

## **Amide-functionalized pillar[5]arenes as a novel class of macrocyclic receptors for the sensing of H<sub>2</sub>PO<sub>4</sub><sup>-</sup> anion**

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### **Abstract**

© The Royal Society of Chemistry 2016. A novel class of amide-functionalized pillar[5]arenes, that is, alkyl and aryl amide derivatives, has been synthesized. Highly selective binding of the dihydrogen phosphate anion over a range of anions by the new synthetic receptors is reported. First, the "binding strength-selectivity" relationship has been decided for the pillar[5]arene/anion systems.

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