ABSTRACT

SIMULTANEOUS AMPLIFICATION OF MULTIPLE TARGETS

Methods for multiplex amplification of target nucleic acid sequences using a single pair of primers. Defined sequences are appended to the ends of multiple target sequences as part of the amplification reaction so that no steps in addition to amplification are required. The target sequences with the appended defined sequences need not be isolated prior to amplification. In one embodiment for coamplification of two target sequences, a sequence corresponding to a terminal segment of the first target sequence is appended to one end of the second target sequence and a sequence corresponding to a terminal segment of the second target sequence is appended to one end of the first target sequence. Amplification of the two targets then requires only a single pair of primers. Alternatively, a single defined sequence may be appended to the 5' and 3' ends of any number of selected targets. All such modified target sequences may then be amplified using a single pair of primers which hybridize to the defined end-sequences.

(Fig. 1).