_2R^{212} and $CONR^{211}R^{212}$;

and optionally wherein R^{205} and R^{206} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of fluoro, OH, oxo, C_{1-4}-alkyl and halo-C_{1-4}-alkyl;

R^{207} is independently selected from N and CR^{208}; or

two adjacent R^{207} form a 5- or 6-membered unsaturated or partially saturated ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of halogen, OH, oxo, C_{1-4}-alkyl and fluoro-C_{1-4}-alkyl;

R^{208} is independently selected from H, halogen, CN, C_{1-6}-alkyl, fluoro-C_{1-6}-alkyl, C_{1-4}-alkylene-OH, C_{1-4}-alkylene-O-C_{1-3}-alkyl, C_{1-4}-alkylene-O-fluoro-C_{1-3}-alkyl, OH, O-C_{1-6}-alkyl, O-fluoro-C_{1-6}-alkyl and C_{3-10}-cycloalkyl,

wherein alkylene is unsubstituted or substituted with 1 to 3 substituents selected from F and cycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

R^{209} is selected from H, halogen, CN, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

R^{211} is independently selected from H, C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl and C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl,

wherein alkyl, alkylene, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 6 substituents independently selected from the group consisting of halogen, CN, OH, oxo, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, NH_2, NH(C_{1-3}-alkyl), N(C_{1-3}-alkyl)$_2$, C_{3-6}-heterocycloalkyl, C_{3-6}-cycloalkyl and SO_2-C_{1-3}-alkyl,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, OH, oxo, CH_3 and CF_3;

R^{212} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-6}-cycloalkyl;

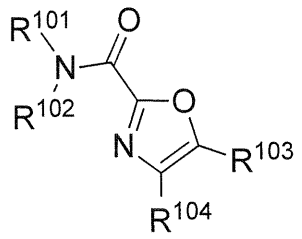
X^{200} is selected from N and CR^{209};

Y^{200} is selected from O and S;

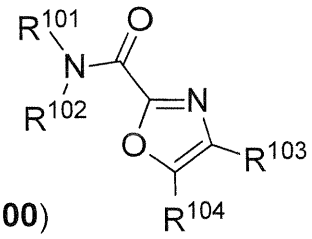
x is independently selected from 0, 1 and 2;

with the proviso, that 4-phenyl-5-(4-sulfamoylphenyl)oxazole-2-carboxamide is excluded.

In a second aspect, there is provided a compound represented by Formula (**100**) and Formula (**100'**)



(100)



(100')

an enantiomer, diastereomer, tautomer, *N*-oxide, solvate, formulation and pharmaceutically acceptable salt thereof,

wherein

R^{101} and R^{102} are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-C_{3-10}-cycloalkyl, C_{1-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-(5-membered heteroaryl), C_{1-10}-alkylene-(6-membered aryl), C_{1-10}-alkylene-(6-membered heteroaryl), and SO_2-C_{1-10}-alkyl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{111}, O-C_{2-6}-alkylene-OR^{111}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{111}, $CONR^{111}R^{112}$, $CONR^{111}SO_2R^{111}$, COR^{111}, SO_xR^{111}, SO_3H, $SO_2NR^{111}R^{112}$, $NR^{111}COR^{111}$, $NR^{111}SO_2R^{111}$, NR^{111}-CO-$NR^{111}R^{112}$, NR^{111}-SO_2-$NR^{111}R^{112}$, C_{3-10}-cycloalkyl, O-C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, O-C_{3-10}-heterocycloalkyl and $NR^{111}R^{112}$;

or R^{101} and R^{102} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of halogen, oxo, CN, OR^{111}, SO_xR^{111}, SO_3H, $NR^{111}SO_2R^{111}$, $SO_2NR^{111}R^{112}$, C_{0-6}-alkylene-CO_2R^{111}, $CONR^{111}R^{112}$, $CONR^{111}SO_2R^{111}$, COR^{111}, NR^{111}-CO-R^{111}, NR^{111}-CO-$NR^{111}R^{112}$, NR^{111}-SO_2-$NR^{111}R^{112}$, $NR^{111}R^{112}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-8}-cycloalkyl, O-C_{3-8}-cycloalkyl, C_{3-8}-heterocycloalkyl and O-C_{3-8}-heterocycloalkyl,

wherein cycloalkyl and heterocycloalkyl are unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consistinf of halogen, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, SO_2-C_{1-3}-alkyl, COOH and oxo;

R^{103} is a 6-10 membered mono- or bicyclic aryl or a 5-14 membered mono-, bi- or tricyclic heteroaryl containing 1 to 5 heteroatoms independently selected from the group consisting of N, O and S,

wherein aryl and heteroaryl is optionally substituted with 1 to 5 substituents independently selected from the group consisting of halogen, C_{1-6}-alkyl, C_{1-6}-alkenyl, C_{1-6}-alkynyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-(5- or 6-membered heteroaryl), C_{1-6}-alkylene-O-R^{131}, C_{0-6}-alkylene-CN, C_{0-6}-alkylene-$N(R^{131})_2$, O-C_{3-10}-cycloalkyl, O-C_{1-6}-alkylene-O-R^{131}, O-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-$COOR^{131}$, C_{0-6}-alkylene-$C(O)R^{131}$, C_{0-6}-alkylene-$C(O)N(R^{131})_2$, C_{0-6}-alkylene-$N(R^{131})C(O)R^{131}$, C_{0-6}-alkylene-SO-R^{131}, C_{0-6}-alkylene-SO_2-R^{131}, C_{0-6}-alkylene-SO_2-$N(R^{131})_2$, C_{0-6}-alkylene-$N(R^{131})SO_2$-R^{131}, C_{0-6}-alkylene-SO_2-C_{3-10}-heterocycloalkyl and C_{0-6}-alkylene-SO_2-C_{3-10}-heterocycloalkyl,

wherein alkylene, cycloalkyl, heterocycloalkyl and the 5- or 6-membered heteroaryl is optionally substituted by 1 to 4 substituents independently selected from the group consisting of halogen, CN, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, oxo, =N-OR^{132}, O-C_{1-3}-alkyl and O-halo-C_{1-3}-alkyl,

or wherein two adjacent substituents complete a 3- to 8-membered saturated or partially unsaturated ring containing carbon atoms and optionally containing 1 to 3 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of halogen, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, oxo, =N-OR^{132}, OH, O-C_{1-6}-alkyl and O-halo-C_{1-6}-alkyl;

