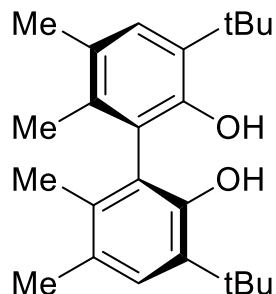
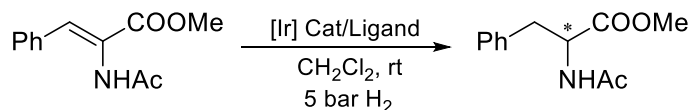


Catalog # 08-2047 (S)-(-)-5,5'-6,6'-Tetramethyl-3,3'-di-t-butyl-1,1'-biphenyl-2,2'-diol, 99%  
(S)-BIPHEN H2

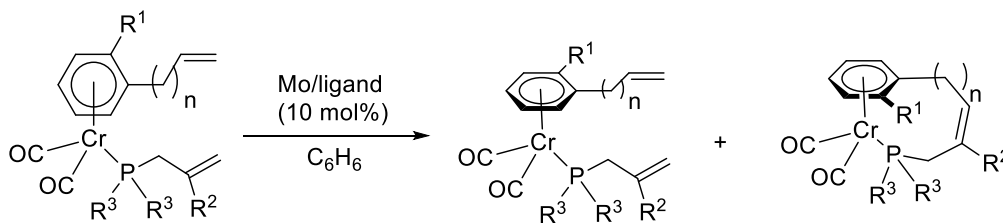


**Technical Notes:**

1. High enantioselectivity in iridium-catalyzed asymmetric hydrogenation.
2. Kinetic resolution of planar-chiral ( $\eta^6$ -arene)chromium complexes by molybdenum-catalyzed asymmetric ring-closing metathesis.
3. Palladium(II)/Bronsted acid-catalyzed enantioselective oxidative carbocyclization-borylation of enallenes.
4. Branch-selective and enantioselective hydroarylation of alkenes via anilide-directed C–H oxidative addition using iridium as a catalyst



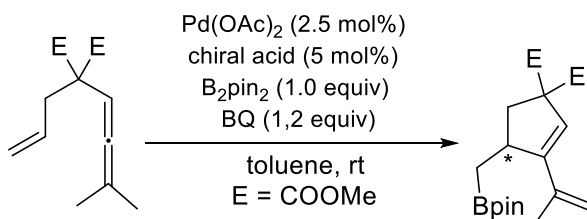
**Tech Note (1)  
Ref. (1)**



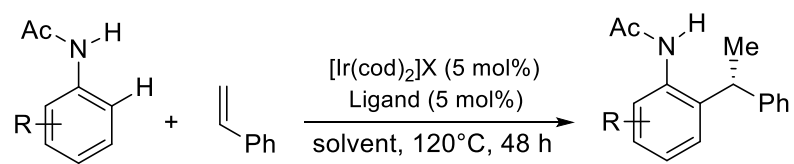
**Tech Note (2)  
Ref. (2)**

R<sup>1</sup> = Me, R<sup>2</sup> = Me, R<sup>3</sup> = Ph, n = 0  
R<sup>1</sup> = Et, R<sup>2</sup> = Me, R<sup>3</sup> = Ph, n = 0  
R<sup>1</sup> = Br, R<sup>2</sup> = Me, R<sup>3</sup> = Ph, n = 0

R<sup>1</sup> = Me, R<sup>2</sup> = Me, R<sup>3</sup> = iPr, n = 0  
R<sup>1</sup> = Me, R<sup>2</sup> = H, R<sup>3</sup> = Ph, n = 0  
R<sup>1</sup> = Me, R<sup>2</sup> = Me, R<sup>3</sup> = Ph, n = 1



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



**Tech Note (4)**  
**Ref. (4)**

References:

1. *Angew. Chem. Int. Ed.*, **2007**, *46*, 1497.
2. *Angew. Chem. Int. Ed.*, **2012**, *51*, 2951.
3. *Angew. Chem. Int. Ed.*, **2015**, *54*, 6024.
4. *J. Am. Chem. Soc.*, **2018**, *140*, 9351.