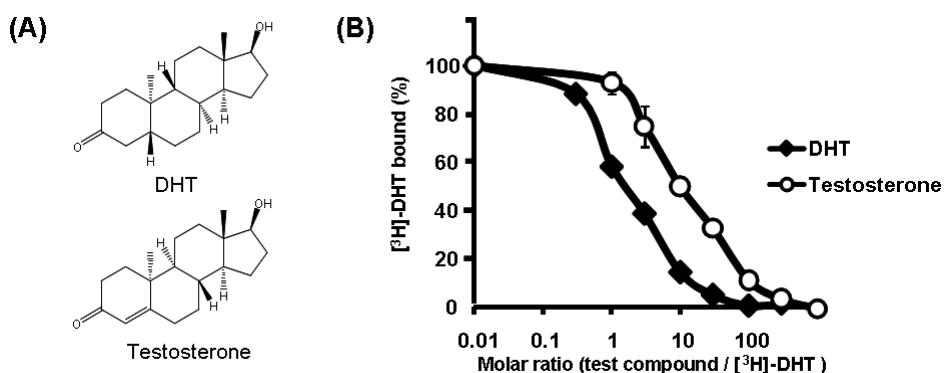


Fig. S4 A: results of the first *in vitro* binding assay.

Fig. S4 - subpart 1

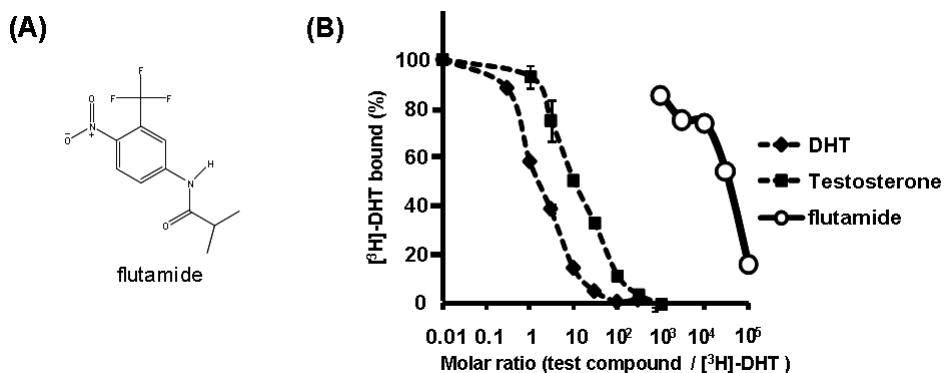
(First experimental verification)

I. *In vitro* binding assay of DHT and testosterone



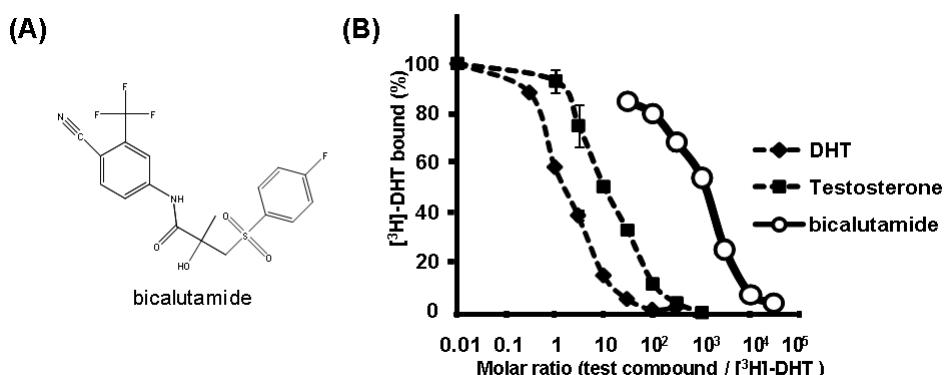
(A) chemical structure of dihydrotestosterone (DHT) and testosterone. (B) result of *in vitro* assay.

II. *In vitro* binding assay of flutamide



(A) chemical structure of flutamide. (B) result of *in vitro* assay.

