

(19) **United States**(12) **Patent Application Publication**
Protter et al.(10) **Pub. No.: US 2013/0053366 A1**(43) **Pub. Date: Feb. 28, 2013**(54) **COMPOUNDS AND METHODS FOR
TREATMENT OF HYPERTENSION***A61K 31/506* (2006.01)*A61K 31/4375* (2006.01)*A61P 3/12* (2006.01)*A61K 31/519* (2006.01)*A61K 31/4985* (2006.01)*A61P 9/12* (2006.01)*A61P 13/12* (2006.01)*A61K 31/55* (2006.01)*A61K 31/497* (2006.01)(76) Inventors: **Andrew Asher Protter**, Palo Alto, CA
(US); **Sarvajit Chakravarty**, Mountain
View, CA (US); **Rajendra Parasmal
Jain**, Pune (IN); **Michael John Green**,
Half Moon Bay, CA (US)(21) Appl. No.: **13/400,031**(22) Filed: **Feb. 17, 2012**(52) **U.S. Cl. 514/215; 514/292; 514/293; 514/287;
514/286; 514/256; 514/255.05; 514/257;
514/250****Related U.S. Application Data**(60) Provisional application No. 61/444,642, filed on Feb.
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61/444,659, filed on Feb. 18, 2011, provisional appli-
cation No. 61/469,664, filed on Mar. 30, 2011, provi-
sional application No. 61/529,745, filed on Aug. 31,
2011, provisional application No. 61/529,816, filed on
Aug. 31, 2011, provisional application No. 61/562,
927, filed on Nov. 22, 2011, provisional application
No. 61/562,938, filed on Nov. 22, 2011.**Publication Classification**(51) **Int. Cl.***A61K 31/437* (2006.01)*A61K 31/439* (2006.01)(57) **ABSTRACT**

Hydrogenated pyrido[4,3-b]indoles, pyrido[3,4-b]indoles and azepino[4,5-b]indoles are described. The compounds may bind to and are adrenergic receptor α_{2B} antagonists. The compounds may also bind to and antagonize adrenergic receptor α_{1B} . The compounds may find use in therapy, e.g., to (i) reduce blood pressure and/or (ii) promote renal blood flow and/or (iii) decrease or inhibit sodium reabsorption. The compounds may also be used to treat diseases or conditions that are, or are expected to be, responsive to a decrease in blood pressure. Use of the compounds to treat cardiovascular and renal disorders is particularly described.

