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Title: The development of a multiplex real-time RT-PCR for the detection of adenovirus, astrovirus, rotavirus and sapovirus from stool samples

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The development of a multiplex real-time RT-PCR for the detection of adenovirus, astrovirus, rotavirus and sapovirus from stool samples

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Highlights

- Rapid simultaneous PCR diagnosis of viral gastroenteritis is advantageous
- Many difficulties encountered when attempting to multiplex the assays
- Development of a single multiplex assay for the detection of viral gastroenteritis from stool samples
- The multiplex developed is sensitive, specific, robust and reproducible

Abstract

Viral gastroenteritis is a major health problem with significant morbidity and economic consequences. Viral gastroenteritis is caused by a number of viruses, including norovirus, rotavirus, adenovirus, astrovirus, and sapovirus. Conventional diagnosis is based on direct antigen detection and electron microscopy, however enzyme immunoassay's are insensitive and not available for all relevant pathogens, and electron microscope (EM) is no longer routinely carried out in most laboratories. Most laboratories now offer norovirus real-time PCR testing however the availability

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