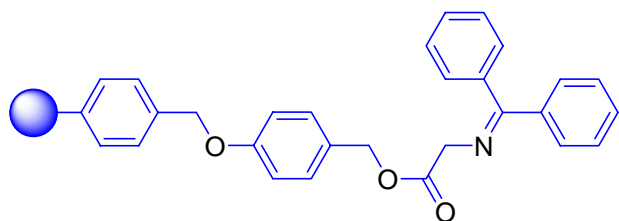


# PL-BIG-W Resin



## Description

Benzophenone imine of Gly-Wang resin

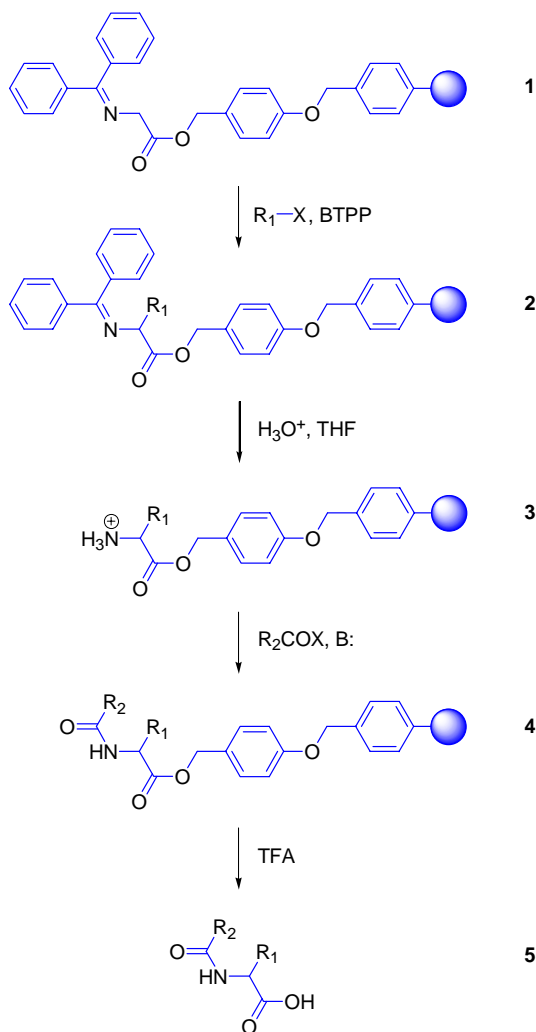
## Synonyms

None

## Applications

PL-BIG-W, **1**, is the benzophenone imine of Gly-Wang resin developed by Professors Willam Scott and Martin O'Donnell from Indiana University Purdue University Indianapolis (IUPUI) for the solid phase synthesis of resin-bound unnatural amino acids, peptides and peptidomimetics.

Alkylation of **1** using an alkyl halide ( $R_1-X$ ) in the presence of a suitable base, such as tert-butylimino-tri(pyrrolidino)phosphorane (BTTP), is followed by acid treatment to hydrolyse the imine. The resultant protonated amine **3** has great synthetic utility – it is one of the most commonly used intermediates in combinatorial chemistry. In the example shown, it is converted into an acyl derivative and cleaved from the resin to give product **5**.



## References

O'Donnell, M J et al (1996), J Am Chem Soc, **118**, 6070  
Scott, W L et al (2004), Org Lett, **6**, 1629

## Products Information

Microporous  
**PL-BIG-W Resin**  
0.7mmol/g 75-150 $\mu$ m (100-200 mesh)