

Abstract

A solid-phase synthesis carrier, a preparation method therefor and the use thereof, wherein a diene cross-linking agent with a similar reactivity ratio to styrene and two vinyl groups thereof not on the same benzene ring is selected as a cross-linking monomer, and is subjected to suspension polymerization to obtain a porous resin. The porous resin is then functionalized to obtain a porous resin with an amino or hydroxyl functional group. Compared with existing preparation methods, the reactivity ratio of the cross-linking agent and styrene is similar, which is beneficial to improving the uniformity of the chemical structure in the resin, forming uniformly distributed active sites and channels, and is beneficial to improving the reaction efficiency and reducing the mass transfer resistance. The preparation of oligonucleotides by using such a carrier as a solid-phase synthesis carrier can improve the yield and purity of the oligonucleotides.

Figure 1