

Toxoplasma gondii Qualitative Real-time PCR



Toxoplasmosis is an infectious disease caused by the protozoan *Toxoplasma gondii*, whose only definitive host is cats. It can spread in fecal material from infected animals, contaminated food or water, and through various body fluids. Three main genotypes cause disease in humans, with Type II being the predominant cause of congenital toxoplasmosis. The parasite can remain latent in infected individuals and may cause chronic disease, including retinochoroiditis (ocular toxoplasmosis). *Toxoplasma* encephalitis and disseminated infection are usually life-threatening complications in immunocompromised patients, such as allogeneic stem cell transplant recipients. Serious complications may occur *in utero*, neonatally, or years after birth when congenital toxoplasmosis is acquired during pregnancy. 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
- On cold packs if sent >24 hours after collection

Testing Schedule:

Testing for *Toxoplasma gondii* 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:

87798

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. Murray P, Baron E, Pfaller F, et al, eds. Manual of Clinical Microbiology. 7th ed. American Society of Microbiology Press, Washington D.C. 1999.
2. Flegel J, Prandota J, Sovičková M, et al. Toxoplasmosis – A global threat. Correlation of latent toxoplasmosis with specific disease burden in a set of 88 countries. *PLoS One*. 9:e90203. 2014.

Sample Type	Volume Needed	Collection Container
Anticoagulated Blood or Bone Marrow*	1mL	Lavender Top (EDTA)
Body Fluids (i.e. amniotic, vitreous)	1mL	Sterile Container
Cerebrospinal Fluid (CSF)	1mL	Sterile Container
Plasma*	1mL	Lavender Top (EDTA)
Serum	1mL	Gold Top (SST)
Tissue**	0.3g	Sterile Container

* EDTA is preferred, sodium heparin is acceptable.

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

Clinical Lab Index:

Toxo: <https://www.testmenu.com/cincinnatichildrens/Tests/662820>