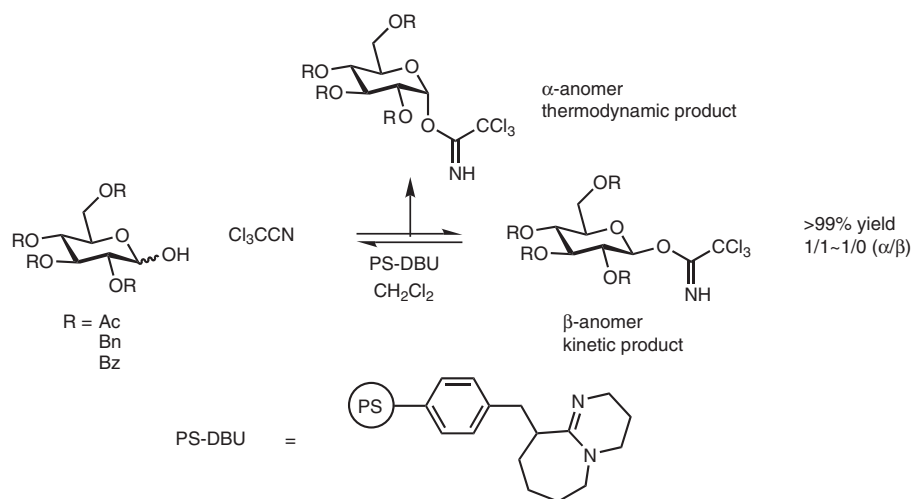


Polymeric DBU for Preparation of Glycosyl Trichloroacetimidates



Significance: The facile and practical procedure for preparation of glycosyl trichloroacetimidates was developed by using polystyrene-supported bases (5 substrates and 23 reaction conditions were examined). PS-DBU was proved to be the most efficient base in this protocol. The reactions of 2,3,4,6-tetra-acyloxy- α -D-glucopyranose derivatives (R = Ac or Bz) with trichloroacetonitrile proceeded smoothly in the presence of PS-DBU to give the corresponding α -anomers in quantitative yields. The trichloroacetimidates (α -anomers) were isolated without any chromatographic purification.

Comment: Accelerated synthesis of glycoconjugates promises to greatly impact the emerging field of glycomics. This polymer-supported protocol realized complete removal of the traces of base from the products.