R^{104} is selected from $(CR^{108}R^{109})R^{140}$, $(C=O)R^{140}$, OR^{140}, SO_y-R^{107} and C_{3-6}-cycloalkyl, which is spirocyclic fused with R^{140},

wherein cycloalkyl is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of F, CH_3 and CF_3;

R^{107} is selected from C_{3-10}-cycloalkyl and C_{3-10}-heterocycloalkyl,

wherein cycloalkyl and heterocycloalkyl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, cycloalkyl and heterocycloalkyl;

R^{108} is selected from H, F, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, O-C_{1-3}-alkyl and O-halo-C_{1-3}-alkyl;

R^{109} is selected from H, F, C_{1-3}-alkyl and halo-C_{1-3}-alkyl;

R^{111} is independently selected from H, C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl and C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl,

wherein alkyl, alkylene, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 6 substituents selected from the group consisting of halogen, CN, OH, oxo, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, NH_2, $NH(C_{1-3}$-alkyl), $N(C_{1-3}$-alkyl)$_2$, C_{3-6}-heterocycloalkyl, C_{3-6}-cycloalkyl and SO_2-C_{1-3}-alkyl,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, OH, oxo, CH_3 and CF_3;

R^{112} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-6}-cycloalkyl;

R^{131} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-8}-cycloalkyl, C_{0-6}-alkylene-C_{3-8}-heterocycloalkyl, 5- or 6-membered heteroaryl and 6-membered aryl, wherein alkyl, alkylene, cyclolalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 6 substituents independently selected from the group consisting of halogen, CN, OH, oxo, =N-OR^{132}, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl and SO_2-C_{1-3}-alkyl;

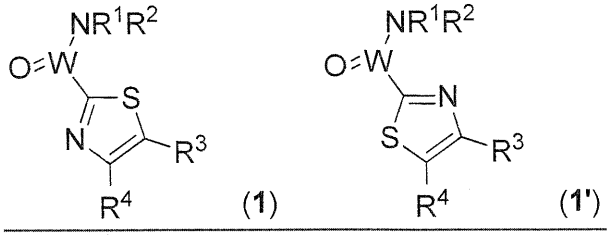
and optionally wherein two R^{131} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of fluoro, OH, oxo, C_{1-4}-alkyl and halo-C_{1-4}-alkyl;

R^{132} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-6}-cycloalkyl;

R^{140} is C_{3-10}-cycloalkyl, which is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{3-8}-cycloalkyl and C_{3-8}-heterocycloalkyl;

x and y are independently selected from 0, 1 and 2.

In a third aspect, there is provided a compound represented by Formula (**1**) or Formula (**1'**)



(**1**) (**1'**)

an enantiomer, diastereomer, tautomer, *N*-oxide, solvate, formulation and pharmaceutically acceptable salt thereof, wherein

R^1 and R^2 are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-C_{3-10}-cycloalkyl, C_{1-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{1-10}-alkylene-(5-membered heteroaryl) and SO_2-C_{1-10}-alkyl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{11}, O-C_{2-6}-alkylene-OR^{11}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{11}, $CONR^{11}R^{12}$, $CONR^{11}SO_2R^{11}$, COR^{11}, SO_xR^{11}, SO_3H, $SO_2NR^{11}R^{12}$, $NR^{11}COR^{11}$, $NR^{11}SO_2R^{11}$, NR^{11}-CO-$NR^{11}R^{12}$, NR^{11}-SO_2-$NR^{11}R^{12}$, C_{3-10}-cycloalkyl, O-C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, O-C_{3-10}-heterocycloalkyl and $NR^{11}R^{12}$;

or R^1 and R^2 when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of halogen, oxo, CN, OR^{11}, SO_xR^{11}, SO_3H, $NR^{11}SO_2R^{11}$, $SO_2NR^{11}R^{12}$, C_{0-6}-alkylene-CO_2R^{11}, $CONR^{11}R^{12}$, $CONR^{11}SO_2R^{11}$, COR^{11}, NR^{11}-CO-R^{11}, NR^{11}-CO-$NR^{11}R^{12}$, NR^{11}-SO_2-$NR^{11}R^{12}$, $NR^{11}R^{12}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-8}-cycloalkyl, O-C_{3-8}-cycloalkyl, C_{3-8}-heterocycloalkyl and O-C_{3-8}-heterocycloalkyl,

wherein cycloalkyl and heterocycloalkyl are unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of halogen, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, SO_2-C_{1-3}-alkyl, COOH and oxo;