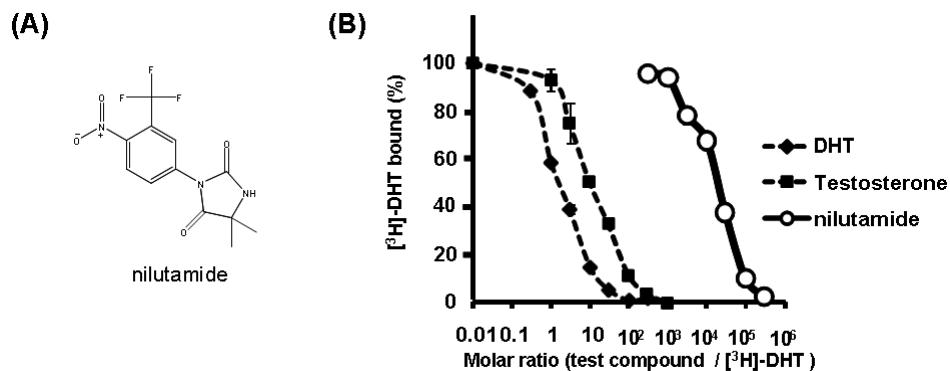
III. *In vitro* binding assay of bicalutamide



(A) chemical structure of bicalutamide. (B) result of *in vitro* assay.

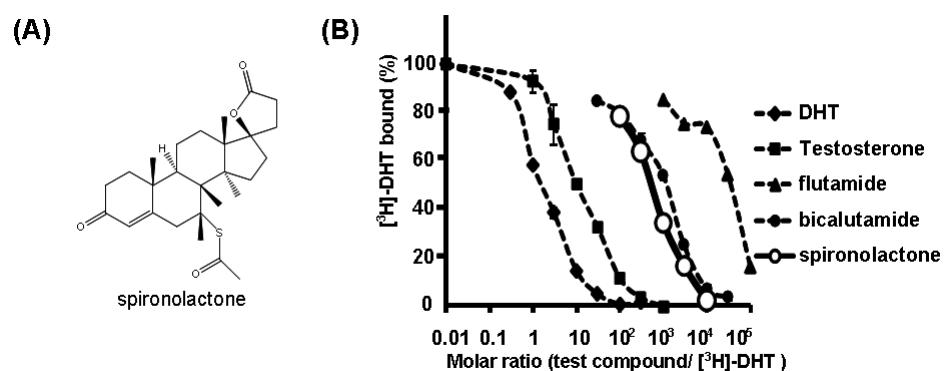
Fig. S4 - subpart 2

IV. *In vitro* binding assay of nilutamide



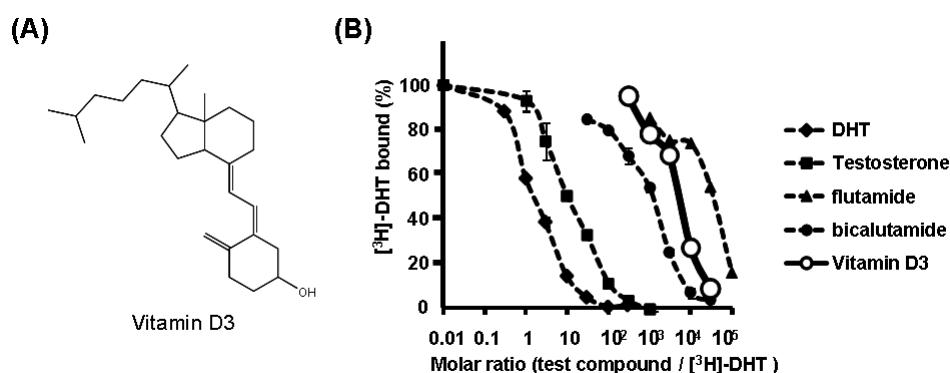
(A) chemical structure of nilutamide. (B) result of *in vitro* assay.

V. *In vitro* binding assay of spironolactone



(A) chemical structure of spironolactone. (B) result of *in vitro* assay.

