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(54) **Title**: A METHOD OF REMOVING NUCLEIC ACID CONTAMINATION IN REVERSE TRANSCRIPTION AND AMPLIFICATION REACTIONS

(57) **Abstract**: The invention provides methods of removing nucleic acid contamination from reverse transcription reactions and hot-start PCR, wherein said hot-start PCR is a barrier hot-start PCR set up and/or involves a hot-start DNA polymerase, which methods comprise use of a DNase that is substantially irreversibly inactivated by heating at a temperature of about 5O0C for 5 minutes, and that is substantially specific for double stranded DNA. The invention further provides a DNase that is substantially irreversibly inactivated by heating at a temperature of about 5O0C for 5 minutes, and that is substantially specific for double stranded DNA, nucleic acids encoding said DNase and kits or compositions comprising said DNase or said nucleic acid.