R^3 is a 6-10 membered mono- or bicyclic aryl or a 5-14 membered mono-, bi- or tricyclic heteroaryl containing 1 to 5 heteroatoms independently selected from the group consisting of N, O and S,

wherein aryl and heteroaryl is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, C_{1-6}-alkyl, C_{1-6}-alkenyl, C_{1-6}-alkynyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-(5- or 6-membered heteroaryl), C_{1-6}-alkylene-O-R^{31}, C_{0-6}-alkylene-CN, C_{0-6}-alkylene-$N(R^{31})_2$, C_{0-6}-alkylene-O-C_{3-10}-cycloalkyl, O-C_{1-6}-alkylene-O-R^{31}, C_{0-6}-alkylene-O-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-$COOR^{31}$, C_{0-6}-alkylene-$C(O)R^{31}$, C_{0-6}-alkylene-$C(O)N(R^{31})_2$, C_{0-6}-alkylene-$N(R^{31})C(O)R^{31}$, C_{0-6}-alkylene-SO-R^{31}, C_{0-6}-alkylene-SO_2-R^{31}, C_{0-6}-alkylene-SO_2-$N(R^{31})_2$, C_{0-6}-alkylene-$N(R^{31})SO_2$-R^{31}, C_{0-6}-alkylene-SO_2-C_{3-10}-heterocycloalkyl and C_{0-6}-alkylene-SO_2-C_{3-10}-heterocycloalkyl,

wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl and the 5- or 6-membered heteroaryl is optionally substituted by 1 to 4 substituents independently selected from the group consisting of halogen, CN, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, oxo, =N-OR^{32}, O-C_{1-6}-alkyl, O-halo-C_{1-3}-alkyl, $N(R^{31})_2$, COOH, $CON(R^{31})_2$, NR^{31}-COR^{31}, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

or wherein two adjacent substituents complete a 3- to 8-membered saturated or partially unsaturated ring containing carbon atoms and optionally containing 1 to 3 heteroatoms selected from O, S, N, SO, SO_2 or NR^{31}, wherein the ring is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of halogen, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, oxo, =N-OR^{32}, OH, O-C_{1-6}-alkyl and O-halo-C_{1-6}-alkyl;

R^4 is selected from $(CR^8R^9)R^{40}$, $(C=O)R^{40}$, OR^{40}, $NR^{41}R^{40}$, SO_v-R^7 and C_{3-6}-cycloalkyl, which is spirocyclic fused with R^{40},

wherein cycloalkyl is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of F, CH_3 and CF_3;

R^7 is selected from C_{3-10}-cycloalkyl and C_{3-10}-heterocycloalkyl,

wherein cycloalkyl and heterocycloalkyl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, cycloalkyl and heterocycloalkyl;

R^8 and R^9 are independently selected from H, F, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, OH, O-C_{1-3}-alkyl and O-halo-C_{1-3}-alkyl;

R^{11} is independently selected from H, C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl and C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl,

wherein alkyl, alkylene, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 6 substituents selected from the group consisting of halogen, CN, OH, oxo, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, NH_2, $NH(C_{1-3}$-alkyl), $N(C_{1-3}$-alkyl$)_2$, C_{3-6}-heterocycloalkyl, C_{3-6}-cycloalkyl and SO_2-C_{1-3}-alkyl,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, OH, oxo, CH_3 and CF_3;

R^{12} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-6}-cycloalkyl;

R^{31} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-8}-cycloalkyl, C_{0-6}-alkylene-C_{3-8}-heterocycloalkyl, 5- or 6-membered heteroaryl and 6-membered aryl, wherein alkyl, alkylene, cyclolalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 6 substituents independently selected from the group consisting of halogen, CN, OH, oxo, =N-OR^{32}, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl and SO_2-C_{1-3}-alkyl;

and optionally wherein two R^{31} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substitutents independently selected from the group consisting of fluoro, OH, oxo, C_{1-4}-alkyl and halo-C_{1-4}-alkyl;

R^{32} is independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-6}-cycloalkyl;

R^{40} is C_{3-10}-cycloalkyl, which is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, C_{3-8}-cycloalkyl and C_{3-8}-heterocycloalkyl;

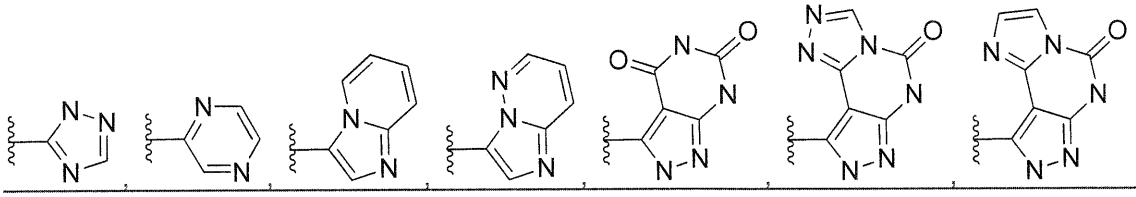
R^{41} is selected from H, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl,

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of OH, oxo, CN, halogen, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{3-6}-heterocycloalkyl and C_{3-6}-cycloalkyl;

x and y are independently selected from 0, 1 and 2;

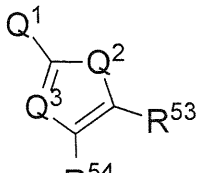
W is selected from C or S=O;

with the proviso that for R^3 the 5-14 membered mono-, bi- or tricyclic heteroaryl containing ring is not

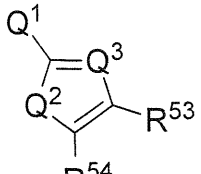


or a 5-membered aromatic heterocyclic group containing at least one oxygen atom.

In a fourth aspect, there is provided a compound according to Formula (**2**) or Formula (**2'**)



(**2**)



(**2'**)

an enantiomer, diastereomer, tautomer, solvate, formulation and pharmaceutically acceptable salt thereof,

wherein

Q^1 is selected from $CO\text{-}NR^{51}R^{52}$, $CO\text{-}R^{52}$, CO_2R^{51}, $SO_2\text{-}NR^{51}R^{52}$, $SO_2\text{-}R^{52}$, $NR^{52}CO\text{-}R^{51}$ and $NR^{52}SO_2\text{-}R^{51}$;

Q^2 is selected from -O-, -S-, $-CR^{55}=CR^{56}$-, $-N=CR^{56}$-, $-CR^{55}=N$- and -N=N-;

Q^3 is selected from N and CR^{55};

