
Lab Dept: Microbiology/Virology

Test Name: ADENOVIRUS DETECTION, ENTERIC

General Information

Lab Order Codes: ADEN

Synonyms: Adenovirus 40, 41; Adenovirus antigen

CPT Codes: 87301 – Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; adenovirus enteric types

Test Includes: Direct detection of adenovirus antigen in stool

Logistics

Lab Testing Sections: Virology

Phone Numbers: MIN Lab: 612-813-5806

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

Turnaround Time: Specimens must arrive by noon for same day results. All specimens received after that time will be held until the next working day for completion

Special Instructions: Requisition must state **specific site** of specimen and **date/time of collection**

Specimen

Specimen Type: Fresh random stool

Container: Plastic leakproof container

Volume: 3 - 4 gm or 2.0 mL of liquid stool

Collection: Collect stool in a clean, dry bedpan or on a newspaper over the toilet. Transfer specimen to a plastic, leakproof container. **Do Not** overfill or contaminate the outside of the container.

Transport/Storage:	<p>Onsite collections: Transport to the laboratory immediately. Do Not send through the pneumatic tube.</p> <p>Offsite collections: Refrigerate specimen. Specimens must be promptly transported to the laboratory, with the next available courier, not to exceed 24 hours from the time of collection. However, delayed transport causes a delay of test results.</p>
Patient Preparation:	Barium procedures and laxatives should be avoided for 1 week prior to collection of the specimen
Sample Rejection:	No diapers accepted. Improperly labeled specimen; specimen contaminated with urine and/or water; ≤0.5 gm stool; leaking container; insufficient volume; specimen containing interfering substances such as media, preservatives, animal serum, metal ions, oxidizing agents or detergents. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range:	No adenovirus antigen detected
Limitations:	<ul style="list-style-type: none"> ● A negative result does not rule out the presence of adenovirus. ● If respiratory or ophthalmic infection is suspected, specimens from the site of infection should be cultured. ● All positive results must be interpreted with caution since adenovirus is capable of latency and recrudescence. Asymptomatic shedding may occur up to 18 months after infection. ● The EIA detects all 41 known serotypes but cannot be used to differentiate types.
Methodology:	Enzyme Immunoassay (EIA)
Additional Information:	A positive result in feces, in association with diarrhea, is highly suggestive of adenoviral gastroenteritis. Adenovirus types 40 and 41 have been most often associated with viral gastroenteritis. They have been implicated in approximately 10% of pediatric patients with gastroenteritis and appear most frequently in children under 2 years of age.
References:	<p>Cook, JH, and M Pezzlo (2010). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC</p> <p>Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC</p>

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7th edition, American Society for Microbiology, Washington DC, pp 33-104

Updates:

11/20/2014: Offsite information added.