Viral Heart (Cardiac) Panel Qualitative Real-time PCR



Viral myocarditis is an often underdiagnosed inflammatory process that typically presents with left ventricular systolic dysfunction in childhood cases. It occurs sporadically as epidemics, usually in newborns, who have poor prognosis and high mortality, primarily caused by Coxsackie Virus B. Parvovirus B19, Adenovirus, and most other Enteroviruses are commonly identified in heart tissue by PCR. In pediatrics, the following viruses also cause myocarditis: Influenza A and B, CMV, HSV, HCV, rubella, VZV, mumps, EBV, HIV, RSV, and HHV6. Viral heart infections are of particular concern in transplant recipients, whose immunosuppression regimens permit latent viruses to reactivate and disseminate, especially in cases of primary infection of the recipient by donor organs. For example, following heart-lung transplants, CMV causes bronchiolitis obliterans and EBV results in posttransplant lymphoproliferative disease. Without vaccines available for the principal viral agents that infect cardiac tissue, treatment is a balancing act of immunosuppression, antiviral therapies, supportive care, and potential surgical intervention¹. The Viral Heart Panel provides a rapid and sensitive method to determine the presence of the pathogens listed to the right. For more information, call the lab at 513-636-9820.

Reporting Units:

Positive/Negative

Sample:

The only acceptable sample for this assay is fresh/frozen heart tissue. Tissue in formalin is unacceptable.

Requested volume: 0.3g

Shipping Conditions:

- Ambient if sent within 24 hours
- On cold packs if sent >24 hours after collection
- Send on gauze wetted with sterile saline or in 0.5-1mL of RNA/ater

Testing Schedule:

Viral Heart panel testing is performed Mon-Fri on first shift. For testing outside of this schedule, call the lab at 513-636-9820. **TAT**: 1-3 days

Organisms Detected:

Adenovirus (AV)

Cytomegalovirus (CMV)

Enterovirus (EV)

Epstein-Barr Virus (EBV)

Human Herpesvirus 6 (HHV-6)

Influenza A Virus

Influenza B Virus

Parvovirus B19

Respiratory Syncytial Virus (RSV)

EPIC Test Code:

5034326

CPT Code:

See component codes.

Clinical Lab Index:

https://www.testmenu.com/cincinnatichildrens/tests/770844

Contact Information:

Cincinnati Children's Division of Pathology Molecular and Genomic Pathology Services (MGPS)

Phone: 513-636-9820 Fax: 513-517-7099

Email: pathology@cchmc.org

Website: cincinnatichildrens.org/pathology

For pricing or billing questions, call 513-636-4261.

Shipping Address:

Cincinnati Children's Hospital Medical Center Attn: Molecular and Genomic Pathology Services (MGPS) 3333 Burnet Ave, R2.001 Cincinnati, OH 45229

References:

 Richman D, Whitley R, Hayden F, eds. <u>Clinical Virology</u>. 3rd ed. American Society of Microbiology Press, Washington D.C. 2009.