

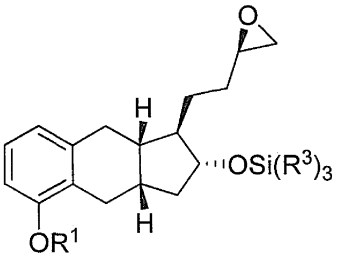
21

wherein R^1 is C_{1-6} alkyl and each R^3 is independently C_{1-6} alkyl or phenyl.

[0006] As described herein, the present disclosure provides processes for preparing a prostacyclin analogue of Formula **IA**:

CLAIMS

1. A compound of Formula **21**

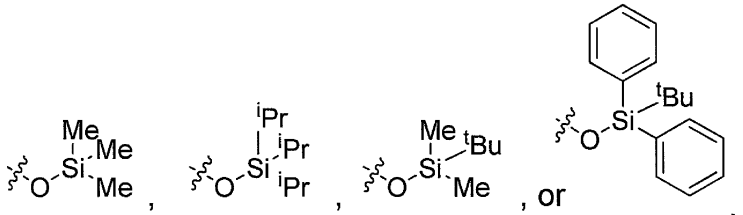


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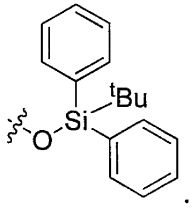
wherein R^1 is C_{1-6} alkyl and each R^3 is independently C_{1-6} alkyl or phenyl.

2. The compound of claim 1, wherein R^1 is methyl, ethyl, propyl, *iso*-propyl, butyl, *sec*-butyl, or *tert*-butyl.

3. The compound of claim 1, wherein the $-OSi(R^3)_3$ group is selected from



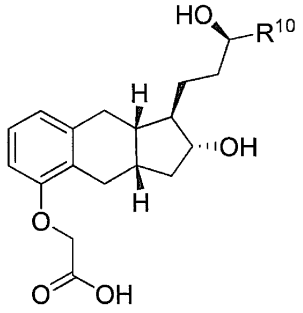
4. The compound of claim 1, wherein R^1 is methyl and the $-OSi(R^3)_3$ group is



METHODS OF SYNTHESIZING A PROSTACYCLIN ANALOGUE

ABSTRACT

The present invention provides processes for preparing a prostacyclin analogue of Formula **I**



IA

or a pharmaceutically acceptable salt thereof, wherein R^{10} is a linear or branched C_{1-6} alkyl. The processes of the present invention comprise steps that generate improved yields and fewer byproducts than traditional methods. The processes of the present invention employ reagents (e.g., the oxidizing reagent) that are less toxic that those used in the traditional methods (e.g., oxalyl chloride). Many of the processes of the present invention generate intermediates with improved e.e. and chemical purity; thereby eliminating the need of additional chromatography steps. And, the processes of the present invention are scalable to generate commercial quantities of the final compound.

[No available figure]