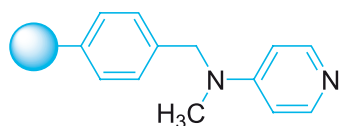


# PL-DMAP Resin

Solution Phase Synthesis

1% DVB, MP



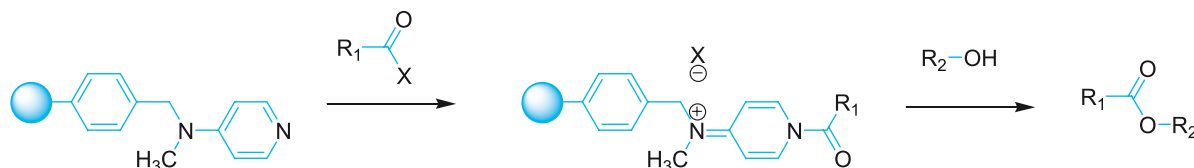
**Description:** Polymer supported dimethylaminopyridine

**Application:** Auxiliary / Tertiary Base

**See Also:** PL-HOBt, PL-DCC, PL-EDC

PL-DMAP is a nucleophilic catalyst for acylation or acetylation reactions. The polymer supported dimethylaminopyridine resin, PL-DMAP, is therefore a versatile reagent for acylations, in amidations or in mesylation of alcohols, for example, and can be readily removed by filtration.

The equivalent to a tertiary amine base may be added to the reaction to sequester the H-X acid and maintain the catalytic activity of the PL-DMAP resin.



## References

- (1) Shinkai, S.; Tsuji, H.; Hara, Y.; Manabe, O. *Bull. Chem. Soc. Jpn.* **1981**, *54*, 631-632.
- (2) Tomoi, M.; Akada, Y.; Kakiuchi, H. *Makromol. Chem., Rapid Commun.* **1982**, *3*, 537-542.
- (3) Menger, F. M.; McCann, D. J. *J. Org. Chem.* **1985**, *50*, 3928-3930.
- (4) Shai, Y.; Jacobson, K. A.; Patchornik, A. *J. Am. Chem. Soc.* **1985**, *107*, 4249-4252.
- (5) Patchornik, A. *Chemtech* **1987**, *17*, 58-63.
- (6) Guendouz, F.; Jacquier, R.; Verducci, J. *Tetrahedron* **1988**, *44*, 7095-7108.
- (7) Koning, C. E.; Jongsma, T.; Brinkhuis, R.; Challa, G. *React. Polym.* **1988**, *8*, 255-266.
- (8) Habermann, J.; Ley, S. V.; Scott, J. S. *J. Chem. Soc., Perkin Trans. 1* **1998**, 3127-3130.
- (9) Ley, S. V.; Bolli, M. H.; Hinzen, B.; Gervois, A. G.; Hall, B. J. *J. Chem. Soc., Perkin Trans. 1* **1998**, 2239-2241.
- (10) Parlow, J. J.; Flynn, D. L. *Tetrahedron* **1998**, *54*, 4013-4031.
- (11) Habermann, J.; Ley, S. V.; Scott, J. S. *J. Chem. Soc., Perkin Trans. 1* **1999**, 1253-1255.
- (12) Ley, S. V.; Schucht, O.; Thomas, A. W.; Murray, P. J. *J. Chem. Soc., Perkin Trans. 1* **1999**, 1251-1252.
- (13) Nicolaou, K. C.; Pfeifferkorn, J. A.; Barluenga, S.; Mitchell, H. J.; Roecker, A. J.; Cao, G. Q. *J. Am. Chem. Soc.* **2000**, *122*, 9968-9976.
- (14) Lannuzel, M.; Lamothe, M.; Perez, M. *Tetrahedron Lett.* **2001**, *42*, 6703-6705.
- (15) Soderberg, E.; Westman, J.; Oscarson, S. *J. Carbohydr. Chem.* **2001**, *20*, 397-410.
- (16) Chibale, K.; Chipeleme, A.; Warren, S. *Tetrahedron Lett.* **2002**, *43*, 1587-1589.
- (17) Thomas, A. W. *Bioorg. Med. Chem. Lett.* **2002**, *12*, 1881-1884.
- (18) Huang, J. W.; Shi, M. *Adv. Synth. Catal.* **2003**, *345*, 953-958.
- (19) Wipf, P.; Werner, S.; Woo, G. H. C.; Stephenson, C. R. J.; Walczak, M. A. A.; Coleman, C. M.; Twining, L. A. *Tetrahedron* **2005**, *61*, 11488-11500.

## Ordering Information

### PL-DMAP Resin (1% DVB)

	Part No
1.7mmol/g 150-300 $\mu$ m	PL3421-1689, 5g
	PL3421-3689, 25g
	PL3421-4689, 100g
	PL3421-6689, 1kg

### PL-DMAP MP Resin

	Part No
2.0mmol/g 100 $\text{\AA}$ 150-300 $\mu$ m	PL3521-1689, 5g
	PL3521-3689, 25g
	PL3521-4689, 100g
	PL3521-6689, 1kg

## Additional Information

Varian Polymer Laboratories manufactures in multi kg quantities. Please enquire for details.