R^{51} and R^{52} are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{0-10}-alkylene-C_{3-10}-cycloalkyl, C_{0-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-10}-alkylene-heteroaryl and C_{0-10}-alkylene-aryl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{61}, O-C_{2-6}-alkylene-OR^{61}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, SO_xR^{61}, SO_3H, $SO_2NR^{61}R^{62}$, $NR^{61}COR^{61}$, $NR^{61}SO_2R^{61}$, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, O-C_{3-6}-heterocycloalkyl and $NR^{61}R^{62}$;

or R^{51} and R^{52} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of halogen, oxo, CN, OR^{61}, SO_xR^{61}, SO_3H, $NR^{61}SO_2R^{61}$, $SO_2NR^{61}R^{62}$, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, NR^{61}-CO-R^{61}, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, $NR^{61}R^{62}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl and O-C_{3-6}-heterocycloalkyl;

R^{53} is a 6-10 membered mono- or bicyclic aryl or a 5-14 membered mono-, bi- or tricyclic heteroaryl containing 1 to 5 heteroatoms independently selected from the group consisting of N, O and S,

wherein aryl and heteroaryl are unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, CN, C_{1-6}-alkyl, C_{1-6}-alkenyl, C_{1-6}-alkynyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-O-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-$COOR^{81}$, C_{0-6}-alkylene-$C(O)R^{81}$, C_{0-6}-alkylene-$C(O)N(R^{81})_2$, C_{0-6}-alkylene-SO_2-$N(R^{81})_2$, C_{0-6}-alkylene-SO_2-R^{81}, C_{0-6}-alkylene-(6-10-membered mono- or bicyclic aryl) and C_{0-6}-alkylene-(6-10-membered mono- or bicyclic heteroaryl),

wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl and heteroaryl are unsubstituted or substituted by 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, OH, oxo, =N-OR^{82}, $N(R^{81})_2$, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, COOH, $CON(R^{81})_2$, CN, NR^{81}-COR^{81}, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

or wherein two adjacent substituents may complete a 3- to 8-membered saturated or partially unsaturated ring containing carbon atoms and optionally containing 1 to 3 members selected from O, S, SO, SO_2 or NR^{81}, wherein the ring is unsubstituted or substituted with one to four substituents independently selected from the group consisting of halogen, oxo, =N-OR^{82}, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and halo-C_{1-6}-alkyl;

R^{54} is selected from C_{0-6}-alkylene-R^{57}, C_3-cycloalkyl-R^{57}, O-C_{0-5}-alkylene-R^{57}, NR^{91}-C_{0-5}-alkylene-R^{57} and SO_x-C_{0-5}-alkylene-R^{57},

wherein alkylene is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, =N-OR^{82}, $N(R^{81})_2$, O-C_{1-6}-alkyl, COOH, $CON(R^{81})_2$, CN, NR^{81}-COR^{81}, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl;

R^{55} and R^{56} are independently selected from H, halogen, CN, C_{1-6}-alkyl and O-C_{1-6}-alkyl,

wherein alkyl is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-3}-alkyl; O-halo-C_{1-3}-alkyl and C_{3-6}-cycloalkyl;

R^{57} is selected from C_{1-10}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

wherein alkyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, cycloalkyl and heterocycloalkyl;

R^{61} and R^{81} independently selected from H, C_{1-6}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, phenyl, and 5-6-membered heteroaryl containing 1 to 4 heteroatoms independently selected from N, O and S

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl$)_2$, C_{3-10}-heterocycloalkyl, C_{3-10}-cycloalkyl, SO_2-C_{1-3}-alkyl, oxo and CN,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$ and C_{3-10}-cycloalkyl,

wherein phenyl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, halogen, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$ and C_{3-10}-cycloalkyl;

R^{62} and R^{82} are independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-10}-cycloalkyl;

R^{91} is selected from H, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl,

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of OH, oxo, CN, halogen, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{3-6}-heterocycloalkyl and C_{3-6}-cycloalkyl;

x is independently selected from 0, 1 and 2;

for use in the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor;

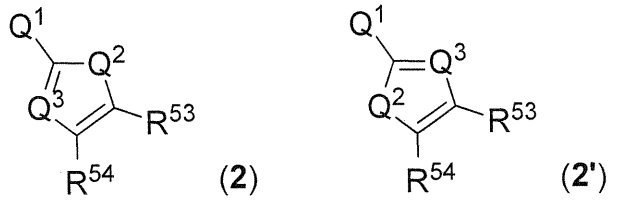
with the proviso that compounds of Formula (**2'**) with Q^1 is NHCO-R^{51}, Q^2 is sulfur, Q^3 is nitrogen, R^{53} and R^{57} are optionally substituted aryl and R^{54} is COR^{57} are excluded.

In a fifth aspect, there is provided a compound as defined above for use as medicament.

In a sixth aspect, there is provided a compound as defined above for use in the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor.

In a seventh aspect, there is provided a pharmaceutical composition comprising a compound as defined above and a pharmaceutically acceptable carrier or excipient.

In an eighth aspect, there is provided use of a compound according to Formula (**2**) or Formula (**2'**)



an enantiomer, diastereomer, tautomer, solvate, formulation and pharmaceutically acceptable salt thereof,

wherein

Q^1 is selected from $CO-NR^{51}R^{52}$, $CO-R^{52}$, CO_2R^{51}, $SO_2-NR^{51}R^{52}$, SO_2-R^{52}, $NR^{52}CO-R^{51}$ and $NR^{52}SO_2-R^{51}$;

Q^2 is selected from -O-, -S-, $-CR^{55}=CR^{56}-$, $-N=CR^{56}-$, $-CR^{55}=N-$ and -N=N-;

Q^3 is selected from N and CR^{55};

