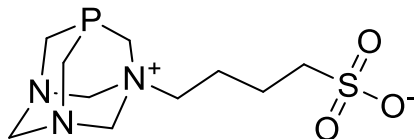
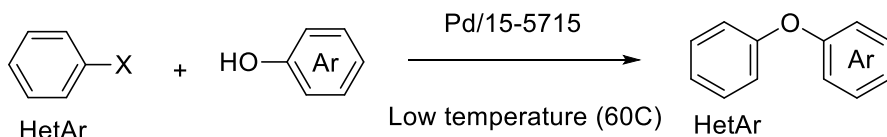


Catalog # 15-5715 4-((1R,3R,5S,7R)-1,3,5-Triaza-7-phosphaadamantan-1-ium-1-yl)butane-1-sulfonate, min. 98%, PTABS

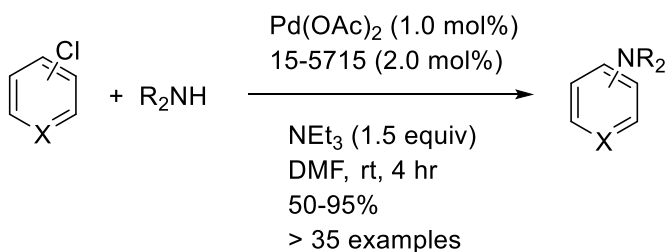


#### Technical Notes:

1. Ligand for the low temperature thioetherification of chloro(hetero)arenes.<sup>1</sup>
2. Ligand used in the efficient Pd catalyzed C-H (hetero)arylation of 1,3,4-Oxadiazoles using bromo(hetero)arenes.<sup>2</sup>
3. Ligand used in the Pd catalyzed low temperature etherification of chloroheteroarenes.<sup>3</sup>
4. Ligand used for the water soluble catalytic system for the Pd catalyzed amination of 6-chloropurine ribonucleoside and synthesis of alogliptin.<sup>4</sup>
5. Ligand for the Pd catalyzed room temperature amination of heteroarenes.<sup>5</sup>
6. Versatile Ligand for Suzuki-Miyaura, Sonogashira and Heck Reactions of Nucleosides.<sup>6</sup>



**Tech Note (3)  
Ref. (3)**



**Tech Note (5)  
Ref. (5)**

#### References:

1. *J. Org. Chem.* **2019**, *84*(14), 8921-8940.
2. *Asian J. Org. Chem.*, **2019**, *8*, 289-295.
3. *J. Org. Chem.* **2018**, *83*, 13088-13102.
4. *Curr. Protoc. Nucleic Acids Chem.*, **2018**, *74*, 58.
5. *Org. Lett.* **2018**, *20*, 473-476.
6. *RSC Adv.* **2016**, *6*, 83820.