



COUNTY OF SAN LUIS OBISPO PUBLIC HEALTH LABORATORY

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LABORATORY TEST FACT SHEET

TEST: GASTROINTESTINAL PATHOGEN (GP) PCR PANEL

ORDER CODE: 6500

TEST DESCRIPTION

The County of San Luis Obispo Public Health Laboratory (SLOPHL) performs a Gastrointestinal Pathogen (GP) PCR Panel that detects 22 agents including viruses, bacteria, and parasites that cause diarrhea. The molecular amplification method is a multiplex, nested PCR test with duplicate microarray targets. PCR is the most rapid and sensitive detection method, allowing for specific identification of the infective agents or toxin genes and permitting the detection of multiple/co-infecting agents. Rapid diagnosis of enteric viruses, bacterial agents and their toxins, and parasites permits therapy and other appropriate patient management efforts to be applied at the earliest juncture.

The panel can also be used to detect outbreaks in closed settings where secondary transmission of some agents can be important, allowing for the correct interventions and early control of transmission. Results are obtained in under 2 hours upon arrival to the Public Health Laboratory.

Agents detected by the Gastrointestinal PCR Panel

Viruses	Bacteria	Bacteria (continued)	Parasites
<ul style="list-style-type: none"> • Astrovirus • Adenovirus F 40/41 • Norovirus GI/GII • Rotavirus A • Sapovirus (I, II, IV and V) 	<ul style="list-style-type: none"> • Campylobacter • Clostridium difficile Toxin A/B • Plesiomonas shigelloides • Salmonella • Vibrio cholerae • Vibrio spp. • Yersinia enterocolitica 	<ul style="list-style-type: none"> • Escherichia coli O157 • Enterotoxigenic E. coli (ETEC) LT/ST • Enteroaggregative E. coli (EAEC) • Enteropathogenic E. coli (EPEC) • Shiga toxin-producing E. coli (stx1/stx 2) • Shigella/Enteroinvasive E. coli (EIEC) 	<ul style="list-style-type: none"> • Cryptosporidium • Cyclospora cayetanensis • Entamoeba histolytica • Giardia lamblia

Sensitivity and Specificity

- Sensitivity for detection varies according to the agent detected from 94.5% to 100%
- Specificity for all viruses varies from 97.1 to 100%.

SPECIMENS ACCEPTED FOR TESTING

- Stool in Cary Blair transport medium is preferred.
 - Specimens may be stored at room temperature or refrigerated for up to 4 days before processing.
- Raw stool in a sterile container is also acceptable, but it must be transferred into Cary Blair transport medium within 2 hours.

CPT code: 87507