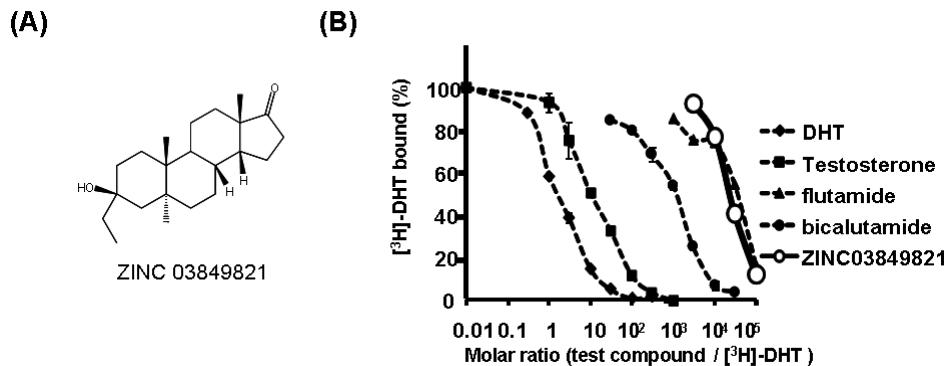
VI. *In vitro* binding assay of vitamin D3



(A) chemical structure of vitamin D3. (B) result of *in vitro* assay.

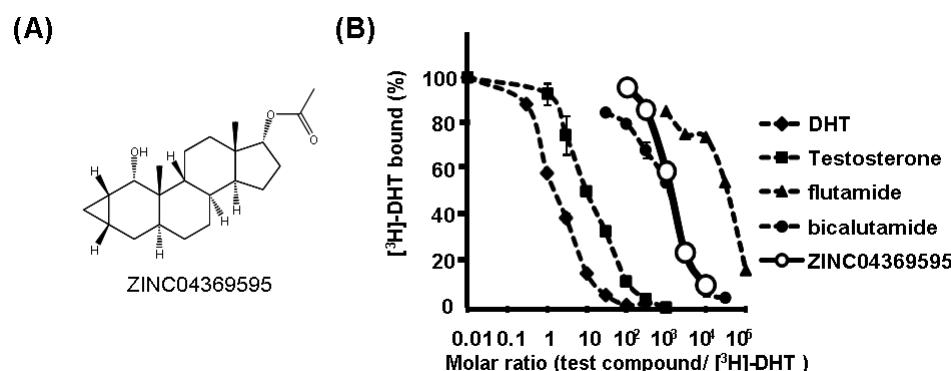
Fig. S4 - subpart 3

VII. *In vitro* binding assay of ZINC 03849821



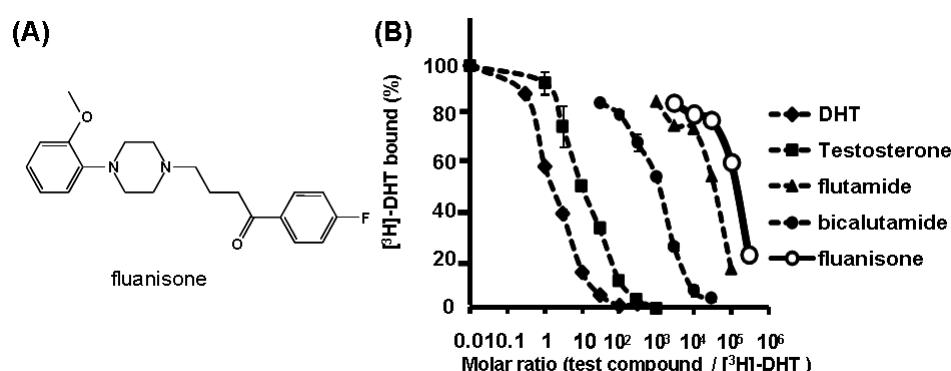
(A) chemical structure of ZINC 03849821. (B) result of *in vitro* assay.

VIII. *In vitro* binding assay of ZINC 04369595



(A) chemical structure of ZINC 04369595. (B) result of *in vitro* assay.

