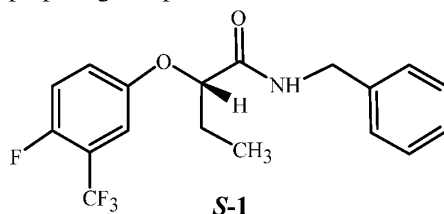


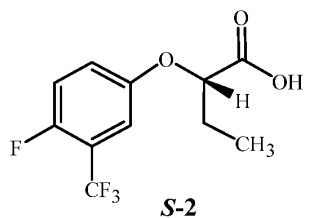
CLAIMS

What is claimed is:

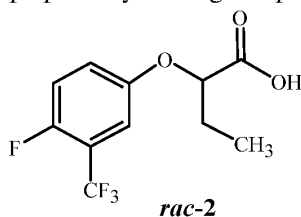
1. A method for preparing compound **S-1**



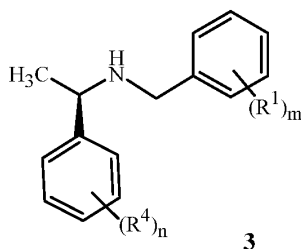
from compound **S-2**



wherein compound **S-2** is prepared by treating compound *rac-2*



with a compound of Formula **3**



wherein

each R^1 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^2 ; or

two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to three R^3 ;

each R^2 and each R^3 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

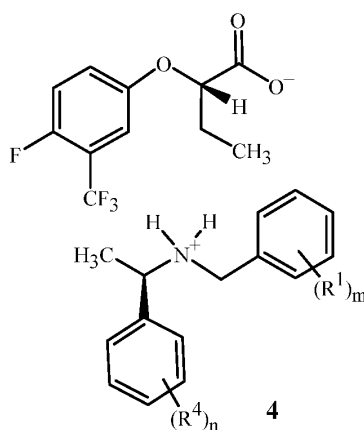
each R^4 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^5 ;

each R^5 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

m is 0, 1, 2 or 3; and

n is 0, 1, 2 or 3;

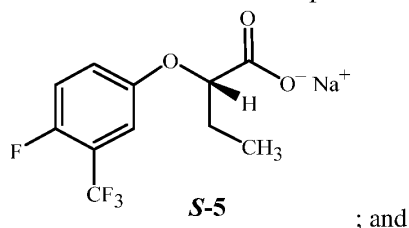
to provide a *R,S*-salt of Formula 4



wherein R^1 , R^4 , m and n are as defined above;

selectively isolating the *R,S*-salt of Formula 4;

treating the *R,S*-salt of Formula 4 with a sodium base to provide carboxylate salt **S-5**



treating carboxylate salt **S-5** with acid.

2. The method of Claim 1 wherein

m is 1 or 2;

n is 0; and

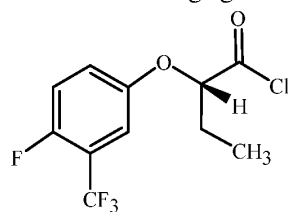
each R^1 is independently halogen, nitro, C_1-C_4 alkyl, C_1-C_4 haloalkyl; or phenyl; or two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to two R^3 .

3. The method of Claim 2 wherein each R¹ is independently halogen, nitro, C₁–C₄ alkyl or C₁–C₄ haloalkyl.

4. The method of Claim 1 wherein the compound of Formula **3** is selected from the group consisting of

(*αR*)-*α*-methyl-*N*-(phenylmethyl)-benzenemethanamine,
N-[(1*R*)-1-phenylethyl]-1-naphthalenemethanamine,
 2,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 3,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,6-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,4,6-trimethyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 4-nitro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine, and
 2-methyl-3-phenyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine.

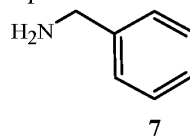
5. The method of Claim 1 further comprising
 treating compound **S-2** with a chlorinating agent to prepare compound **S-6**



S-6

; and

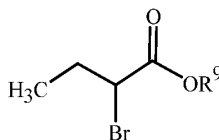
treating compound **S-6** with compound **7**



7

to prepare compound **S-1**.

