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(54) **LABELLED NUCLEOTIDES**

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(51) **Int. Cl.**

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(58) **Field of Classification Search** 536/23.1; 435/6, 91.1, 287.2

See application file for complete search history.

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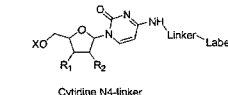
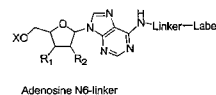
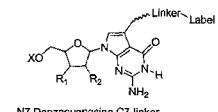
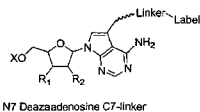
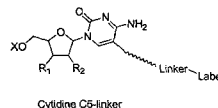
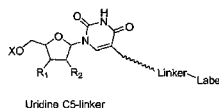
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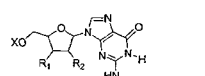
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(57) **ABSTRACT**

Nucleosides and nucleotides are disclosed that are linked to detectable labels via a cleavable linker group.

15 Claims, 6 Drawing Sheets

where R₁ and R₂, which may be the same or different, are each selected from H, OH, or any group which can be transformed into an OH. Suitable groups for R₁ and R₂ are described in Figure 3

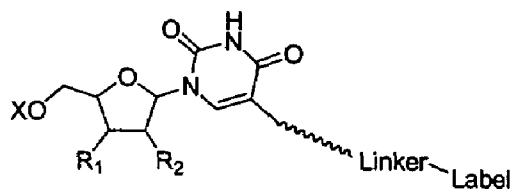


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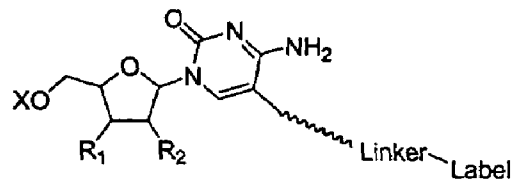
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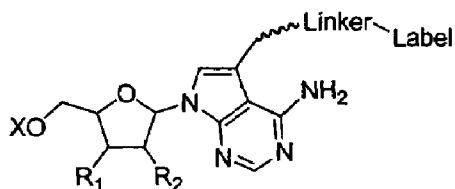
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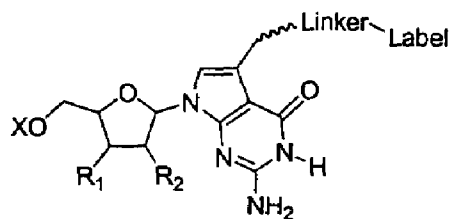
Uridine C5-linker



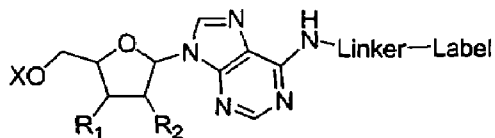
Cytidine C5-linker



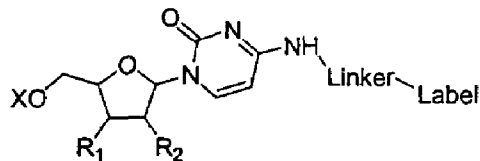
N7 Deazaadenosine C7-linker



N7 Deazaguanosine C7-linker



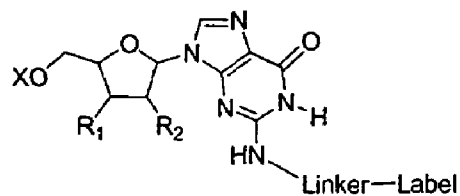
Adenosine N6-linker



Cytidine N4-linker

where R_1 and R_2 , which may be the same or different, are each selected from H, OH, or any group which can be transformed into an OH. Suitable groups for R_1 and R_2 are described in Figure 3

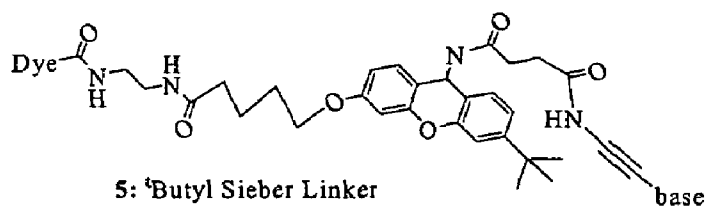
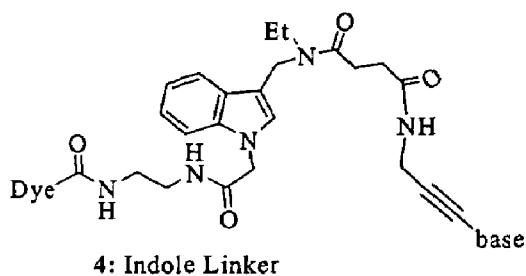
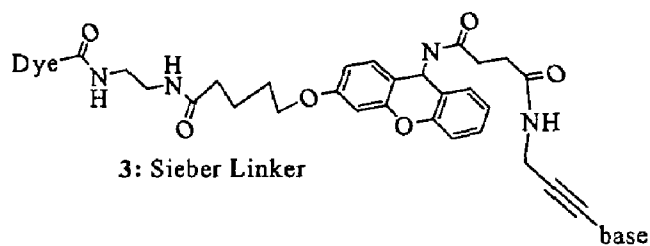
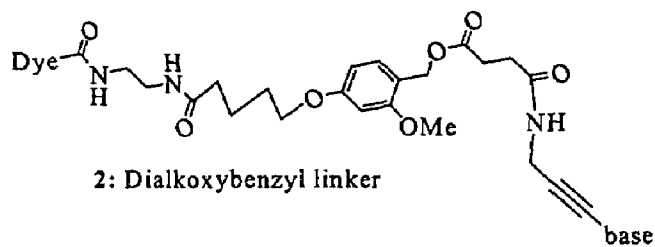
X = H, phosphate, diphosphate or triphosphate



Guanosine N2-linker

Fig. 1

Acid Labile Linkers



Disulfide Linker

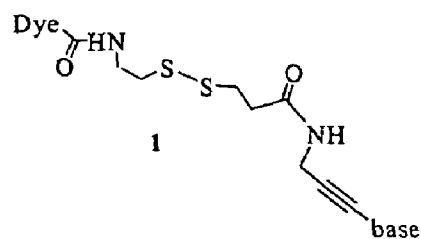


Fig. 2

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