Astrovirus Qualitative Real-time RT-PCR

Viral gastroenteritis is a major health problem in developing countries, and even in developed countries it has significant morbidity and economic consequences. In humans, it can be caused by any of a number of viruses including: adenoviruses, astroviruses, noroviruses, rotaviruses and sapoviruses. Human Astrovirus (HAstV) infection has been found in all age groups, but is most prevalent in young children who are likely exposed numerous times during childhood. Astroviruses are classified into 8 antigenic serotypes (HAstV 1-8). The virus can be passed person-to-person via fecal-oral transmission or from person-to-food-to-person. While gastroenteritis caused by astrovirus is less severe than that caused by rotavirus, it is considered to be a significant pathogen in patients undergoing various types of transplantation. Therefore, detection may provide insight as to the cause of symptoms for which no alternative etiology has been determined. Real-time RT-PCR provides a rapid and sensitive method to determine the presence of target-specific amplifiable nucleic acids in all samples intended for PCR\(^1\text{a}\). For more information, call the lab at 513-636-9820.

**Reporting Units:**
Positive/Negative

**Unacceptable Specimens:**
- Frozen whole blood
- Swabs in gel or charcoal media

**Shipping Conditions:**
- Ambient if sent within 24 hours
- On wet ice if sent >24 hours after collection

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Volume Needed</th>
<th>Collection Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stool</td>
<td>1mL or 0.3g</td>
<td>Sterile Container</td>
</tr>
<tr>
<td>Rectal Swab*</td>
<td>n/a</td>
<td>Lavender Top (EDTA)</td>
</tr>
<tr>
<td>Tissue (originating from the gastrointestinal tract)**</td>
<td>0.3g</td>
<td>Sterile Container</td>
</tr>
</tbody>
</table>

* Red or green top culturette swabs preferred; viral transport media acceptable.
** Wrap tissue in gauze wetted slightly with sterile saline to keep moist during transport.

**Testing Schedule:**
Testing for Astrovirus is performed Mon-Fri on first shift. For testing outside of this schedule, call the lab at 513-636-9820. **TAT:** 1-3 days

**CPT Codes:**
87798

**Contact Information:**
Cincinnati Children’s Division of Pathology
Molecular and Genomic Pathology Services
Phone: 513-636-9820
Fax: 513-803-2941
Email: pathology@cchmc.org
Website: cincinnatichildrens.org/pathology
For pricing or billing questions, call 513-636-9264.

**Shipping Address:**
Cincinnati Children’s Hospital Medical Center
Lab Processing, B4.127
Attn: Molecular and Genomic Pathology Services (MGPS)
3333 Burnet Ave.
Cincinnati, OH 45229

**References:**

Clinical Lab Index:
Astro: https://www.testmenu.com/cincinnatichildrens/Tests/662800