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(54) Title: NUCLEOTIDE COMPLEXES CAPABLE OF AN IMPROVED DNA SYNTHESIS YIELD

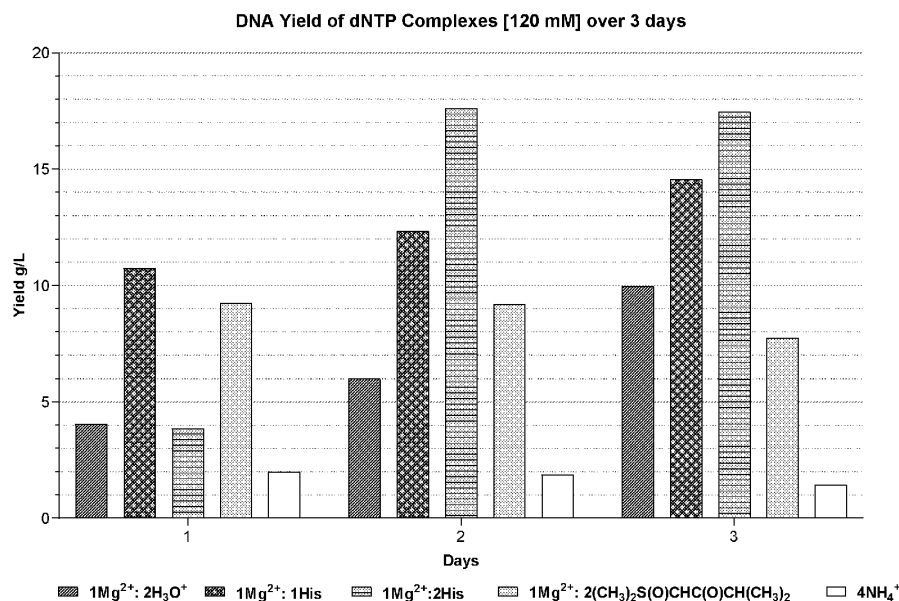


Fig. 6

(57) Abstract: The present invention relates to novel nucleotide complexes which enhance the enzymatic production of DNA. The nucleotide complexes includes a divalent cation at a ratio of 0.2-1.5 divalent cations per nucleotide, whilst monovalent ions (other than hydrogen or hydronium ions from any solvent) are minimal. The nucleotide complexes have desirable properties for the synthesis of deoxyribonucleic acid (DNA), in particular cell-free enzymatic synthesis of DNA, preferably on a large or industrial scale. Further, the invention includes improved processes for preparing said nucleotide complexes. Further complexes are disclosed which possess unique properties in accelerating DNA synthesis at higher concentrations, these complexes also containing zwitterion molecules.

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