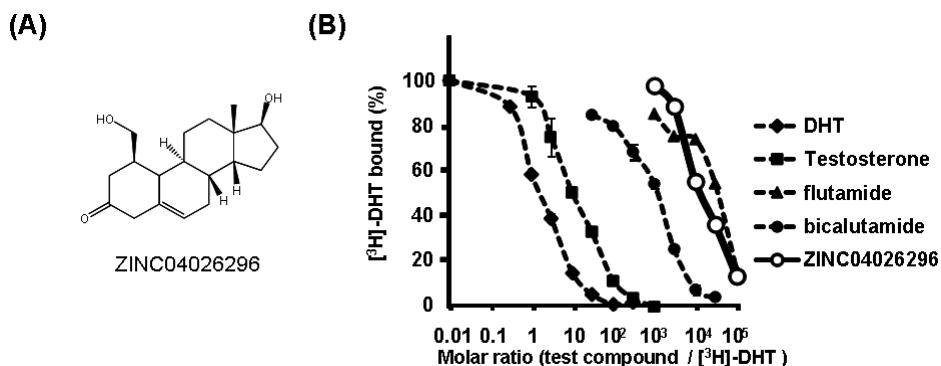
IX. *In vitro* binding assay of fluanisone



(A) chemical structure of fluanisone. (B) result of *in vitro* assay.

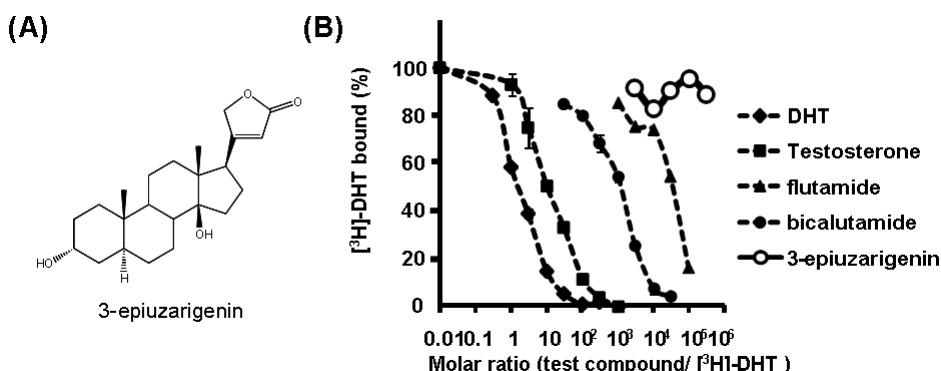
Fig. S4 - subpart 4

X. *In vitro* binding assay of ZINC 04026296



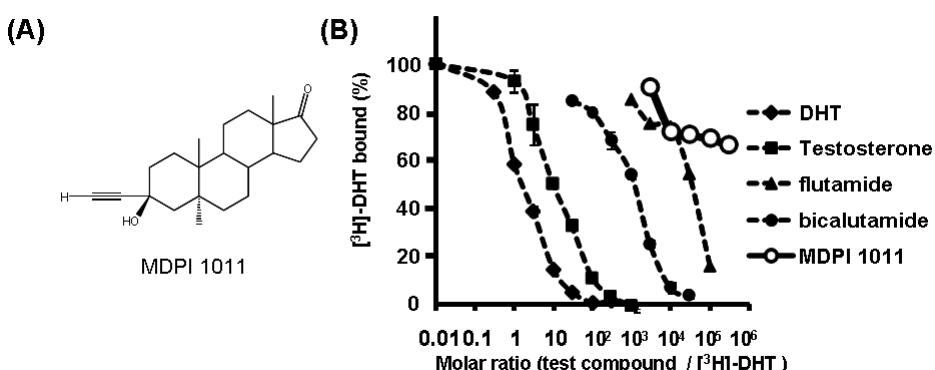
(A) chemical structure of ZINC 04026296. (B) result of *in vitro* assay.

XI. *In vitro* binding assay of 3-epiuzarigenin



(A) chemical structure of 3-epiuzarigenin. (B) result of *in vitro* assay.

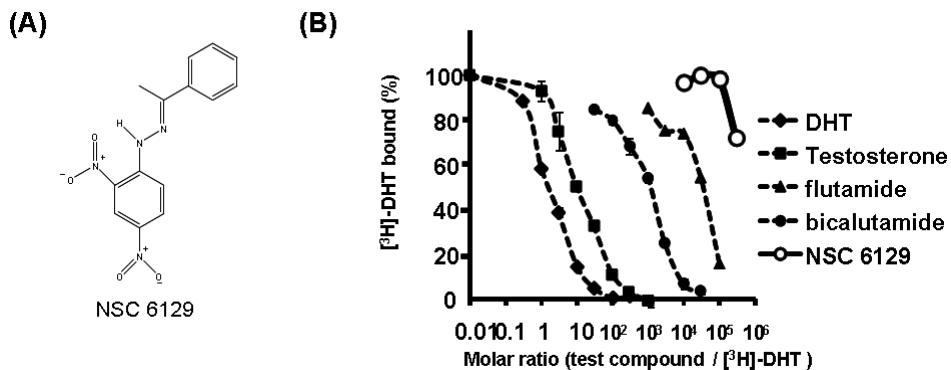
XII. *In vitro* binding assay of MDPI 1011



(A) chemical structure of MDPI 1011. (B) result of *in vitro* assay.

