

5-Nitro-4,6-dithiocyanatopyrimidine: A Novel Coupling Reagent for Peptide Synthesis

Category

Peptide Chemistry

Key words

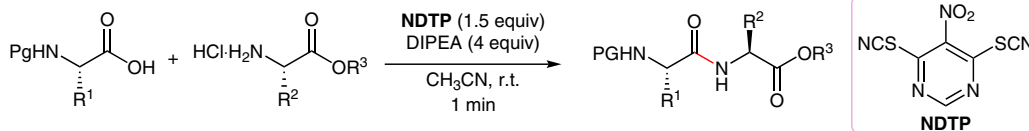
coupling agents

amino acid activation

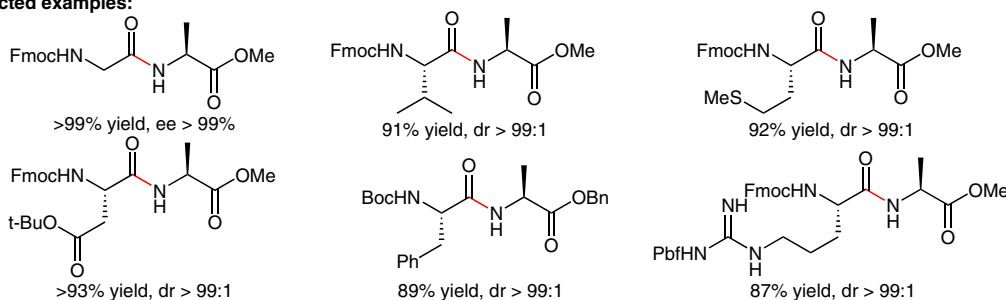
nitrodithiocyanatopyrimidine

solid-phase synthesis

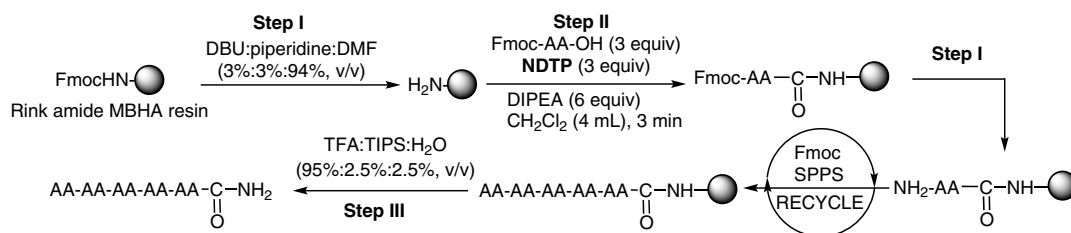
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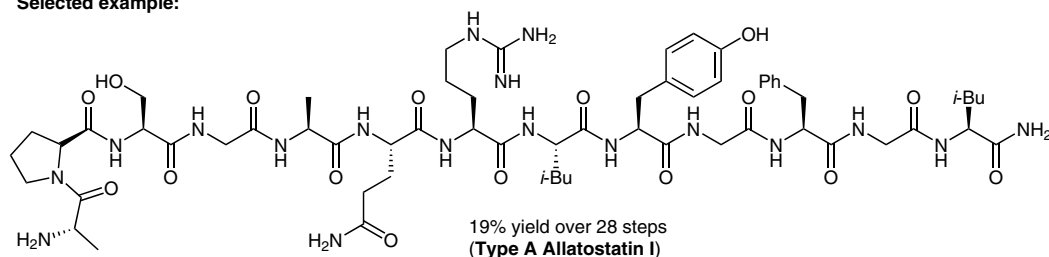
Selected examples:



Application of methodology towards solid-phase peptide synthesis



Selected example:



Significance: The development of novel and practically viable methods for forming peptide bonds is in high demand for peptide drug discovery. The authors have developed 5-nitro-4,6-dithiocyanatopyrimidine (NDTP) as a powerful coupling agent for peptide synthesis.

Comment: NDTP-mediated peptide bond-forming reactions proceeded smoothly to deliver a series of peptides in high yields with excellent selectivities. NDTP is a mild, nonirritant, conveniently available, and recyclable reagent. Moreover, it is also compatible with Fmoc solid-phase peptide synthesis.