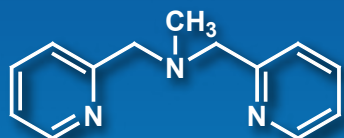


New

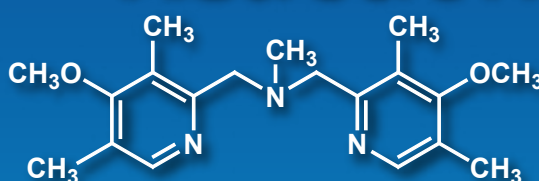
CHEMISTRY

TGI

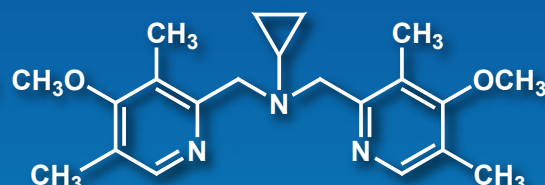
# Di(2-picolyl)amine Ligands for C(sp<sup>2</sup>)-C(sp<sup>3</sup>) Cross-Coupling Reaction



Methylbis(2-pyridylmethyl)-  
amine  
1g / 5g  
[M3627]



1-(4-Methoxy-3,5-dimethylpyridin-  
2-yl)-N-[(4-methoxy-3,5-  
dimethylpyridin-2-yl)methyl]-  
N-methylmethanamine  
1g / 5g  
[M3633]



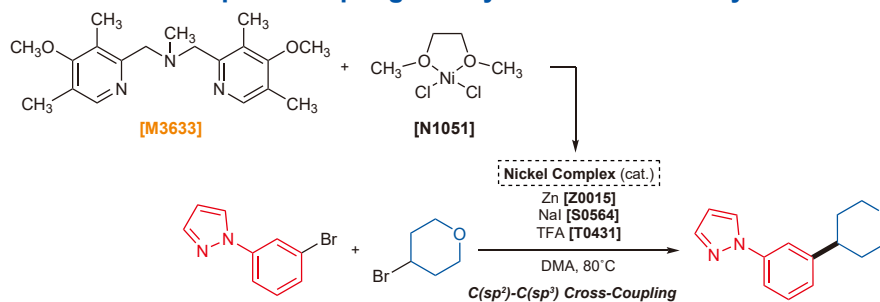
N,N-Bis[(4-methoxy-  
3,5-dimethylpyridin-2-yl)-  
methyl]cyclopropanamine  
1g / 5g  
[B6525]

## Advantages

- Have an electron-rich di(2-picoly)amine (DPA) backbone
- Useful as ligands for nickel-catalyzed C(sp<sup>2</sup>)-C(sp<sup>3</sup>) cross-coupling reactions <sup>1)</sup>
- Allows the introduction of alkyl groups into aryl moieties

## Application

### Reductive cross-electrophile coupling of alkyl bromides with aryl bromides <sup>2)</sup>



In drug discovery research, sp<sup>3</sup>-carbon-rich compounds with low planarity are gathering more attention in order to improve off-target effects and lipophilicity. These ligands are useful for the synthesis of such compounds.

References 1) D. C. Salgueiro, L. E. Ehehalt, K. A. Johnson, D. J. Weix, *Org. Synth.* **2022**, 99, 215. <https://doi.org/10.15227/orgsyn.099.0215>  
2) A. J. Rago, A. Vasilopoulos, A. W. Dombrowski, Y. Wang, *Org. Lett.* **2022**, 24, 8487. <https://doi.org/10.1021/acs.orglett.2c03346>

## Related Products

Nickel(II) Chloride Ethylene Glycol Dimethyl Ether Complex  
Zinc (Powder)  
Sodium Iodide (= NaI)  
Trifluoroacetic Acid (= TFA)

1g / 5g [N1051]  
300g [Z0015]  
300g [S0564]  
25g / 100g / 500g [T0431]

## Ordering and Customer Service

### TCI AMERICA

Tel : 800-423-8616 / 503-283-1681  
Fax : 888-520-1075 / 503-283-1987  
E-mail : Sales-US@TCIchemicals.com

### TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00  
Fax : +32 (0)3 735 07 01  
E-mail : Sales-EU@TCIchemicals.com

### TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00  
Fax : +49 (0)6196 64053-01  
E-mail : Sales-DE@TCIchemicals.com

### Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 78 45 60  
E-mail : Sales-UK@TCIchemicals.com

### 梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386  
Fax : 021-6712-1385  
E-mail : Sales-CN@TCIchemicals.com

### Tokyo Chemical Industry (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909  
E-mail : Sales-IN@TCIchemicals.com

### TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878  
E-mail : globalbusiness@TCIchemicals.com

• Chemicals itemized in this brochure are for research and testing use only. Please avoid use other than by chemically knowledgeable professionals. • Information such as listed products and its specifications and so on are subject to change without prior notice. • The contents may not be reproduced or duplicated in whole or in part without permission of Tokyo Chemical Industry Co., Ltd.