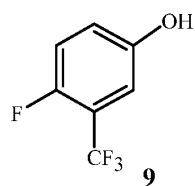
6. The method of Claim 1 wherein compound **rac-2** is prepared by treating a compound of Formula **rac-8**



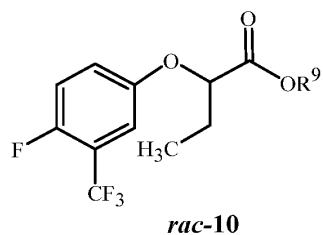
rac-8

wherein R⁹ is C₁–C₆ alkyl;

with compound **9** in the presence of a base



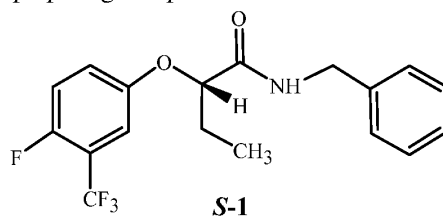
to provide a compound of Formula ***rac-10***



wherein R⁹ is C₁–C₆ alkyl; and

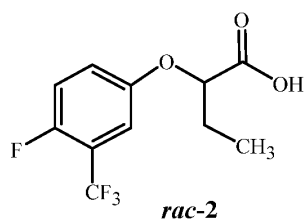
hydrolyzing the compound of Formula ***rac-10***.

7. A method for preparing compound ***S-1***

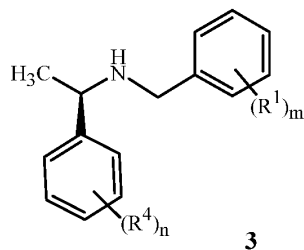


the method comprising:

treating compound ***rac-2***



with a compound of Formula **3**



wherein

each R^1 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^2 ; or

two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to three R^3 ;

each R^2 and each R^3 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

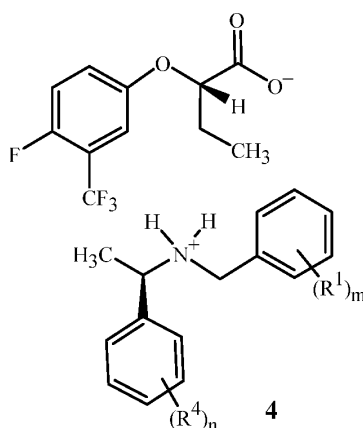
each R^4 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^5 ;

each R^5 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

m is 0, 1, 2 or 3; and

n is 0, 1, 2 or 3;

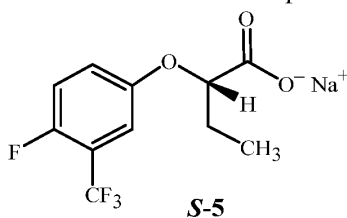
to provide the *R,S*-salt of Formula 4



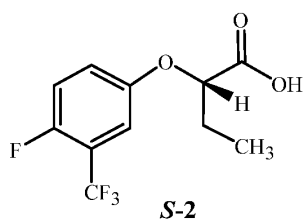
wherein R^1 , R^2 , R^3 , R^4 , m and n are as defined above;

selectively isolating the *R,S*-salt of Formula 4;

treating the *R,S*-salt of Formula 4 with a sodium base to provide carboxylate salt *S-5*



treating the carboxylate salt *S-5* with acid to prepare compound *S-2*



; and

converting compound **S-2** to compound **S-1**.

8. The method of Claim 7 wherein

m is 1 or 2;

n is 0; and

each R^1 is independently halogen, nitro, C_1 – C_4 alkyl, C_1 – C_4 haloalkyl; or phenyl; or two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to two R^3 .

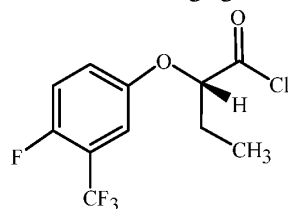
9. The method of Claim 8 wherein each R^1 is independently halogen, nitro, C_1 – C_4 alkyl or C_1 – C_4 haloalkyl.

10. The method of Claim 8 wherein the compound of Formula **3** is selected from the group consisting of

(αR)- α -methyl-*N*-(phenylmethyl)-benzenemethanamine,
N-[(1*R*)-1-phenylethyl]-1-naphthalenemethanamine,
 2,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 3,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,6-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,4,6-trimethyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 4-nitro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine, and
 2-methyl-3-phenyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine.

