

## ABSTRACT

Provided in the present application is a multi-amplification method, mainly comprising two processes of linear amplification induced by a low-concentration capture oligonucleotide and exponential amplification induced by a universal primer. The method comprises: firstly, using a low-concentration specific capture oligonucleotide to bind a target molecule with clear 5'-terminal sequence information and to initiate linear amplification; obtaining a product with a complete hairpin structure by means of self-folding and self-extending of the linear amplification product, and thereby obtaining an amplification intermediate product with a universal sequence being a terminal but comprising a target sequence; and performing an equivalent signal amplification on the amplification intermediate products comprising different target sequences in an exponential amplification manner by means of the same universal primer. The combined linear amplification and universal primer-based exponential amplification detection strategy can finally achieve the purpose of equivalent amplification and detection of multiple target molecules.

Fig.1A