R^{51} and R^{52} are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{0-10}-alkylene-C_{3-10}-cycloalkyl, C_{0-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-10}-alkylene-heteroaryl and C_{0-10}-alkylene-aryl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{61}, O-C_{2-6}-alkylene-OR^{61}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, SO_xR^{61}, SO_3H, $SO_2NR^{61}R^{62}$, $NR^{61}COR^{61}$, $NR^{61}SO_2R^{61}$, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, O-C_{3-6}-heterocycloalkyl and $NR^{61}R^{62}$;

or R^{51} and R^{52} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of halogen, oxo, CN, OR^{61}, SO_xR^{61}, SO_3H, $NR^{61}SO_2R^{61}$, $SO_2NR^{61}R^{62}$, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, NR^{61}-CO-R^{61}, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, $NR^{61}R^{62}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl and O-C_{3-6}-heterocycloalkyl;

R^{53} is a 6-10 membered mono- or bicyclic aryl or a 5-14 membered mono-, bi- or tricyclic heteroaryl containing 1 to 5 heteroatoms independently selected from the group consisting of N, O and S,

wherein aryl and heteroaryl are unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, CN, C_{1-6}-alkyl, C_{1-6}-alkenyl, C_{1-6}-alkynyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-O-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-$COOR^{81}$, C_{0-6}-alkylene-$C(O)R^{81}$, C_{0-6}-alkylene-$C(O)N(R^{81})_2$, C_{0-6}-alkylene-SO_2-$N(R^{81})_2$, C_{0-6}-alkylene-SO_2-R^{81}, C_{0-6}-alkylene-(6-10-membered mono- or bicyclic aryl) and C_{0-6}-alkylene-(6-10-membered mono- or bicyclic heteroaryl),

wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl and heteroaryl are unsubstituted or substituted by 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, OH, oxo, =N-OR^{82}, $N(R^{81})_2$, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, COOH, $CON(R^{81})_2$, CN, NR^{81}-COR^{81}, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

or wherein two adjacent substituents may complete a 3- to 8-membered saturated or partially unsaturated ring containing carbon atoms and optionally containing 1 to 3 members selected from O, S, SO, SO_2 or NR^{81}, wherein the ring is unsubstituted or substituted with one to four substituents independently selected from the group consisting of halogen, oxo, =N-OR^{82}, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and halo-C_{1-6}-alkyl;

R^{54} is selected from C_{0-6}-alkylene-R^{57}, C_3-cycloalkyl-R^{57}, O-C_{0-5}-alkylene-R^{57}, NR^{91}-C_{0-5}-alkylene-R^{57} and SO_x-C_{0-5}-alkylene-R^{57},

wherein alkylene is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, =N-OR^{82}, N(R^{81})$_2$, O-C_{1-6}-alkyl, COOH, CON(R^{81})$_2$, CN, NR^{81}-COR^{81}, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl;

R^{55} and R^{56} are independently selected from H, halogen, CN, C_{1-6}-alkyl and O-C_{1-6}-alkyl,

wherein alkyl is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-3}-alkyl; O-halo-C_{1-3}-alkyl and C_{3-6}-cycloalkyl;

R^{57} is selected from C_{1-10}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

wherein alkyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, cycloalkyl and heterocycloalkyl;

R^{61} and R^{81} independently selected from H, C_{1-6}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, phenyl, and 5-6-membered heteroaryl containing 1 to 4 heteroatoms independently selected from N, O and S

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, NH(C_{1-6}-alkyl), N(C_{1-6}-alkyl)$_2$, C_{3-10}-heterocycloalkyl, C_{3-10}-cycloalkyl, SO_2-C_{1-3}-alkyl, oxo and CN,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, NH(C_{1-6}-alkyl), N(C_{1-6}- alkyl)$_2$ and C_{3-10}-cycloalkyl,

wherein phenyl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl,

halogen, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$ and C_{3-10}-cycloalkyl;

R^{62} and R^{82} are independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-10}-cycloalkyl;

R^{91} is selected from H, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl,

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of OH, oxo, CN, halogen, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{3-6}-heterocycloalkyl and C_{3-6}-cycloalkyl;

x is independently selected from 0, 1 and 2;

in the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor;

with the proviso that compounds of Formula (**2'**) with Q^1 is NHCO-R^{51}, Q^2 is sulfur, Q^3 is nitrogen, R^{53} and R^{57} are optionally substituted aryl and R^{54} is COR^{57} are excluded.

In a ninth aspect, there is provided use of a compound as defined above in the manufacture of a medicament.

In a tenth aspect, there is provided use of a compound as defined above in the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor.

Thus, the present ~~invention~~ disclosure provides carboxamide or sulfonamide containing cyclic compounds as RORγ modulators, which can be used for treating or preventing a disease or disorder associated with the inactivation or activation of the RORγ receptor.

The present ~~invention~~ disclosure relates to a RORγ modulator which is based on a cyclic scaffold for use in the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of RORγ.

When treating the disease or disorder associated with the modulation of the RORγ receptor, the activity of said receptor is preferably reduced.

Preferably, the disease or disorder is selected from the group consisting of autoimmune diseases. Autoimmune diseases comprise a group of diseases with a similar etiology of an overshooting immune response against endogenous targets resulting in chronic inflammation and physical disabilities or other severe symptoms. Autoimmune diseases comprise e.g. rheumatoid arthritis, ankylosing spondylitis, lupus erythematosus, psoriasis, psoriatic arthritis, atopic eczema, inflammatory bowel diseases such as Crohn´s disease, asthma, mucosal leishmaniasis, multiple sclerosis, systemic sclerosis, type 1 diabetes, Kawasaki disease, Hashimoto's thyroiditis, chronic graft-versus-host disease, acute graft-versus-host disease, Celiac Sprue, idiopathic thrombocytopenic thromobotic purpura, myasthenia gravis, Sjorgren's

syndrome, scleroderma, ulcerative colitis, epidermal hyperplasia, glomerulonephritis, chronic obstructive pulmonary disease and amyotrophic lateral sclerosis.

