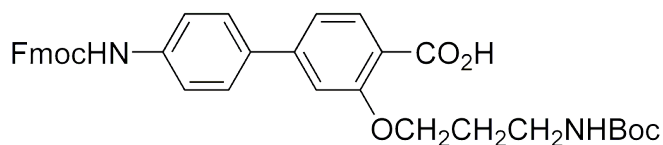
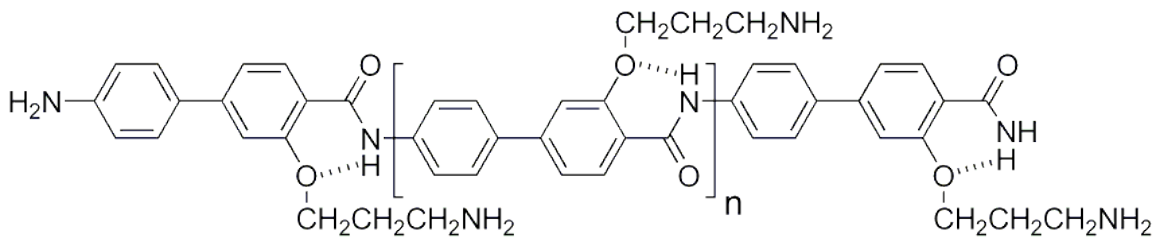


"Nanometer-Scale Molecular Rods" Nowick, J. S.; Gothard, C. M. Presented at the 229th National Meeting of the American Chemical Society, San Diego, CA, March 2005; paper ORG 732.

Abstract: This paper introduces the unnatural amino acid, 4'-amino-[1,1'-biphenyl]-4-carboxylic acid, termed *Abc*, which is designed as a nanometer-length building block for the creation of molecular rods. Water-soluble oligomers of Abc^K , a variant of *Abc* named for its resemblance to the side chain of lysine, can be synthesized from Fmoc- $Abc^{K(Boc)}$ -OH using standard solid-phase peptide synthesis technology to create rodlike molecules of any desired length. Herein, we report the synthesis of Fmoc- $Abc^{K(Boc)}$ -OH and its efficient coupling to generate water-soluble oligomers of defined length.



Fmoc- $Abc^{K(Boc)}$ -OH



Abc^K oligomer