

Abstract

An entry into synthesis of β -nitrile equipped unnatural amino acid derivatives via nucleophilic addition of bromoacetonitrile or 2-bromopropanenitrile to α -imino esters or diimino esters is reported. The synthesis of nitrile containing β -amino alcohol, aspartic acid, and β -nitrile equipped N-arylated amino acids was achieved from nitrile containing α -amino esters obtained from this work. Dipeptide composed of nitrile attached unnatural α -amino acid and (R)-phenylalanine was also synthesized.