The present ~~invention~~ disclosure provides novel compounds to be used in the treatment of diseases or disorders associated with the inactivation or activation of the RORγ receptor.

Further, the present ~~invention~~ disclosure relates to a method for treating autoimmune diseases comprising rheumatoid arthritis, ankylosing spondylitis, lupus erythematosus, psoriasis, psoriatic arthritis, atopic eczema, inflammatory bowel diseases such as Crohn´s disease, asthma, mucosal leishmaniasis, multiple sclerosis, systemic sclerosis, type 1 diabetes,

33. The compound for use according to any of claims 29 to 32 wherein

R^{54} is selected from C_{1-6}-alkylene-R^{57}, O-R^{57} and SO_2-R^{57},

wherein alkylene is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, CN and C_{3-6}-cycloalkyl;

R^{57} is selected from C_{1-10}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

wherein alkyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, cycloalkyl and heterocycloalkyl.

34. The compound according to any of claims 1 to 28 for use as medicament.

35. The compound according to any of claims 1 to 28 for use in the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor.

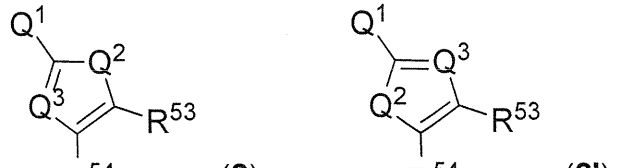
36. The compound for use according to claim 35, wherein the disease is selected from the group consisting of rheumatoid arthritis, ankylosing spondylitis, lupus erythematosus, psoriasis, psoriatic arthritis, atopic eczema, inflammatory bowel diseases such as Crohn´s disease, asthma, mucosal leishmaniasis, multiple sclerosis, systemic sclerosis, type 1 diabetes, Kawasaki disease, Hashimoto's thyroiditis, chronic graft-versus-host disease, acute graft-versus-host disease, Celiac Sprue, idiopathic thrombocytopenic thromobotic purpura, myasthenia gravis, Sjorgren's syndrome, scleroderma, ulcerative colitis, epidermal hyperplasia, glomerulonephritis, chronic obstructive pulmonary disease and amyotrophic lateral sclerosis.

37. A pharmaceutical composition comprising a compound according to any of claims 1 to 33 and a pharmaceutically acceptable carrier or excipient.

38. The compound for use according to any of claims 29 to 33, wherein the disease or disorder is selected from the group consisting of rheumatoid arthritis, ankylosing spondylitis, lupus erythematosus, psoriasis, psoriatic arthritis, atopic eczema, inflammatory bowel

diseases such as Crohn´s disease, asthma, mucosal leishmaniasis, multiple sclerosis, systemic sclerosis, type 1 diabetes, Kawasaki disease, Hashimoto's thyroiditis, chronic graft-versus-host disease, acute graft-versus-host disease, Celiac Sprue, idiopathic thrombocytopenic thromobotic purpura, myasthenia gravis, Sjorgren's syndrome, scleroderma, ulcerative colitis, epidermal hyperplasia, glomerulonephritis, chronic obstructive pulmonary disease and amyotrophic lateral sclerosis.

39. Use of a compound according to Formula (**2**) or Formula (**2'**)



(**2**) (**2'**)

an enantiomer, diastereomer, tautomer, solvate, formulation and pharmaceutically acceptable salt thereof,

wherein

Q^1 is selected from CO-$NR^{51}R^{52}$, CO-R^{52}, CO_2R^{51}, SO_2-$NR^{51}R^{52}$, SO_2-R^{52}, NR^{52}CO-R^{51} and $NR^{52}SO_2$-R^{51};

Q^2 is selected from -O-, -S-, -CR^{55}=CR^{56}-, -N=CR^{56}-, -CR^{55}=N- and -N=N-;

Q^3 is selected from N and CR^{55};

R^{51} and R^{52} are independently selected from H, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{2-10}-alkynyl, C_{0-10}-alkylene-C_{3-10}-cycloalkyl, C_{0-10}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-10}-alkylene-heteroaryl and C_{0-10}-alkylene-aryl, wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl, aryl and heteroaryl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, CN, OR^{61}, O-C_{2-6}-alkylene-OR^{61}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, SO_xR^{61}, SO_3H, $SO_2NR^{61}R^{62}$, $NR^{61}COR^{61}$, $NR^{61}SO_2R^{61}$, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl, O-C_{3-6}-heterocycloalkyl and $NR^{61}R^{62}$;

or R^{51} and R^{52} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of halogen, oxo, CN, OR^{61}, SO_xR^{61}, SO_3H, $NR^{61}SO_2R^{61}$, $SO_2NR^{61}R^{62}$, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, NR^{61}-CO-R^{61}, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, $NR^{61}R^{62}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl and O-C_{3-6}-heterocycloalkyl;

R^{53} is a 6-10 membered mono- or bicyclic aryl or a 5-14 membered mono-, bi- or tricyclic heteroaryl containing 1 to 5 heteroatoms independently selected from the group consisting of N, O and S,

wherein aryl and heteroaryl are unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, CN, C_{1-6}-alkyl, C_{1-6}-alkenyl, C_{1-6}-alkynyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{0-6}-alkylene-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-O-C_{3-10}-cycloalkyl, C_{0-6}-alkylene-C_{3-10}-heterocycloalkyl, C_{0-6}-alkylene-$COOR^{81}$, C_{0-6}-alkylene-$C(O)R^{81}$, C_{0-6}-alkylene-$C(O)N(R^{81})_2$, C_{0-6}-alkylene-SO_2-$N(R^{81})_2$, C_{0-6}-alkylene-SO_2-R^{81}, C_{0-6}-alkylene-(6-10-membered mono- or bicyclic aryl) and C_{0-6}-alkylene-(6-10-membered mono- or bicyclic heteroaryl),

wherein alkyl, alkenyl, alkynyl, alkylene, cycloalkyl, heterocycloalkyl and heteroaryl are unsubstituted or substituted by 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, OH, oxo, =N-OR^{82}, $N(R^{81})_2$, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, COOH, $CON(R^{81})_2$, CN, NR^{81}-COR^{81}, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

or wherein two adjacent substituents may complete a 3- to 8-membered saturated or partially unsaturated ring containing carbon atoms and optionally containing 1 to 3 members selected from O, S, SO, SO_2 or NR^{81}, wherein the ring is unsubstituted or substituted with one to four substituents independently selected from the group consisting of halogen, oxo, =N-OR^{82}, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and halo-C_{1-6}-alkyl;