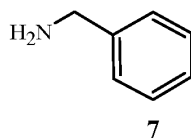
11. The method of Claim 8 wherein converting compound **S-2** to compound **S-1** comprises

treating compound **S-2** with a chlorinating agent to prepare compound **S-6**

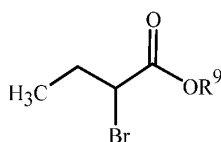


; and

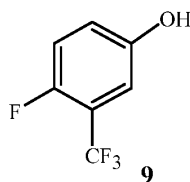
treating compound **S-6** with compound **7**



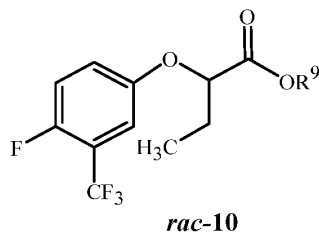
12. The method of Claim 8 wherein compound *rac-2* is prepared by treating a compound of Formula *rac-8*



wherein R⁹ is C₁–C₆ alkyl;
with compound **9** in the presence of a base

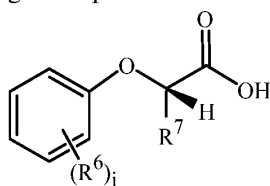


to provide a compound of Formula *rac-10*



wherein R⁹ is C₁–C₆ alkyl; and
hydrolyzing the compound of Formula *rac-10*.

13. A method for preparing a compound of Formula *S-A2*



wherein

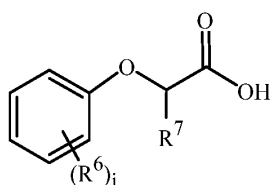
each R⁶ is independently halogen, nitro, cyano, C₁–C₄ alkyl, C₁–C₄ haloalkyl, C₁–C₄ alkoxy, C₁–C₄ alkenyl, C₁–C₄ haloalkenyl or C₁–C₄ haloalkoxy;

R^7 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkenyl or C_1-C_6 haloalkenyl; and

i is 0, 1, 2 or 3;

the method comprising:

treating a compound of Formula ***rac-A2***



rac-A2

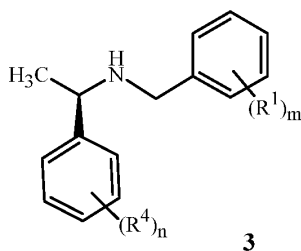
wherein

each R^6 is independently halogen, nitro, cyano, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 alkenyl, C_1-C_4 haloalkenyl or C_1-C_4 haloalkoxy;

R^7 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkenyl or C_1-C_6 haloalkenyl; and

i is 0, 1, 2 or 3;

with a compound of Formula **3**



3

wherein

each R^1 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^2 ; or

two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to three R^3 ;

each R^2 and each R^3 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

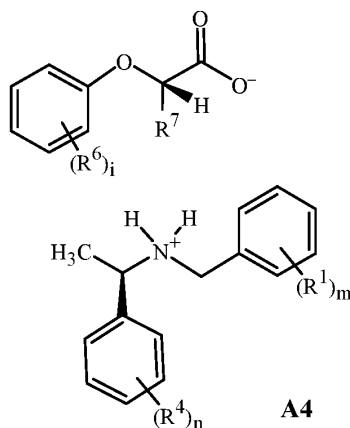
each R^4 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl, C_1-C_6 haloalkoxy; or phenyl optionally substituted with up to two R^5 ;

each R^5 is independently halogen, nitro, cyano, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkenyl, C_1-C_6 haloalkenyl or C_1-C_6 haloalkoxy;

m is 0, 1, 2 or 3; and

n is 0, 1, 2 or 3;

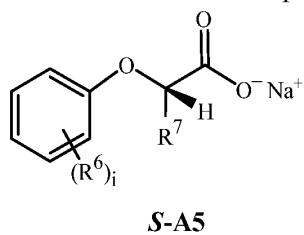
to provide the *R,S*-salt of Formula **A4**



wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , i , m and n are as defined above;

selectively isolating the *R,S*-salt of Formula **A4**;

treating the *R,S*-salt of Formula **A4** with a sodium base to provide carboxylate salt **S-A5**



wherein R^6 , R^7 and i are as defined above; and

treating the carboxylate salt **S-A5** with acid.

