

BRIDP®

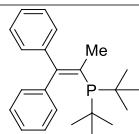
Monophosphine Ligands for Palladium-catalyzed Coupling Reaction

The common characteristics of efficient ligands for cross-coupling reactions are the unique levels of electron-richness and steric hindrance. In order to achieve more efficiency and versatility in cross-coupling reactions, TAKASAGO has designed and developed a new family of phosphine ligands, BRIDP®s.

"BRIDP" is registered trademarks or trademarks of Takasago International Corporation in Japan and other countries.

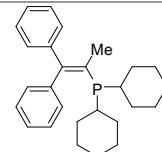
vBRIDP®

CAS No.	384842-25-5
Formula	C ₂₃ H ₃₁ P
M.W.	338.48



Cy-vBRIDP®

CAS No.	384842-24-4
Formula	C ₂₇ H ₃₅ P
M.W.	390.55



Suzuki, K.; Hori, Y.; Kobayashi, T. *Synlett*. **2007**, 20, 3206.

doi: [10.1055/s-2007-992371](https://doi.org/10.1055/s-2007-992371)

Suzuki, K.; Hori, Y.; Nishikawa, T.; Kobayashi, T. *Adv. Synth. Catal.* **2007**, 349, 2089.

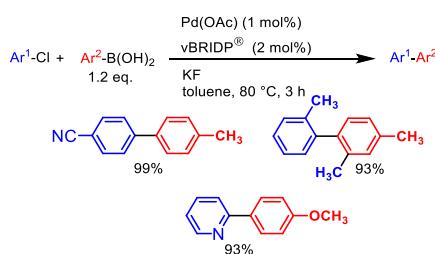
doi: [10.1002/adsc.200700220](https://doi.org/10.1002/adsc.200700220)

Suzuki, K.; Hori, Y.; Nakayama, Y.; Kobayashi, T. *J. Synth. Org. Chem., Jpn.* **2011**, 69, 1231.

doi: [10.5059/yukigoseikyokaishi.69.1231](https://doi.org/10.5059/yukigoseikyokaishi.69.1231)

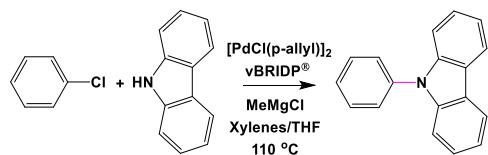
Tech Note

1 Suzuki-Miyaura Coupling



Suzuki, K.; Hori, Y.; Kobayashi, T. *Synlett.* **2007** 20, 3206.
doi: [10.1055/s-2007-992371](https://doi.org/10.1055/s-2007-992371)

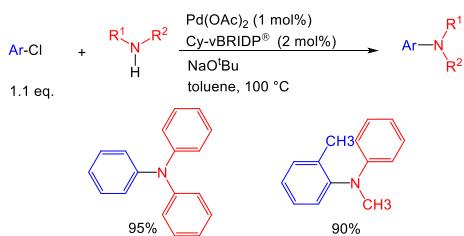
5 An Efficient Synthesis of N-(Hetero)arylcbazoles



Nakayama, Y.; Yokoyama, N.; Nara, H.; Kobayashi, T.; Fujiwhara, M. *Adv. Synth. Catal.* **2015**, 357, 2322.
doi: [10.1002/adsc.201500301](https://doi.org/10.1002/adsc.201500301)

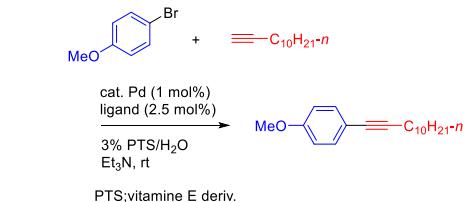
JP6046950B, EP2736881B, US9233922B, CN103917522B, KR101942125B, WO2013032035A (Takasago)

2 Buchwald-Hartwig Amination



Suzuki, K.; Hori, Y.; Nishikawa, T.; Kobayashi, T. *Adv. Synth. Catal.* **2007**, 349, 2089.
doi: [10.1002/adsc.200700220](https://doi.org/10.1002/adsc.200700220)

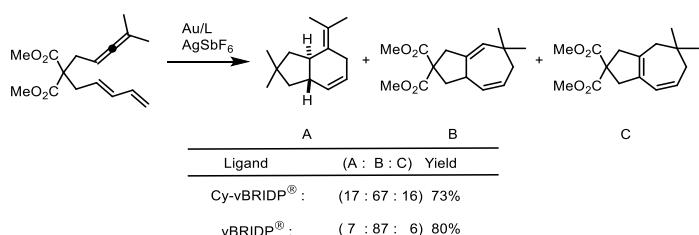
3 Sonogashira Coupling



Pd source	Ligand	Time	Yield
$\text{PdCl}_2(\text{CH}_3\text{CN})_2$	X-Phos	3 d	92% conv.
Pd(OAc)_2	Cy-vBRIDP [®]	20 h	95% conv.

Lipshutz, B. H. *Org. Lett.* **2008**, 10, 3793.
doi: [10.1021/o801471f](https://doi.org/10.1021/o801471f)

4 [4 + 2] and [4 + 3] Cycloadditions in Gold-Catalyzed Reactions of Allene-Diene



Toste, F. D. *J. Am. Chem. Soc.* **2009**, 131, 6348.
doi: [10.1021/ja901649s](https://doi.org/10.1021/ja901649s)