R^{54} is selected from C_{0-6}-alkylene-R^{57}, C_3-cycloalkyl-R^{57}, O-C_{0-5}-alkylene-R^{57}, NR^{91}-C_{0-5}-alkylene-R^{57} and SO_x-C_{0-5}-alkylene-R^{57},

wherein alkylene is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, =N-OR^{82}, $N(R^{81})_2$, O-C_{1-6}-alkyl, COOH, $CON(R^{81})_2$, CN, NR^{81}-COR^{81}, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl;

R^{55} and R^{56} are independently selected from H, halogen, CN, C_{1-6}-alkyl and O-C_{1-6}-alkyl,

wherein alkyl is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-3}-alkyl; O-halo-C_{1-3}-alkyl and C_{3-6}-cycloalkyl;

R^{57} is selected from C_{1-10}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

wherein alkyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of

halogen, OH, oxo, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, cycloalkyl and heterocycloalkyl;

R^{61} and R^{81} independently selected from H, C_{1-6}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, phenyl, and 5-6-membered heteroaryl containing 1 to 4 heteroatoms independently selected from N, O and S

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$, C_{3-10}-heterocycloalkyl, C_{3-10}-cycloalkyl, SO_2-C_{1-3}-alkyl, oxo and CN,

wherein cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of C_{1-6}-alkyl, halo-C_{1-6}-alkyl, OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, phenyl, heteroaryl, halogen, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$ and C_{3-10}-cycloalkyl,

wherein phenyl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of OH, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, halogen, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, NH_2, $NH(C_{1-6}$-alkyl), $N(C_{1-6}$-alkyl)$_2$ and C_{3-10}-cycloalkyl;

R^{62} and R^{82} are independently selected from H, C_{1-6}-alkyl, halo-C_{1-6}-alkyl and C_{3-10}-cycloalkyl;

R^{91} is selected from H, C_{1-6}-alkyl, C_{3-6}-cycloalkyl and C_{3-6}-heterocycloalkyl,

wherein alkyl, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of OH, oxo, CN, halogen, O-C_{1-6}-alkyl, O-halo-C_{1-6}-alkyl, C_{3-6}-heterocycloalkyl and C_{3-6}-cycloalkyl;

x is independently selected from 0, 1 and 2;

in the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the RORγ receptor;

with the proviso that compounds of Formula (**2'**) with Q^1 is NHCO-R^{51}, Q^2 is sulfur, Q^3 is nitrogen, R^{53} and R^{57} are optionally substituted aryl and R^{54} is COR^{57} are excluded.

40. The use according to claim 39 wherein

Q^1 is selected from CO-$NR^{51}R^{52}$ and NR^{52}CO-R^{51};

Q^2 is selected from -O- and -S-; and

Q^3 is N.

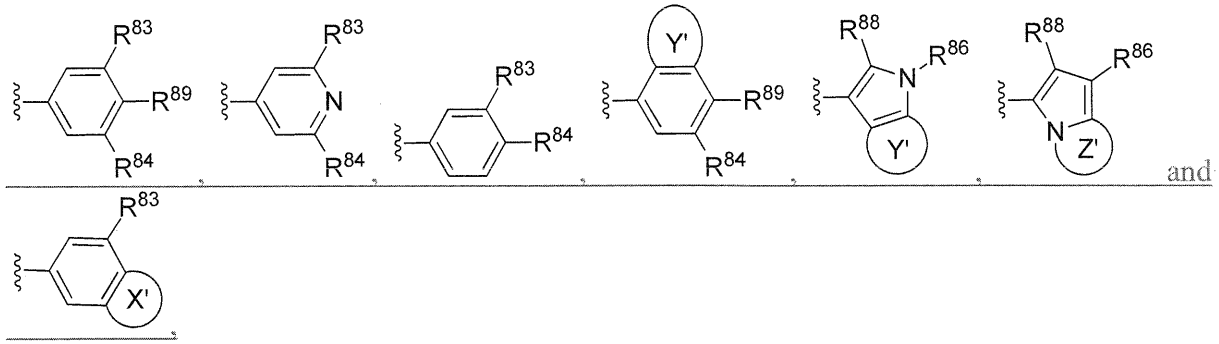
41. The use according to any of claims 39 to 40 wherein

R^{51} is selected from H, C_{1-10}-alkyl, C_{0-10}-alkylene-C_{3-10}-cycloalkyl, and C_{0-10}-alkylene-C_{3-10}-heterocycloalkyl, wherein alkyl, alkylene, cycloalkyl and heterocycloalkyl is unsubstituted or substituted with 1 to 7 substituents independently selected from the group consisting of oxo, OR^{61}, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, halogen, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, $NR^{61}COR^{61}$, $NR^{61}SO_2R^{61}$, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl and O-C_{3-6}-heterocycloalkyl;

R^{52} is selected from the group consisting of H, C_{1-6} alkyl and halo-C_{1-6} alkyl;

or R^{51} and R^{52} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of halogen, oxo, CN, OR^{61}, SO_xR^{61}, SO_3H, $NR^{61}SO_2R^{61}$, $SO_2NR^{61}R^{62}$, CO_2R^{61}, $CONR^{61}R^{62}$, $CONR^{61}SO_2R^{62}$, COR^{61}, NR^{61}-CO-R^{61}, NR^{61}-CO-$NR^{61}R^{62}$, NR^{61}-SO_2-$NR^{61}R^{62}$, $NR^{61}R^{62}$, C_{1-6}-alkyl, halo-C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl, C_{3-6}-cycloalkyl, O-C_{3-6}-cycloalkyl, C_{3-6}-heterocycloalkyl and O-C_{3-6}-heterocycloalkyl.

