ABSTRACT

A METHOD FOR POLYALKOXYLATION OF NUCLEIC ACIDS THAT ENABLES RECOVERY AND REUSE OF EXCESS POLYALKOXYLATION REAGENT

The present invention is related to a method for the preparation of a modified nucleic acid molecule comprising a nucleic acid moiety and a non-nucleic acid moiety by reacting a first reactant and a second reactant, wherein the first reactant comprises the non-nucleic acid moiety and a carboxyl group, and wherein the second reactant is an amino-modified nucleic acid molecule comprising the nucleic acid moiety and an amino modification comprising an amino group which is attached to the nucleic acid moiety, wherein the method comprises the following steps: a) activating the first reactant, preferably the carboxyl group of the first reactant, by a condensation reagent in a water miscible organic solvent, and b) reacting the activated first reactant, preferably the activated carboxyl group of the first reactant, of step a) and the second reactant, preferably the amino group of the amino modification of the amino-modified nucleic acid molecule which has been dissolved in water or a mixture of a water miscible organic solvent and water, whereby the modified nucleic acid molecule is formed.

Figure for publication: None