

## 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 PCR<sup>1-2</sup>. 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

### CPT Codes:

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](mailto:pathology@cchmc.org)  
Website: [cincinnatichildrens.org/pathology](http://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)***	8x10um 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.

Clinical Lab Index:

Crypto: <https://www.testmenu.com/cincinnatichildrens/Tests/932061>