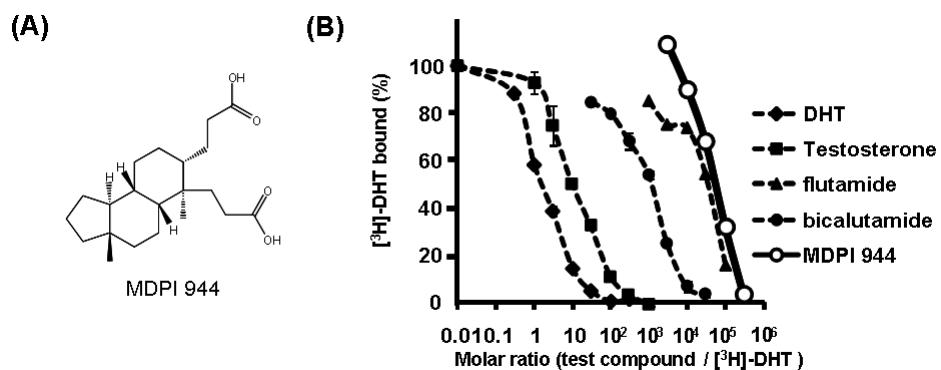
Fig. S4 - subpart 5

XIII. *In vitro* binding assay of NSC 6129



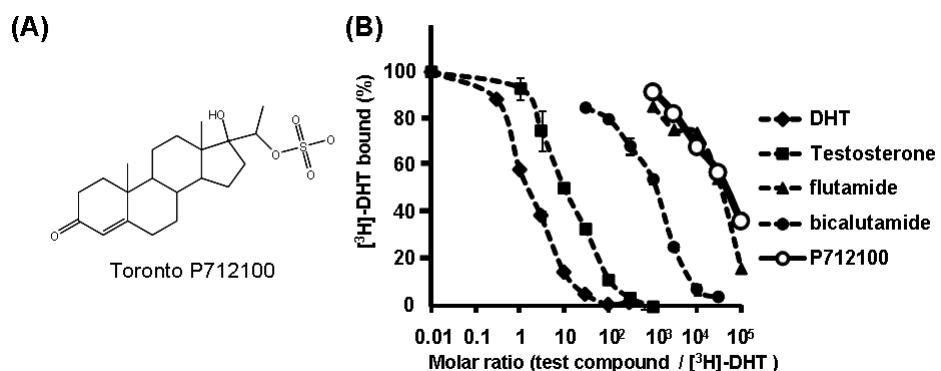
(A) chemical structure of NSC 6129. (B) result of *in vitro* assay.

XIV. *In vitro* binding assay of MDPI 944



(A) chemical structure of MDPI 944. (B) result of *in vitro* assay.

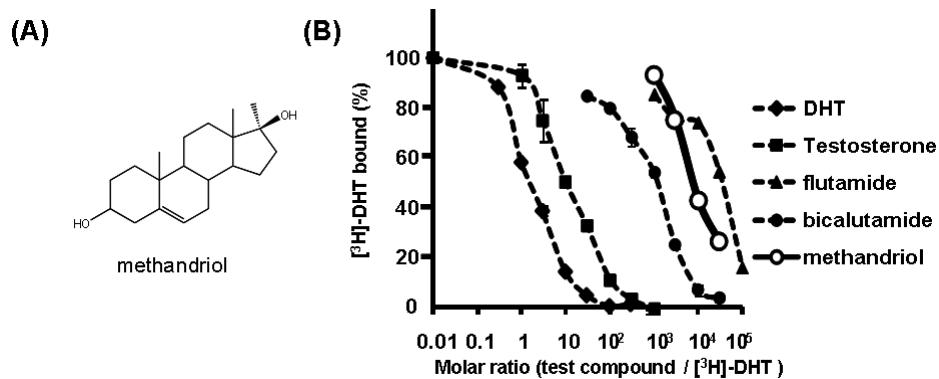
XV. *In vitro* binding assay of P712100



(A) chemical structure of P712100. (B) result of *in vitro* assay.