42. The use according to any of claims 39 to 41 wherein R^{53} is selected from



wherein

R^{83} is selected from halogen, C_{1-6}-alkyl, fluoro-C_{1-6}-alkyl, C_{1-4}-alkylene-OH, C_{1-4}-alkylene-CN, C_{1-4}-alkylene-O-C_{1-3}-alkyl, C_{1-4}-alkylene-O-fluoro-C_{1-3}-alkyl, O-C_{1-6}-alkyl, O-fluoro-C_{1-6}-alkyl, C_{3-10}-cycloalkyl, $C(O)N(R^{87})_2$,

wherein alkylene is unsubstituted or substituted with 1 to 3 substituents selected from F, and cycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

R^{84} is selected from C_{1-4}-alkylene-OH, C_{1-4}-alkylene-O-C_{1-3}-alkyl, C_{1-4}-alkylene-O-fluoro-C_{1-3}-alkyl, C_{3-10}-cycloalkyl, $C(O)N(R^{87})_2$ and $S(O_2)N(R^{87})_2$,

wherein alkylene is unsubstituted or substituted with 1 to 3 substituents selected from F, and cycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

R^{86} is selected from C_{1-6}-alkyl, fluoro-C_{1-6}-alkyl, $C(O)N(R^{87})_2$ and $S(O_2)N(R^{87})_2$,

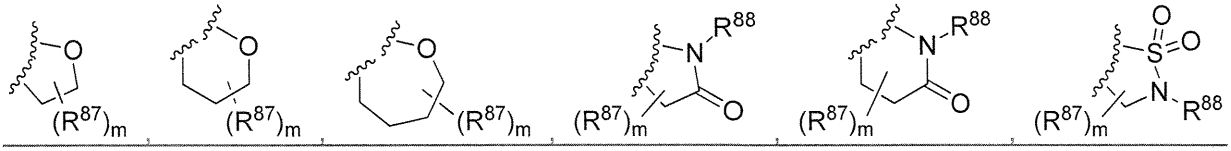
R^{87} is independently selected from H, C_{1-6}-alkyl, fluoro-C_{1-6}-alkyl, C_{0-3}-alkylene-C_{1-6}-cycloalkyl, C_{1-6}-alkylene-OH, C_{1-6}-alkylene-O-C_{1-3}-alkyl and C_{1-6}-alkylene-CN, wherein alkylene and cycloalkyl is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of F, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl,

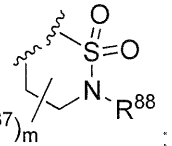
and wherein two R^{87} when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing 1 or 2 heteroatoms selected from O, S or N, wherein the ring is unsubstituted or substituted with 1 to 4 substituents independently selected from the group consisting of fluoro, oxo, C_{1-4}-alkyl and halo-C_{1-4}-alkyl;

R^{88} is selected from H, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

R^{89} is selected from H, F or OH;

X' is an annelated saturated heterocycle selected from the group consisting of



and  ;

Y' is an annelated 5- or 6-membered carbocycle, an annelated 6-membered aryl or an annelated 6-membered heteroaryl containing 1 to 2 nitrogen atoms, wherein the carbocycle, aryl or heteroaryl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of fluoro, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl;

Z' is an annelated 6-membered cycle forming a heteroaryl containing 1 to 2 nitrogen atoms, wherein the heteroaryl is unsubstituted or substituted with 1 to 3 substituents selected from the group consisting of fluoro, C_{1-3}-alkyl and fluoro-C_{1-3}-alkyl; and

m is selected from 1 to 4.

43. The use according to any of claims 39 to 42 wherein

R^{54} is selected from C_{1-6}-alkylene-R^{57}, O-R^{57} and SO_2-R^{57},

wherein alkylene is unsubstituted or substituted with 1 to 5 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-6}-alkyl, CN and C_{3-6}-cycloalkyl;

R^{57} is selected from C_{1-10}-alkyl, C_{3-10}-cycloalkyl, C_{3-10}-heterocycloalkyl, 6-10-membered mono- or bicyclic aryl and 6-10-membered mono- or bicyclic heteroaryl,

wherein alkyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of halogen, OH, oxo, O-C_{1-3}-alkyl, O-halo-C_{1-3}-alkyl, C_{1-3}-alkyl, halo-C_{1-3}-alkyl, cycloalkyl and heterocycloalkyl.

44. Use of a compound according to any of claims 1 to 28 in the manufacture of a medicament.

45. Use of a compound according to any of claims 1 to 28 in the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder associated with the inhibition or activation of the $ROR\gamma$ receptor.

46. The use of a compound according to claim 45, wherein the disease is selected from the group consisting of rheumatoid arthritis, ankylosing spondylitis, lupus erythematosus, psoriasis, psoriatic arthritis, atopic eczema, inflammatory bowel diseases such as Crohn´s disease, asthma, mucosal leishmaniasis, multiple sclerosis, systemic sclerosis, type 1 diabetes, Kawasaki disease, Hashimoto's thyroiditis, chronic graft-versus-host disease, acute graft-versus-host disease, Celiac Sprue, idiopathic thrombocytopenic thromobotic purpura, myasthenia gravis, Sjorgren's syndrome, scleroderma, ulcerative colitis, epidermal hyperplasia, glomerulonephritis, chronic obstructive pulmonary disease and amyotrophic lateral sclerosis.