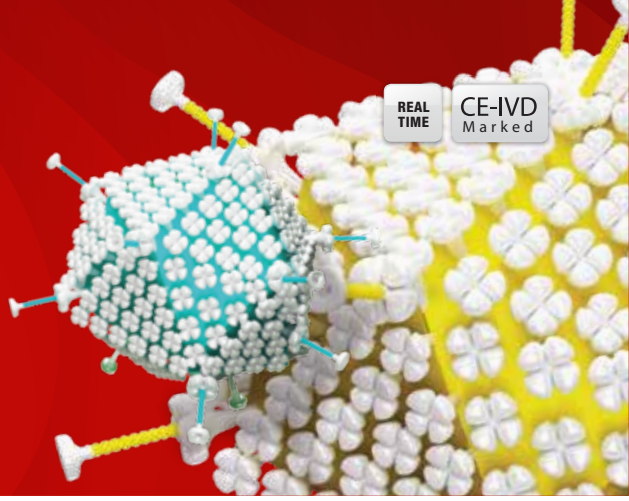
Allplex™

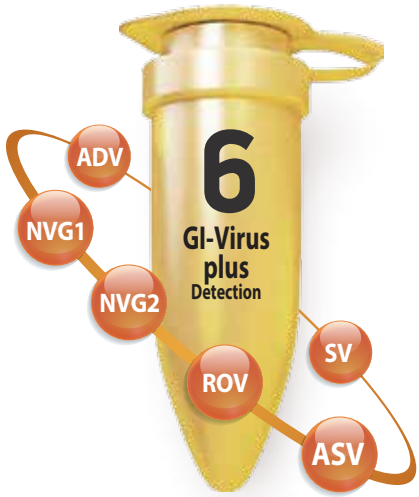
# GI-Virus plus Assay

**Comprehensive assay for the detection and identification of 6 gastrointestinal viruses using One-step real-time RT-PCR**




Viral gastroenteritis is one of the most common diseases in all age groups, and continues to be a significant cause of morbidity and mortality worldwide. Globally, Norovirus resulted in a total of $4.2 billion in direct health system costs[1].

**Allplex™ GI-Virus plus Assay** has extended coverage of human adenovirus (ADV). Along with rotavirus and norovirus, adenovirus has emerged as one of the leading causes of viral acute gastroenteritis (AGE) in clusters, such as schools, camps, daycare centers and healthcare settings. ADV have been classified into seven groups (A to G) on the basis of their physical, chemical and biological properties[2]. Traditionally, ADV subgroup F has been known to associate with AGE; however, new studies have shown that other subgroups also cause AGE[3]. Based on Seegene's proprietary MuDT technology, this assay reports multiple Ct values of each pathogen in a single channel using real-time PCR instruments.




## Key features

- One-step multiplex real-time RT-PCR for 6 key viral pathogens associated with gastroenteritis
- Reliable results within 2 hrs 40 min, after extraction
- Simplified procedure and maximized throughput in a single test
- Expandable to a total solution related to gastrointestinal tract infection up to bacteria and parasite
- Informative data with individual Ct values for each analyte
- Automated data interpretation with Seegene Viewer

## Specimen

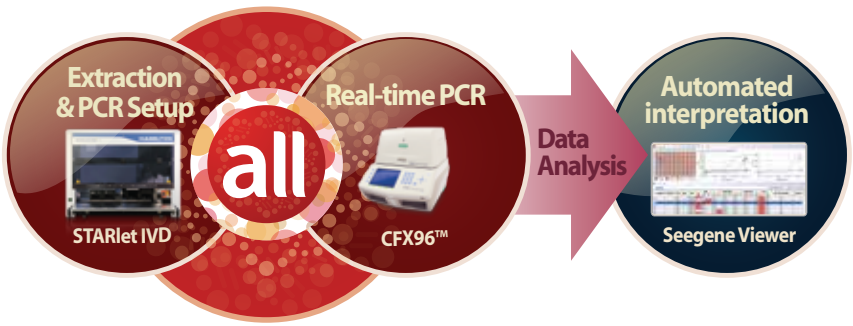
- Stool

## Analytes

- Norovirus G I
- Norovirus G II
- Rotavirus
- Adenovirus
- Astrovirus
- Sapovirus
- Internal Control

## Compatible instrumentation (CE-IVD Marked)

- **Automated Extraction & PCR Setup**
  NIMBUS IVD (Hamilton)
  STARlet IVD (Hamilton)
- **Automated Extraction**
  NucliSENS® easyMAG® (BioMérieux)
- **Real-time PCR**
  CFX96™ (Bio-Rad)




