

Cryptosporidium Qualitative Real-time PCR



Cryptosporidium is an intracellular parasite that infects the epithelium of gastrointestinal and respiratory tracts in mammals and causes watery diarrhea and cough, respectively. The two main culprits of human cryptosporidiosis are *C. parvum* and *C. hominis*. An extremely common water-borne pathogen, it can be spread via fecal-oral route and in respiratory secretions via aerosol droplets or fomites. Cryptosporidiosis can be fatal in immunocompromised hosts and has significant morbidity and mortality in pre-schooled-aged children in developing countries; survivors of cryptosporidiosis often experience growth retardation and cognitive deficits. Real-time PCR provides a rapid and sensitive method to determine the presence of target-specific amplifiable nucleic acids in all samples intended for PCR¹⁻². For more information, call the lab at 513-636-9820.

Reporting Units:

Positive/Negative

Unacceptable Specimens:

- Frozen whole blood
- Swabs in gel or charcoal media

Shipping Conditions:

- Ambient if sent within 24 hours or FFPE tissue
- On cold packs if sent >24 hours after collection

Testing Schedule:

Cryptosporidium 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

EPIC Test Code:

11732506

CPT Code:

87272

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)
240 Albert Sabin Way, R2.001
Cincinnati, OH 45229

References:

1. "Parasites – Cryptosporidium (also known as "Crypto")". <https://www.cdc.gov/parasites/crypto/>. Centers for Disease Control and Prevention. Atlanta, GA. Last revised January 12, 2017.
2. Sponseller J, Griffiths J, Tzipori S. The evolution of respiratory cryptosporidiosis: evidence for transmission by inhalation. *Clin Microbiol Rev.* 27:575-586. 2014.

Sample Type	Volume Needed	Collection Container
Body Fluids (i.e. pericardial, pleural)	1mL	Sterile Container
Stool	1mL or 0.3g	Sterile Container
Rectal swab*	n/a	Red or Green Culturette Swab
Fresh tissue (preferred)**	0.3g	Sterile Container
FFPE tissue (consultation required)***	3x10um scrolls	n/a
Urine	1mL	Sterile Container

* Red or green top culturette swabs preferred; viral transport media acceptable.

** Wrap tissue in gauze wetted slightly with sterile saline to keep moist during transport.

*** Call the Pathology administrative office at 513-636-4261.