

(54) Title of the invention : MULTIPLEXED LUMINEX MAGPIX ASSAY FOR CONCURRENT DETECTION OF BLUETONGUE VIRUS, BOVINE CORONAVIRUS AND ROTAVIRUS

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(57) Abstract :

The present invention discloses a multiplexed LuminexMagpix assay with the specific designed probes and primers of three viruses. The assay has a method for simultaneous detection of Bluetongue virus, Bovine Coronavirus and Rotavirus which includes the steps of: designing biotinylated primers for generation of PCR amplicons, designing of specific probes for rotavirus VP6, bovine coronavirus N gene, and BTV Seg-10, modifying the probes with an amino C12 linker at the 5' end, hybridizing the amplicons with the probe, quantifying the amplicons by the reporter molecule streptavidin-R-phycoerythrin producing signal with the Bluetongue virus, Bovine Coronavirus and Rotavirus and detecting the three viruses in a single reaction.

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