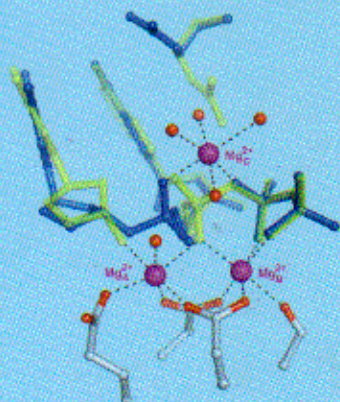




HUMAN DNA POLYMERASES

Biology, Medicine and Biotechnology

Maintenance of the information embedded in the genomic DNA sequence is essential for life. DNA polymerases play pivotal roles in the complex processes that maintain genetic integrity. Besides their tasks *in vivo*, DNA polymerases are the workhorses in numerous biotechnology applications such as the polymerase chain reaction (PCR), cDNA cloning, next-generation sequencing, nucleic acids based diagnostics and in techniques to analyze ancient and otherwise damaged DNA (e.g. for forensic applications). Moreover, some diseases are related to DNA polymerase defects and chemotherapy through inhibition of DNA polymerases is used to fight HIV, Herpes and Hepatitis B and C infections. This book focuses on (i) biology of DNA polymerases, (ii) medical aspects of DNA polymerases and (iii) biotechnological applications of DNA polymerases. It is intended for a wide audience from basic scientists, to diagnostic laboratories, to companies and to clinicians, who seek a better understanding and the practical use of these fascinating enzymes.

World Scientific
www.worldscientific.com
10609 hc

ISBN 978-981-3226-40-1



9 789813 226401