
Lab Dept: Microbiology/Virology

Test Name: ADENOVIRUS DNA PCR, FLUID,
RESPIRATORY, TISSUE, STOOL

General Information

Lab Order Codes: ADVP

Synonyms: ADV PCR

CPT Codes: 87798 – Infectious agent detection by nucleic acid, not otherwise specified; amplified probe technique, each organism

Test Includes: Adenovirus detection by PCR. This test **does not** include adenovirus culture.

Logistics

Test Indications: To detect Adenovirus DNA in clinical specimens.

Human adenoviruses cause a variety of diseases including pneumonia, cystitis, conjunctivitis, diarrhea, hepatitis, myocarditis, and encephalitis. In humans, adenoviruses have been recovered from almost every organ system. Infections can occur at any time of the year and in all age groups. Currently, there are 51 adenovirus serotypes that have been grouped into 6 separate subgenera.

Culture is the gold standard for the diagnosis of adenovirus infection; however, it can take up to 3 weeks to achieve culture results. Serological tests have faster turnaround times, but can be less sensitive compared to culture. PCR offers a rapid, specific, and sensitive means of diagnosis by detecting adenovirus DNA.

Lab Testing Sections: Microbiology/Virology - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo Test: LADV)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 5 days, set up Monday through Friday

Special Instructions: Viral culture is the standard method and is recommended along with PCR.

Specimen

Specimen Type:	Body Fluid, Respiratory Specimens, CSF, Stool, Swab (nasal, throat, genital, ocular, or respiratory), Tissue, Urine
Container:	Body Fluid, Respiratory Specimen, CSF, Stool, Tissue, Urine: Screw-capped sterile container Swab: Multimicrobe media (M4-RT) and Eswabs (Note: Calcium alginate-tipped swab, wood swab, or transport swab containing gel is not acceptable for PCR testing)
Volume:	Body Fluid : 0.5 mL (non-centrifuged) (Minimum: 0.5 mL) CSF: 0.5 mL (non-centrifuged) (Minimum: 0.3 mL) Respiratory: 1 mL (Minimum: 0.3 mL) Urine: 1 mL (Minimum: 0.3 mL) Stool: 1 gm fresh stool (Minimum: 0.5 gm) Tissue: Fresh tissue in 1-2 mL sterile saline or multi-microbe medium (M4-RT, M4, or M5)
Collection:	Specimen source is required on all submitted specimens. Fluid: Collection specific to site Respiratory Specimen: Bronchial washing, bronchoalveolar lavage, nasopharyngeal aspirate or washing, sputum or tracheal aspirate Stool: Routine collection Swab: Collection specific to site. Place swab back into M4 or M5 media. Tissue: Collection specific to site Urine: Random Urine collection
Special Processing:	Lab staff: Do not centrifuge. Forward promptly at refrigerated temperature. Specimens stable for 7 days refrigerated (preferred) or frozen.
Sample Rejection:	Specimen improperly labeled; QNS; gross contamination; incorrect specimen container. Slides or paraffin blocks will NOT be processed.

Interpretive

Reference Range:	None detected A positive report indicates the presence of adenovirus. A negative report does not rule out the presence of adenoviruses because organisms may be present at levels below the detection limits of this assay.
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Limitations:

A negative result does not rule out the presence of PCR inhibitors in the patient specimen or adenoviral nucleic acid in concentrations below the level of detection of the assay.

Test results should be used as an aid in diagnosis and should not be considered diagnostic in themselves.

Methodology:

Real-Time Polymerase Chain Reaction (PCR)/DNA probe hybridization

References:

[Mayo Clinic Laboratories](#) November 2023

Updates:

8/5/2009: Previously forwarded to Lab Corp from MML. Now performed internally at MML.

11/13/2023: Updated specimen volumes and acceptable swab media, added specimen stability.