

PL-IPG Resin

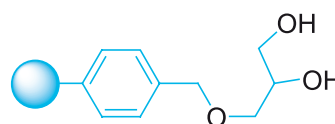
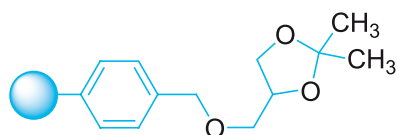
Solid Phase Synthesis

1% DVB

PL-IPG-Diol Resin

Solid Phase Synthesis

1% DVB



Description: Solid supported isopropylidene glycerol

Application: Solid Phase Synthesis: Immobilization of Aldehydes and Ketones

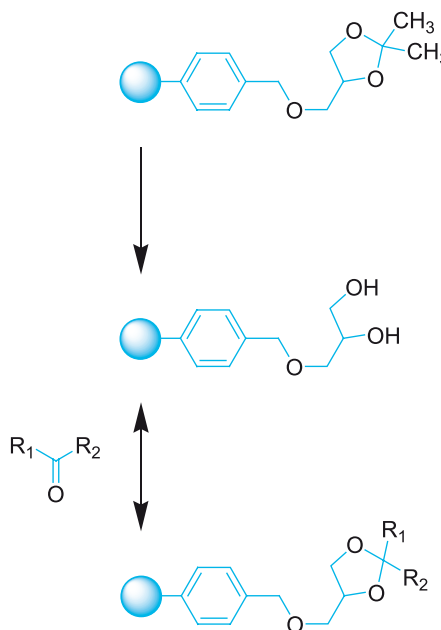
See Also: PL-Carboni, PL-Carboni-Diol, PL-DEAM

PL-IPG is a vicinal diol resin protected as the acetal form (Leznoff's acetal resin). After hydrolysis of the acetal, the resultant vicinal diol resin, PL-IPG-Diol, is suitable for immobilization of aldehydes.

The resin was originally developed to enable modification of a single aldehyde group of a symmetrical dialdehyde by acting as a protecting group.

Aldehydes and ketones are attached under anhydrous conditions and may be subsequently cleaved by acidolysis. Loading via an acetal exchange reaction using trimethylorthoformate (TMOF) has also been reported.

In addition, vicinal diol resins have been used to immobilize boronic acids (see also PL-DEAM).



References

- (1) Leznoff, C. C.; Wong, J. Y. *Can. J. Chem.* **1972**, *50*, 2892-2893.
- (2) Leznoff, C. C.; Wong, J. Y. *Can. J. Chem.* **1973**, *51*, 3756-3764.
- (3) Wong, J. Y.; Leznoff, C. C. *Can. J. Chem.* **1973**, *51*, 2452-2456.
- (4) Wong, J. Y.; Manning, C.; Leznoff, C. C. *Angew. Chem., Int. Ed. Engl.* **1974**, *13*, 666-667.
- (5) Leznoff, C. C.; Greenberg, S. *Can. J. Chem.* **1976**, *54*, 3824-3829.
- (6) Hodge, P.; Waterhouse, J. *J. Chem. Soc., Perkin Trans. 1* **1983**, 2319-2323.
- (7) Xu, Z. H.; McArthur, C. R.; Leznoff, C. C. *Can. J. Chem.* **1983**, *61*, 1405-1409.
- (8) Chamoin, S.; Houldsworth, S.; Kruse, C. G.; Bakker, W. I.; Snieckus, V. *Tetrahedron Lett.* **1998**, *39*, 4179-4182.
- (9) Maltais, R.; Berube, M.; Marion, O.; Labrecque, R.; Poirier, D. *Tetrahedron Lett.* **2000**, *41*, 1691-1694.
- (10) Bergauer, M.; Hubner, H.; Gmeiner, P. *Bioorg. Med. Chem. Lett.* **2002**, *12*, 1937-1940.
- (11) Koppitz, M.; Reinhardt, G.; van Lingn, A. *Tetrahedron Lett.* **2005**, *46*, 911-914.

Ordering Information

PL-IPG Resin (1% DVB)

1.7mmol/g 150-300 μ m

Part No

PL3486-1689, 5g
PL3486-3689, 25g
PL3486-4689, 100g
PL3486-6689, 1kg

PL-IPG-Diol Resin (1% DVB)

1.8mmol/g 150-300 μ m

Part No

PL3486-1689OH, 5g
PL3486-3689OH, 25g
PL3486-4689OH, 100g
PL3486-6689OH, 1kg

Additional Information

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