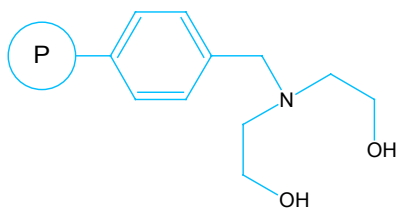


PL-DEAM Resin



Description

Polymer supported diethanolamine

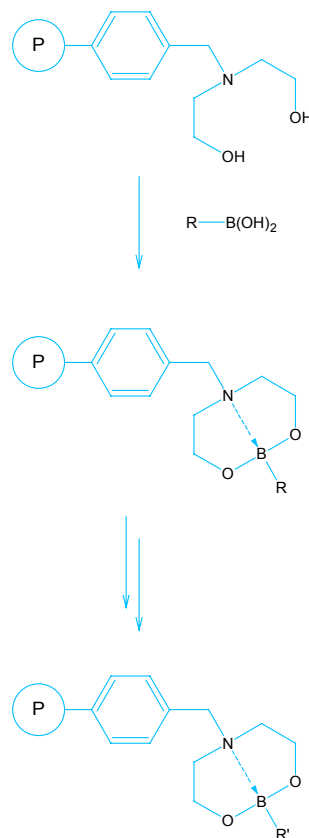
Synonyms

None

Applications

PL-DEAM Resin is a versatile resin designed for use with boronic acids. Boronic acids are widely used in organic synthesis, particularly in Suzuki coupling reactions – a key carbon-carbon bond forming reaction. PL-DEAM Resin is a dual-purpose resin, which can be used as a scavenger resin to remove excess boronic acids from non-aqueous solutions, or to immobilize boronic acids for further functionalization. A variety of commercially available boronic acids of the general formula $R-B(OH)_2$ can be attached to the resin, enabling modification of the side chain group R. This allows the creation of novel boronic acids to further increase the diversity in organic synthesis. The products are readily cleaved from the resin using aqueous tetrahydrofuran. Alternatively, the Suzuki reaction itself can be carried out with the polymer bound boronic acid itself – ideal for producing biphenyl derivatives through reaction with iodobenzene compounds.

PL-DEAM MP can be used for boronic acid immobilization in polar protic solvents and is also a highly effective scavenger of metals from solution, in particular platinum and tin species.



References

- Hall, D G et al (1999), *Angew Chemie Int Ed*, **38**, 3064
Gravel, M et al (2000), *J Comb Chem* **2**, 228
Hall, D G et al (2000), *Chem Comm*, 2379
James, T D et al (2001), *Tetrahedron Lett*, **41**, 4553
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Products Information

Microporous

PL-DEAM Resin

0.9 mmol/g 75-150 μ m (100-200 mesh)

1.7 mmol/g 150-300 μ m (50-100 mesh)

Macroporous

PL-DEAM MP-Resin

>1.5mmol/g 100 \AA 150-300 μ m (50-100 mesh)

StratoSpheres Plugs™

PL-DEAM sPlug

130 μ mol 9.0x7.5mm

PL-DEAM Resin is manufactured under license from the University of Alberta.