## Powerful automated platform for a complete test process

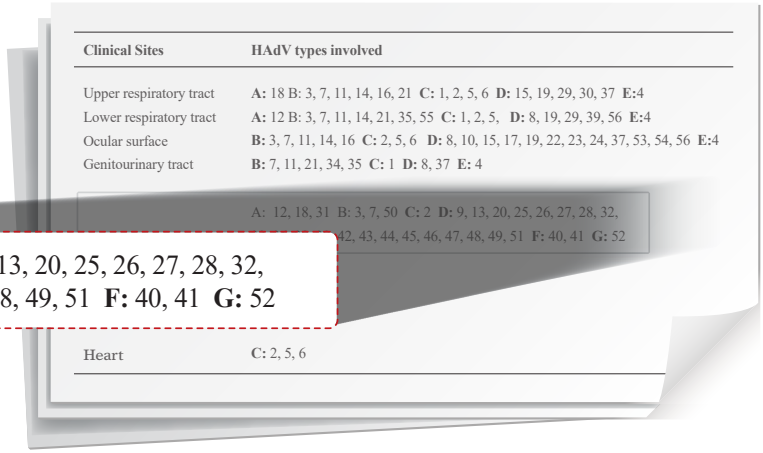
- User-friendly automation system
- Automatic data interpretation software optimized for multiplex assays
- Interlocked with LIS
- Multi-Ct values in a single channel

# *Why focus on coverage of adenovirus :*

## Not only F group of ADV but also other groups of ADV are associated with gastroenteritis.

### According to review paper, [3]

| | |
|---|---|
| GI tract | **A:** 12, 18, 31 **B:** 3, 7, 50 **C:** 2 D: 9, 13, 20, 25, 26, 27, 28, 32, 33, 36, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 51 **F:** 40, 41 **G:** 52 |




### In Korea, [4]

Identified ADV in clinical stool samples from acute gastroenteritis

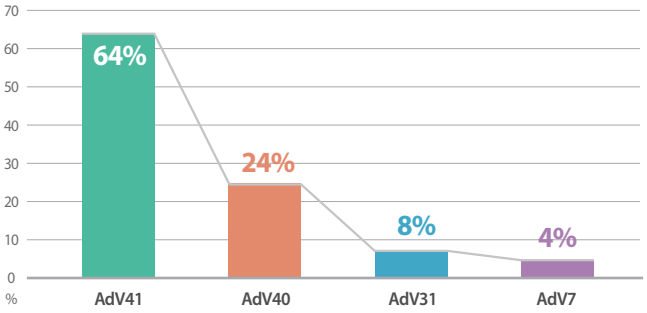
| ADV type | ADV -F41 | ADV -C2 | ADV -B3 | ADV -A18 | Others | ADV -C1 | ADV -C5 | ADV -D19 | ADV -C6 | ADV -A31 | ADV -E4 | ADV -D37 | ADV -A12 | ADV -F40 | ADV -B55 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Infection Rate | 60.60% | 13.80% | 9.60% | 8.10% | 7.60% | 6.40% | 4.60% | 2.70% | 1.80% | 1.80% | 0.80% | 0.80% | 0.50% | 0.50% | 0.50% |

### In other countries,

Clinical manifestations of the ADV infected patients[5]

| ADV infection | | | | | |
|---|---|---|---|---|---|
| Diarrhea duration | ADV-F | ADV-A | ADV-B | ADV-C | ADV-D |
| <1 day | 17.1% | 4.9% | 4.9% | 7.3% | 12.2% |
| 1-3 day | 29.3% | 0% | 0% | 0% | 7.3% |
| 4-6 day | 4.9% | 2.4% | 2.4% | 2.4% | 2.4% |
| 7-9 day | 0% | 0% | 0% | 0% | 2.4% |

Distribution of ADV serotypes[6]




## *Ready to feel a difference?*

| Category | Product | Package Volume | Cat. No. |
|---|---|---|---|
| Allplex™ | **GI-Virus plus Assay** | 25 rxns* | GI10186Z |
| | | 50 rxns | GI10187Y |
| | | 100 rxns* | GI10188X |

* For use with NIMBUS IVD and STARlet IVD only


* Reference

1) Bartsch et al. PLOS ONE, 2016. DOI:10.1371/journal.pone.0151219
2) Khanal et al. Biomedicines 2018, 6, 30; doi:10.3390/biomedicines6010030
3) Robinson et al. Infect Genet Evol. 2011 Aug; 11(6): 1208–1217.
4) Jae-Seok Kim et al. BioMed Research International 2017
5) Afrad et al. JMV 2017, DOI 10.1002/jmv.25008
6) ÇOLAK et al. TJMS 2017, doi:10.3906/sag-1510-94v



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