

عنوان مقاله:

Using a new superparamagnetic nanocatalyst for the N-Boc protection of amines

محل انتشار:

بیستمین کنگره شیمی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Reyhaneh Pourhasan Kisomi - *Department of Chemistry, Faculty of Science, University of Guilan, Rasht, Iran*

Mostafa Golshekan - *Neuroscience Research Center, Department of Pharmacology, Guilan University of Medical Science, Rasht, Iran*

Farhad Shirini - *Department of Chemistry, Faculty of Science, University of Guilan, Rasht, Iran*

خلاصه مقاله:

Functional group protection and deprotection methods are important in the multistep organic synthesis. The presence of an amino group in various biologically active compounds makes its protection as a necessity during their synthesis [1]. The Namine protecting groups have been used extensively across a wide range of chemical fields, such as peptide, nucleotide, polymer, and ligand preparations. Several methods and reagents have been reported for the protection of amine and amin and amine derivatives [2]. Among them, N-tert-butoxycarbonylation has received the greatest attention because of the stability of the N-Boc group against nucleophilic attack or alkali media and catalytic hydrogenation [3]. The challenge of designing a protocol for efficient Boc protection of amines, which is mild as well as environment-friendly and which has the advantages of solid catalysts, encouraged us to investigate the applicability of a new stable and highly active superparamagnetic nanocatalyst for the preparation of N-Boc derivatives. In this regard, a simple, green, and efficient method for the N-tert-butoxycarbonylation of amines was accomplished at 50°C and neat conditions. The green conditions, excellent yields, practicability, operational simplicity, product purity, cost efficiency and environmentally profits are the considerable advantages of this protocol

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/850754>