14. The method of Claim 13 wherein

m is 1 or 2;

n is 0; and

each R^1 is independently halogen, nitro, C_1 – C_4 alkyl, C_1 – C_4 haloalkyl; or phenyl; or two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to two R^3 .

15. The method of Claim 14 wherein each R^1 is independently halogen, nitro, C_1 – C_4 alkyl or C_1 – C_4 haloalkyl.

16. The method of Claim 13 wherein the compound of Formula **3** is selected from the group consisting of

(αR)- α -methyl-*N*-(phenylmethyl)-benzenemethanamine,
N-[(1*R*)-1-phenylethyl]-1-naphthalenemethanamine,
 2,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,

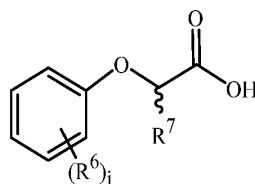
3,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,6-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 2,4,6-trimethyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
 4-nitro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine, and
 2-methyl-3-phenyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine.

17. The method of Claim 13 wherein
 each R^6 is independently halogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy or C_1 - C_4 haloalkyl;
 R^7 is C_1 - C_6 alkyl; and
 i is 0, 1 or 2.

18. The method of Claim 17 wherein
 each R^6 is independently halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl; and
 R^7 is C_1 - C_2 alkyl.

19. The method of Claim 18 wherein i is 2; one R^6 is 3- CF_3 , the second R^6 is 4-F;
 and R^7 is ethyl.

20. A method for racemizing an enantiomerically-enriched compound of
 Formula *scal-A2*



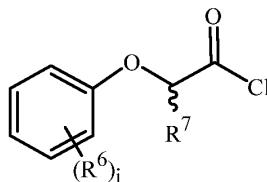
scal-A2

wherein

each R^6 is independently halogen, nitro, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkenyl, C_1 - C_4 haloalkenyl or C_1 - C_4 haloalkoxy;
 R^7 is C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkenyl or C_1 - C_6 haloalkenyl; and
 i is 0, 1, 2 or 3;

the method comprising

treating an enantiomerically-enriched compound of Formula *scal-A2* with a
 chlorinating agent to provide a compound of Formula *scal-A12*;



scal-A12

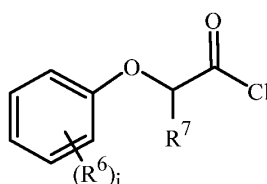
wherein

each R^6 is independently halogen, nitro, cyano, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 alkenyl, C_1-C_4 haloalkenyl or C_1-C_4 haloalkoxy;

R^7 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkenyl or C_1-C_6 haloalkenyl; and

i is 0, 1, 2 or 3;

treating the compound of Formula *scal-A12* with a tertiary amine to provide a compound of Formula *rac-A12*



rac-A12

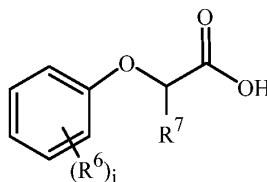
wherein

each R^6 is independently halogen, nitro, cyano, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 alkenyl, C_1-C_4 haloalkenyl or C_1-C_4 haloalkoxy;

R^7 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkenyl or C_1-C_6 haloalkenyl; and

i is 0, 1, 2 or 3;

and hydrolyzing the compound of Formula *rac-A12* to provide the compound of Formula *rac-A2*



rac-A2

wherein

each R^6 is independently halogen, nitro, cyano, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 alkenyl, C_1-C_4 haloalkenyl or C_1-C_4 haloalkoxy;

R^7 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkenyl or C_1-C_6 haloalkenyl; and

i is 0, 1, 2 or 3.

21. The method of Claim 20 wherein

each R^6 is independently halogen, C_1-C_4 alkyl, C_1-C_4 alkoxy or C_1-C_4 haloalkyl;

R^7 is C_1-C_6 alkyl; and

i is 0, 1 or 2.

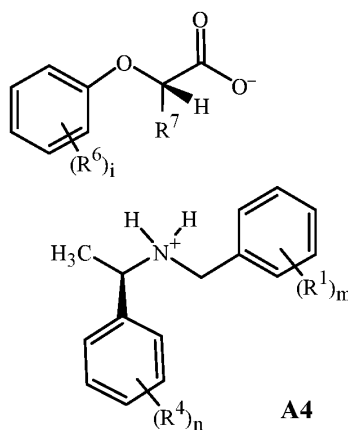
22. The method of Claim 21 wherein

each R^6 is independently halogen, C_1-C_4 alkyl or C_1-C_4 haloalkyl; and

R^7 is C_1 – C_2 alkyl.

