

Measles rRT-PCR

Revised 9/26/2023

Test Description	Molecular assay for qualitative detection of Measles virus RNA in clinical oral/nasopharyngeal swabs and in urine
Test Use	Direct detection of viral RNA is indicative of current infection and may be needed for case confirmation when serologic testing is not conclusive
Test Department	Advanced Molecular Diagnostics Phone: (860) 920-6689, FAX (860) 920-6721
Methodology	Real-time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR)
Availability	Daily, Monday-Friday
Specimen Requirements	Combined throat/nasopharyngeal swabs in 1-3 mL viral transport media (VTM). Both swabs can be placed into the same VTM tube. Use flocced synthetic or synthetic (e.g. polyester or Dacron-tipped) swab with plastic or aluminum shafts. Do NOT use calcium alginate or cotton tipped swabs, or wood shafts. Urine, 10-50 mL
Collection Kit/Container	Category B shipping box with ice pack To request collection kit, refer to Collection Kit Ordering Information.
Collection Instructions	Standard aseptic specimen collection procedures should be followed. Refrigerate VTM immediately after collection. Swabs should be allowed to remain in VTM for at least 1 hour at 4°C
Specimen Handling & Transport	Store specimen at 2-8° C and transport with an ice pack to be received at the laboratory within 24 hours of collection. If there is a delay in shipment the sample must be stored at <-70°C and shipped on dry ice.
Unacceptable Conditions	Unlabeled specimens Specimens that have leaked or containers that have broken in transit Specimens that have been improperly collected or stored
Requisition Form	Clinical Test Requisition, OL-9B (select Measles PCR)
Required Information	Name and address of submitter. Two patient identifiers (i.e. name, DOB, Acc.#, MRN), Town of residence (city, state, zip), Specimen source/type, date collected, test(s) requested. Please ensure information on the requisition matches the specimen.
Limitations	Proper collection, storage and transport of specimens are essential for accurate results. A negative test does not rule out infection with measles virus and should not be used as the sole basis of a patient treatment/management decision
Additional Comments	Detection of measles RNA is most successful when samples are collected on the first day of rash through the 3 days following onset of rash. However, detection of measles RNA by RT-PCR may be successful as late as 10-14 days post rash onset. Measles virus is present in the cells that have been sloughed off in the urinary tract. When feasible to do so, collection of both NP or OP, and urine samples can increase the likelihood of detecting viral RNA