Lab Dept: Microbiology/Virology

Test Name: ADENOVIRUS DNA PCR, PLASMA

General Information

Lab Order Codes:	ADVPP
Synonyms:	ADV PCR; Adenovirus Molecular Detection
CPT Codes:	87798 – Infectious agent detection by nucleic acid, not otherwise specified; amplified probe technique, each organism
Test Includes:	Adenovirus detection in plasma specimens by PCR. This test **does not** include adenovirus culture. Refer to Viral Culture order.

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: LCADP)
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, Wednesday and Friday
Special Instructions:	Viral culture is the standard method and is recommended along with PCR.

Specimen

Specimen Type:	Blood
Container:	Lavender top (EDTA) tube
Draw Volume:	3 mL (Minimum: 0.9 mL) blood
Processed Volume:	1 mL (Minimum: 0.3 mL) plasma
Collection:	Routine blood collection
Special Processing:	**Lab staff:** Centrifuge specimen, remove plasma aliquot into a screw-capped, plastic vial. Ship and store specimen at refrigerated temperatures. Specimen stable refrigerated (preferred) or frozen for 7 days.
Sample Rejection:	Mislabeled or unlabeled sample; QNS; gross contamination; gross hemolysis

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.
Limitations:	• Asymptomatic shedding may occur up to 18 months after infection. Test results should be interpreted in conjunction with other clinical information. • 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 January 2018
Updates:	11/15/2023: Biennial review, removed frozen as reason for rejection.