
Lab Dept: Microbiology/Virology

Test Name: ADENOVIRUS DNA DETECTION AND QUANTIFICATION, PLASMA

General Information

Lab Order Codes: ADVQ

Synonyms: ADV PCR; Adenovirus Molecular Detection

CPT Codes: 87799 – Infectious agent detection by nucleic acid, not otherwise specified, quantification, each organism

Test Includes: Presence or absence of Adenovirus DNA with quantification in IU/mL, if within the reportable range.

Logistics

Test Indications: Aids in the diagnosis of disseminated adenovirus infections in at-risk individuals.

Useful for measuring adenoviral load in plasma to monitor disease progression and antiviral response in individuals with disseminated infection.

Lab Testing Sections: Microbiology/Virology - Sendouts

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

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days, set up Tuesdays and Fridays

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Lavender top (EDTA) tube

Draw Volume: 4.5 mL (Minimum: 2.4 mL) blood

Processed Volume:	1.5 mL (Minimum: 0.8 mL) plasma
Collection:	Routine blood collection
Special Processing:	Lab staff: Centrifuge specimen, remove plasma aliquot into a screw-capped, plastic vial. Store specimen frozen. Ship on dry ice (frozen) temperatures. Specimen stable frozen (preferred) for 30 days or refrigerated for 6 days.
Sample Rejection:	Mislabeled or unlabeled sample; QNS; gross lipemia

Interpretive

Reference Range:	Undetected See Mayo's test catalog entry for additional interpretation and quantification range limits.
Limitations:	Adenovirus (ADV) DNA test results should be used as an aid in diagnosis and should not be considered diagnostic in themselves. Although the reference range is generally considered to be "Undetected" for this assay, adenovirus DNA may be detected from asymptomatic individuals in certain settings. This assay should only be used to test at-risk patients with clinical history and symptoms consistent with disseminated adenovirus disease and is not used to screen otherwise healthy individuals. Only EDTA-plasma specimens are acceptable for testing with this assay. Visibly lipemic plasma specimens are not acceptable, as ADV DNA may be undetectable or under-quantified due to possible complete or partial polymerase chain reaction inhibition. Due to differences in design and analytical performance for different assays detecting and quantifying ADV DNA in human plasma specimens, serial testing for ADV load in plasma of a given patient over time should be performed using the same molecular assay.
Methodology:	Real-Time (Quantitative) Polymerase Chain Reaction (rt-qPCR)
References:	Mayo Clinic Laboratories December 2024
Updates:	12/17/2024: Initial entry. Replaces obsolete ADVPP.