Figure 1

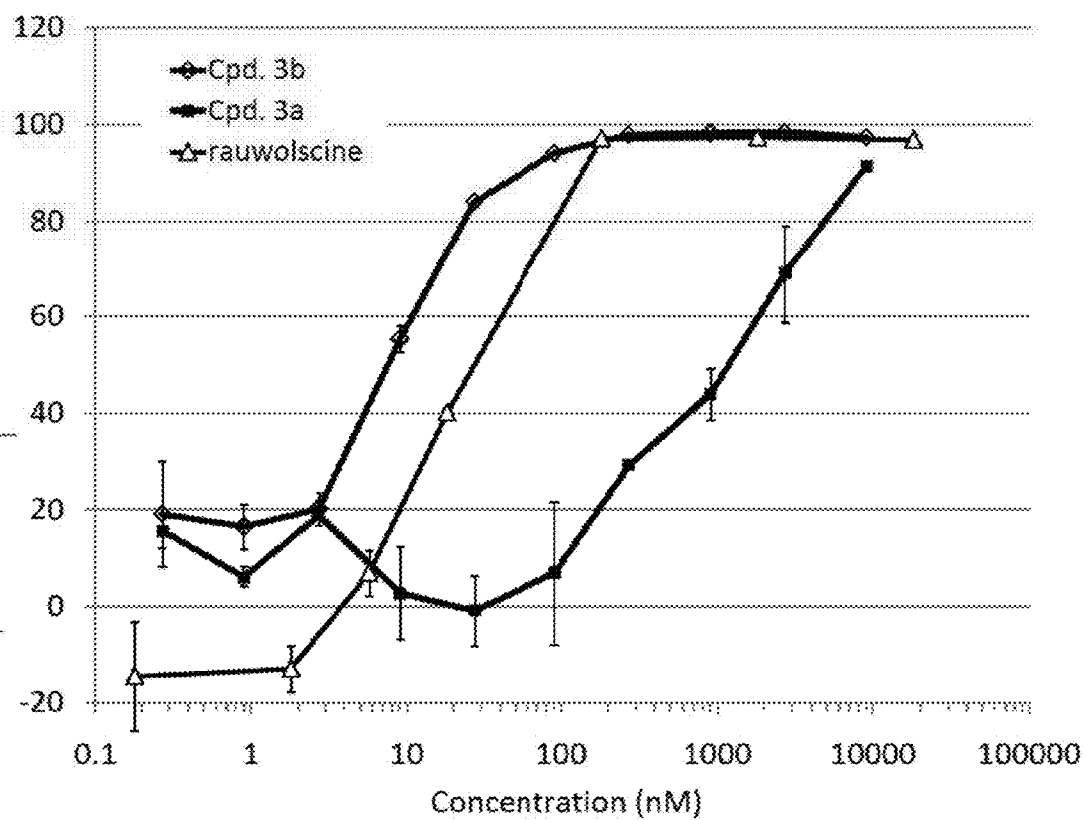


Figure 2

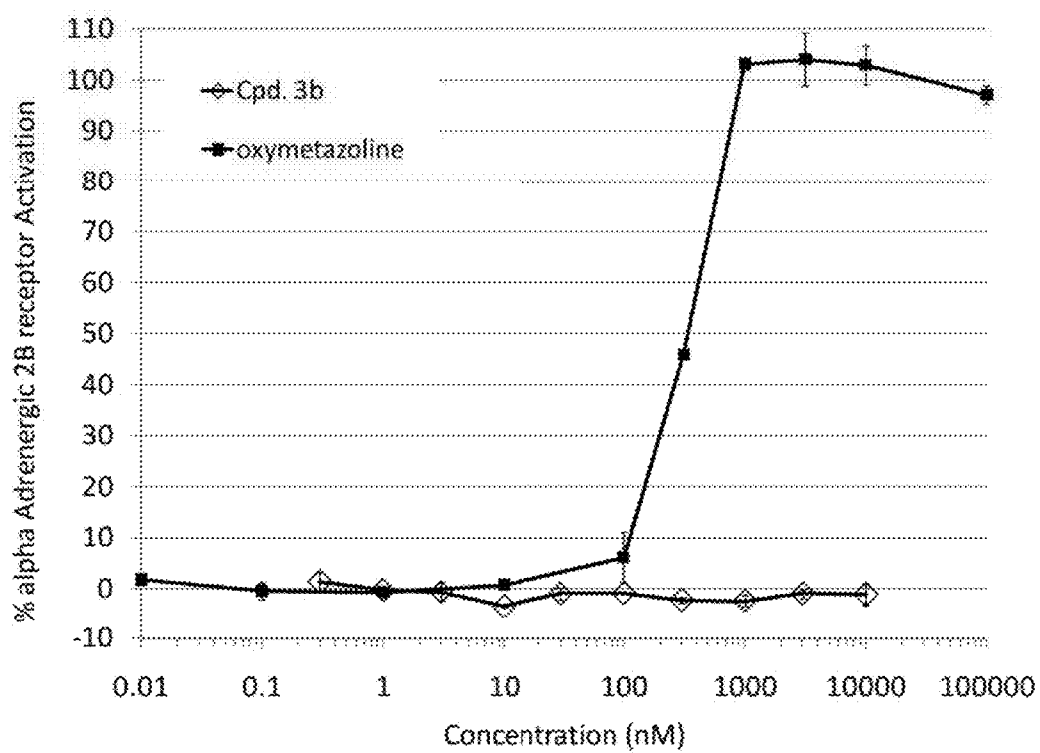


