



COUNTY OF SAN LUIS OBISPO PUBLIC HEALTH LABORATORY

Phone: (805) 781-5507 | Fax: (805) 781-1023 | Weekend Phone: (805) 305-8188
www.sloPublicHealth.org/Lab

LABORATORY TEST FACT SHEET

TEST: POXVIRUS PCR

TEST DESCRIPTION

The County of San Luis Obispo Public Health Laboratory performs both orthopoxvirus and non-variola orthopoxvirus PCR assays. The orthopoxvirus PCR assay detects DNA from many orthopoxviruses including variola (smallpox), vaccinia, cowpox, mpox, camelpox, ectromelia, and gerbilpox viruses. The non-variola orthopox PCR detects DNA from non-variola orthopoxviruses, including vaccinia, cowpox, mpox, and ectromelia viruses. Results of these assays are for the presumptive identification orthopoxvirus DNA. Specimens that test positive for orthopoxvirus nucleic acid are considered presumptive for an orthopox and additional specimen(s) will be referred to the Centers for Disease Control & Prevention (CDC) for confirmatory testing.

Skin lesions associated with smallpox, mpox, or other orthopoxviruses are characteristically firm, well circumscribed, deep-seated, and umbilicated (refer to: www.cdc.gov/poxvirus/mpox). Extra precautions will need to be taken if smallpox (variola virus) is suspected.

If a specimen tests positive for non-variola orthopoxvirus DNA, a duplicate specimen will be referred to the CDC for confirmatory mpox testing.

Sensitivity and Specificity

Performance characteristics for these orthopoxvirus PCR tests have been determined by the CDC.

PRE-APPROVAL NOT REQUIRED

Pre-approval is not required for testing during normal business hours (Monday to Friday, 8 am to 5 pm). To request testing on the weekend or after normal business hours, testing approval should be coordinated with the communicable disease group for the county where the patient resides.

1. County of San Luis Obispo County Public Health Department
 - a. Business hours: (805) 781-5500
 - b. After hours: (805) 781-4550
2. Santa Barbara County Disease Prevention
 - a. 24/7: (805) 681-5280
3. Ventura County Communicable Disease Office
 - a. 24/7: (805) 981-5201

SPECIMENS ACCEPTED FOR TESTING

1. Acceptable specimens:
 - a. Dry swabs (nylon, polyester, or Dacron) of skin lesions placed in separate sterile containers. The same lesion should be sampled with two swabs and each swab placed in a separate sterile container. The duplicate swab will be used for reference testing.
 - b. Swab (nylon, polyester, or Dacron) of skin lesions placed in viral transport medium (VTM).
 - c. Note: It is preferable to separately collect swab specimens from different locations on the body or from lesions which differ in appearance.

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2. Refrigerate (2–8°C) dry and wet swabs within an hour after collection. Transport at refrigerated temperature (wet ice) within 7 days. If specimens are to be held longer than 7 days, freeze (-20°C or lower) within an hour of collection and ship on dry ice.

CPT code: 87798