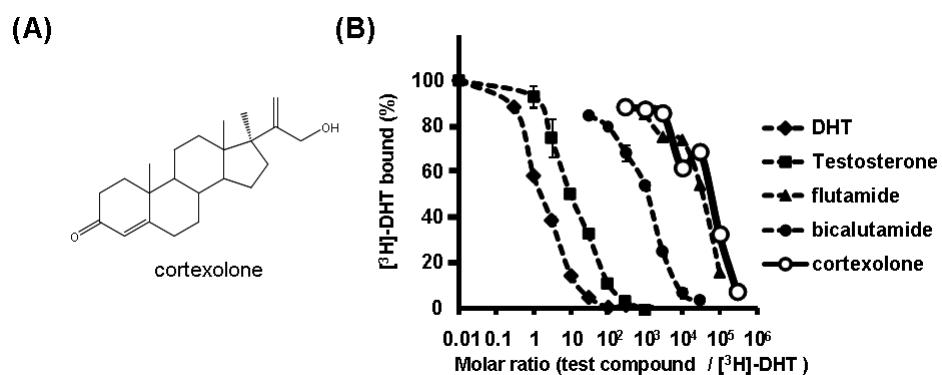
Fig. S4 - subpart 6

XVI. *In vitro* binding assay of methandriol



(A) chemical structure of methandriol. (B) result of *in vitro* assay.

XVII. *In vitro* binding assay of cortexolone

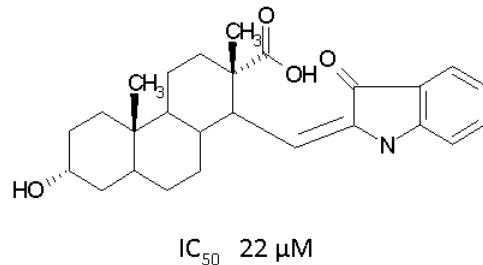
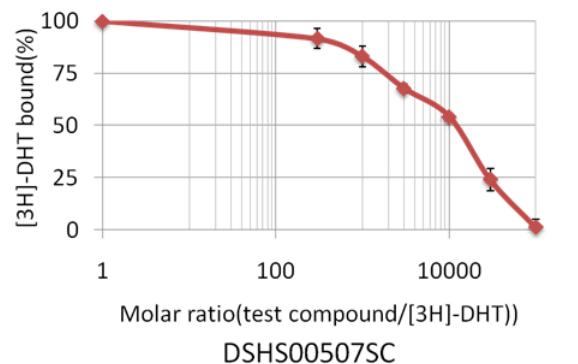


(A) chemical structure of cortexolone. (B) result of *in vitro* assay.

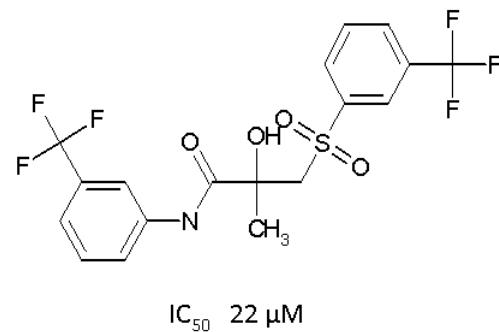
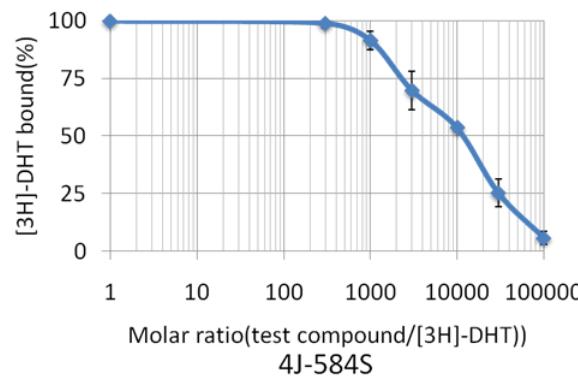
Fig. S4 - subpart 7