Figure 3

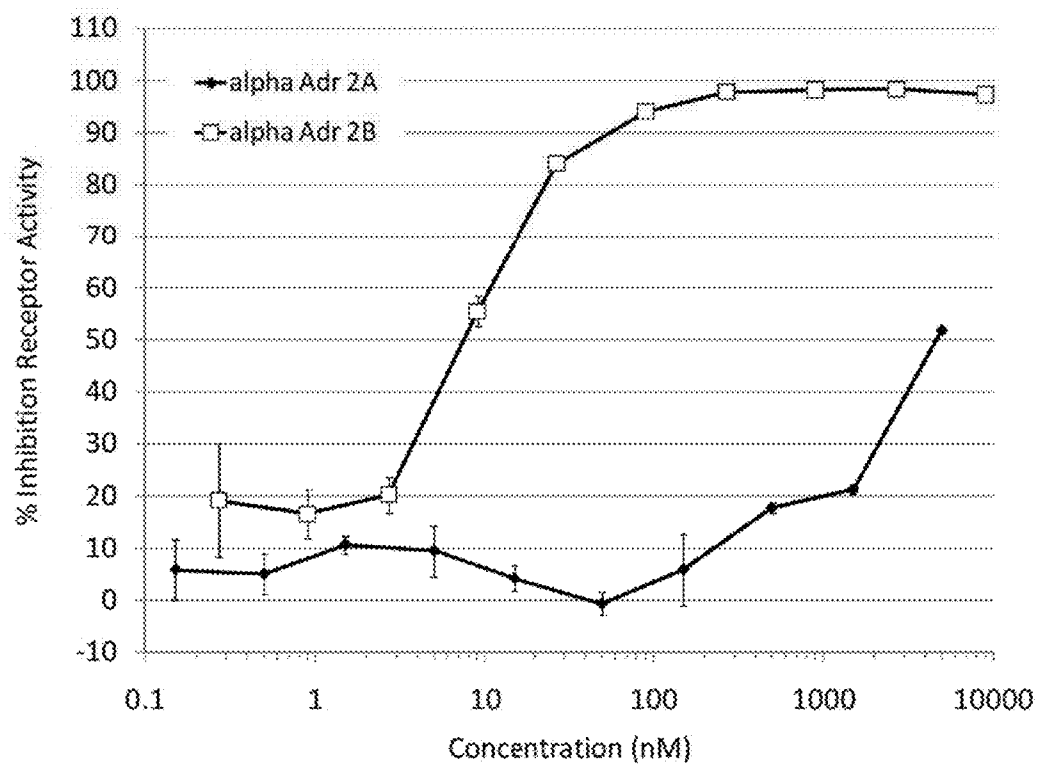


Figure 4

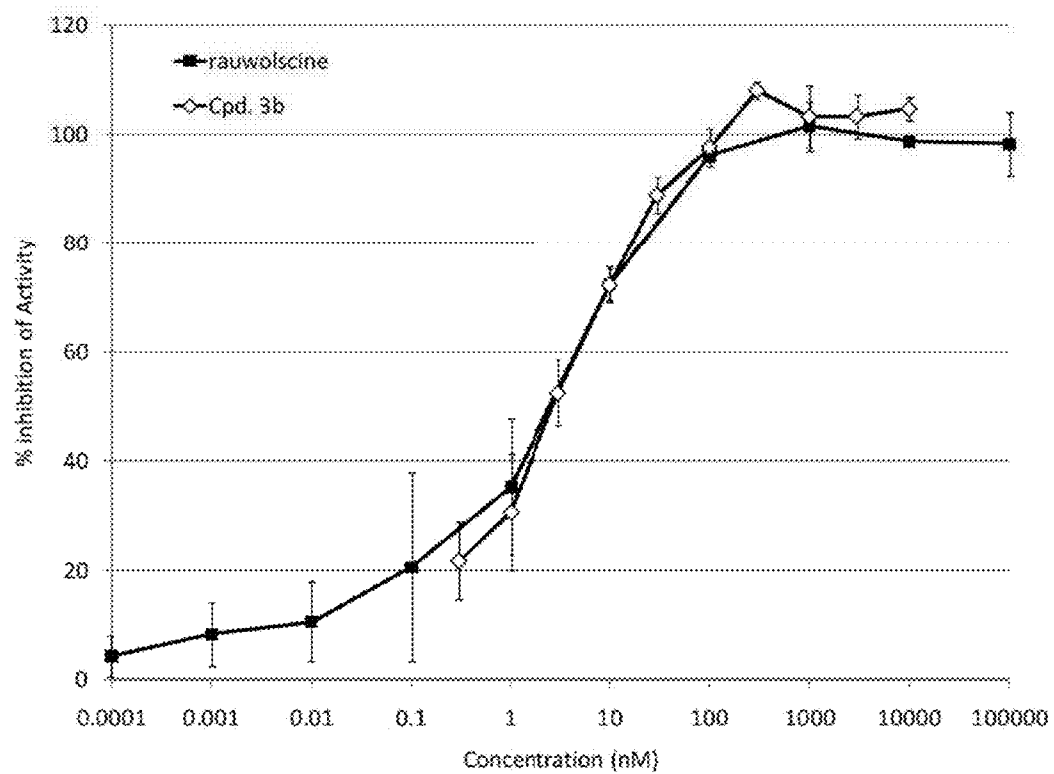


Figure 5

