IOWA

State Hygienic Laboratory

Laboratory Update

Orthopoxvirus, Conclusion, Qualitative Real-Time PCR

LRN Code: LRNT123
Update 8/1/2022

Announcement

The State Hygienic Laboratory is pleased to announce the release of the Orthopoxvirus, Conclusion, Qualitative Real-Time PCR test (LRN Code: LRNT123). This is a PCR test intended for the qualitative detection of non-variola Orthopoxviruses (VAC1 assay).

Monkeypox is a rare disease caused by infection with the monkeypox virus. Monkeypox virus belongs to the Orthopoxvirus genus in the family Poxviridae. The Orthopoxvirus genus also includes variola virus (which causes smallpox), vaccinia virus (used in the smallpox vaccine), and cowpox virus. Monkeypox is unrelated to the chickenpox virus of the Herpesviridae family. Scientists at the Centers for Disease Control and Prevention (CDC) are tracking multiple cases of monkeypox that have been reported in several countries that have not reported monkeypox in the past, including the United States.

Reporting Requirements

Clinicians must report suspected monkeypox cases to the **IDPH Center for Acute Disease Epidemiology (CADE)** as soon as monkeypox is suspected and **PRIOR TO COLLECTING SPECIMENS**.

Specimens approved by IDPH for testing at SHL should be submitted using a current **IDPH Epidemiological Investigation Test Request Form (TRF)** obtained by contacting **IDPH CADE**.

IDPH will consult with CDC and SHL to determine the need and plan for laboratory testing.

Please see the following pages for additional test details.

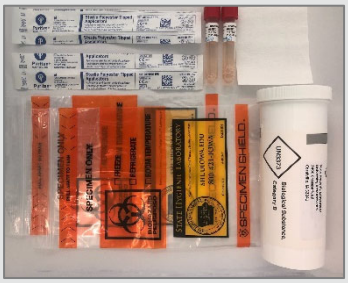
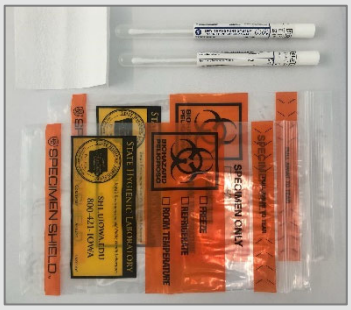
Orthopoxvirus, Conclusion, Qualitative Real-Time PCR

LRN Code: LRNT123

Effective August 1, 2022

Clinical Significance	The Orthopoxvirus, Conclusion, Qualitative Real-Time PCR test is intended for the qualitative detection of non-variola Orthopoxviruses and Monkeypox virus DNA using swabs from human pustular or vesicular rash specimens.	
Specimen Collection	Collect swab specimens from two lesions. Collect two swab specimens per lesion. Each swab should be in a separate collection tube.	
Specimen Requirements	Monkeypox Dry Swab Kit or Monkeypox VTM Kit Order kits at: **www.shl.uiowa.edu/kitsquotesforms/clinicalkit.xml**	
Reject Criteria	Cotton or rayon swabs; wooden swabs; M4 media, UTM; FlexTrans are unacceptable.	
Instructions	Swab the lesion vigorously and place the swab into viral transport media (VTM) or dry swab tube. Each swab should be placed in a separate collection tube. The two collection tubes from the same lesion can then be placed in biohazard bag that is sealed with a Test Request Form specific to that lesion. Ship refrigerated via CDS courier to SHL.	
Transport Temperature	Frozen specimen Refrigerated specimen	Ship on dry ice Ship on ice packs
Specimen Stability	Room temperature Refrigerated Frozen	Unacceptable 7 days 30 days
Set-up/Analytic Time	Set-up Report available	Monday – Friday, next day testing 2 – 3 days
Reference Range	Result Name Reference Range	Orthopoxvirus Negative
Methodology	Real-Time Polymerase Chain Reaction	
Performing Site	State Hygienic Laboratory at the University of Iowa	
Sample Pick-up	Contact CDS courier to schedule pick-up of specimens **http://cdsofiowa.com** | (515) 289-9990	

Order a Clinical Test Kit	Specimen collection kits are available for order on the SHL website
	• **http://www.shl.uiowa.edu/kitsquotesforms/clinicalkit.xml**
	• Type of kit, select either
	  ○ Monkeypox VTM Kit (2 swabs/kit)
	  ○ Monkeypox Dry Swab Kit (2 swabs/kit)

Kit Contents **contents subject to change*	**Monkeypox VTM Kit** • Puritan sterile polyester swab x2 • Viral transport media (VTM) x2 • Specimen biohazard bag • Absorbent material • White mailing tube w/ return label  **Dry Swab Kit** • Puritan sterile polyester swab x2 (in Dry Transport System tube) • Specimen biohazard bag • Absorbent material 
Contact Information	**IDPH CADE** (515) 242-5935 (business hours) (515) 323-4360 (non-business hours) **SHL** (319) 335-4500 or (800) 421-4692 **www.shl.uiowa.edu** 2490 Crosspark Road Coralville, IA 52240