(Second experimental verification)

XVIII. *In vitro* binding assay of DSHS00507SC



XIX. *In vitro* binding assay of 4J-584S



XX. *In vitro* binding assay of T5853872

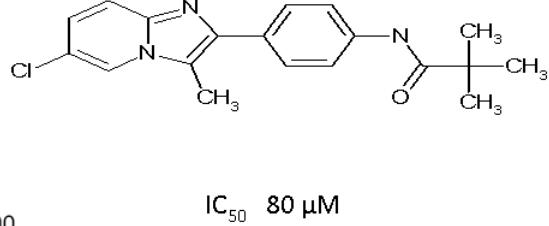
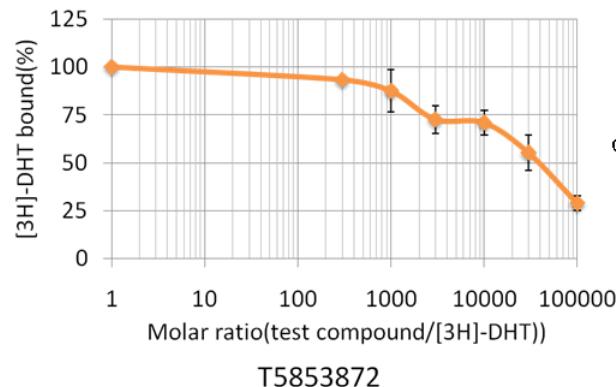
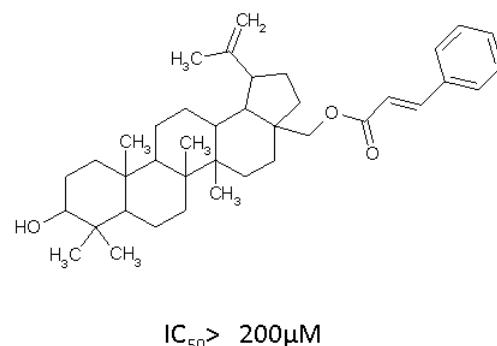
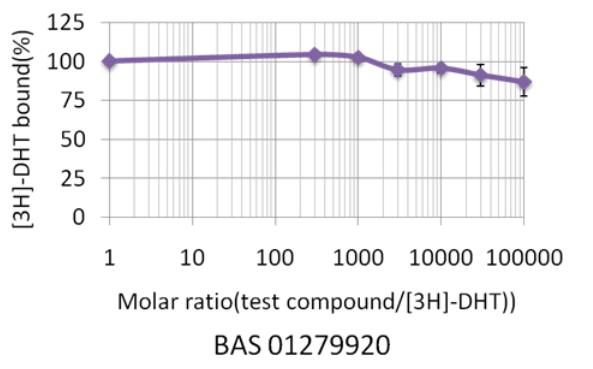


Fig. S4 - subpart 8

XXI. *In vitro* binding assay of BAS01279920



XXII. *In vitro* binding assay of AN-652/43163258

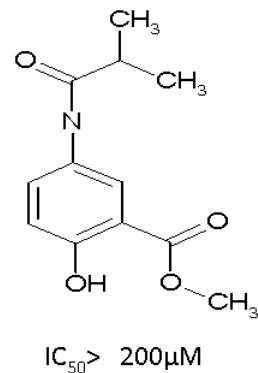
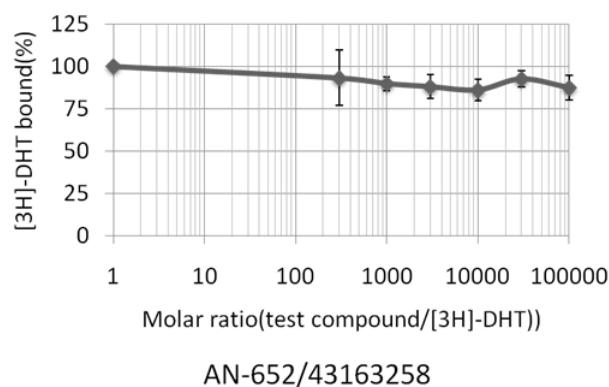


Fig. S4 I-XXII: result of *in vitro* binding assay for each compound.