23. The method of Claim 22 wherein i is 2; one R^6 is 3- CF_3 , the second R^6 is 4-F; and R^7 is ethyl.

24. An R,S -salt of Formula **A4**



wherein

each R^1 is independently halogen, nitro, cyano, C_1 – C_6 alkyl, C_1 – C_6 haloalkyl, C_1 – C_6 alkoxy, C_1 – C_6 alkenyl, C_1 – C_6 haloalkenyl, C_1 – C_6 haloalkoxy; or phenyl optionally substituted with up to two R^2 ; or

two adjacent R^1 substituents are taken together with the phenyl to which they are attached to form a naphthalenyl ring optionally substituted with up to three R^3 ;

each R^2 and each R^3 is independently halogen, nitro, cyano, C_1 – C_6 alkyl, C_1 – C_6 haloalkyl, C_1 – C_6 alkoxy, C_1 – C_6 alkenyl, C_1 – C_6 haloalkenyl or C_1 – C_6 haloalkoxy;

each R^4 is independently halogen, nitro, cyano, C_1 – C_6 alkyl, C_1 – C_6 haloalkyl, C_1 – C_6 alkoxy, C_1 – C_6 alkenyl, C_1 – C_6 haloalkenyl, C_1 – C_6 haloalkoxy; or phenyl optionally substituted with up to two R^5 ;

each R^5 is independently halogen, nitro, cyano, C_1 – C_6 alkyl, C_1 – C_6 haloalkyl, C_1 – C_6 alkoxy, C_1 – C_6 alkenyl, C_1 – C_6 haloalkenyl or C_1 – C_6 haloalkoxy;

each R^6 is independently halogen, nitro, cyano, C_1 – C_4 alkyl, C_1 – C_4 haloalkyl, C_1 – C_4 alkoxy, C_1 – C_4 alkenyl, C_1 – C_4 haloalkenyl or C_1 – C_4 haloalkoxy;

R^7 is C_1 – C_6 alkyl, C_1 – C_6 haloalkyl, C_1 – C_6 alkenyl or C_1 – C_6 haloalkenyl;

i is 0, 1, 2 or 3;

m is 0, 1, 2 or 3; and

n is 0, 1, 2 or 3.

25. The R,S -salt of Claim 24 wherein each R^1 is independently halogen, nitro, C_1 – C_4 alkyl or C_1 – C_4 haloalkyl.

26. The *R,S*-salt of Claim 24 that is a salt of an amine selected from the group consisting of

(αR)- α -methyl-*N*-(phenylmethyl)-benzenemethanamine,
N-[(1*R*)-1-phenylethyl]-1-naphthalenemethanamine,
2,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
3,4-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
2,6-dichloro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
2,4,6-trimethyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine,
4-nitro-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine, and
2-methyl-3-phenyl-*N*-[(1*R*)-1-phenylethyl]-benzenemethanamine.

27. The *R,S*-salt of Claim 24 wherein *m* is 2 and the R^1 substituents are chloro at the 2- and 4-positions; and *n* is 0.

28. The *R,S*-salt of Claim 24 wherein
each R^6 is independently halogen, C_1-C_4 alkyl, C_1-C_4 alkoxy or C_1-C_4 haloalkyl;
and
 R^7 is C_1-C_6 alkyl.

29. The *R,S*-salt of Claim 24 wherein
each R^6 is independently halogen, C_1-C_4 alkyl or C_1-C_4 haloalkyl; and
 R^7 is C_1-C_2 alkyl.

30. The *R,S*-salt of Claim 24 wherein *i* is 2; one R^6 is 3- CF_3 , the second R^6 is 4-F and R^7 is ethyl.

31. The *R,S*-salt of Claim 24 wherein
m is 2 and the R^1 substituents are chloro in the 2- and 4-positions;
n is 0;
i is 2;
one R^6 is 3- CF_3 and the second R^6 is 4-F; and
 R^7 is ethyl.