

Toxoplasma Quantitative Real-time DNA PCR

Test ID	2200 <i>Toxoplasma gondii</i> Real-time qPCR
Clinical Utility	<i>Toxoplasma gondii</i> is highly problematic when primary infection occurs during the first trimester of pregnancy, often leading to fetal death or when reactivation occurs in immunocompromised patients, leading to life-threatening disease including encephalitis and extracerebral toxoplasmosis. Onset of disease in most patients is preceded by an increase in parasite load measured in peripheral blood specimens using quantitative PCR. Monitoring blood levels of <i>Toxoplasma gondii</i> DNA correlates well with treatment.
Procedure	Extraction of <i>Toxoplasma gondii</i> DNA from blood, CSF, other biological fluids, or tissues followed by amplification and detection using real-time, quantitative PCR. An internal control is added to ensure the extraction was performed correctly and the PCR reaction was not inhibited.
Specimens	Whole Blood: 3-5 ml submitted in an EDTA tube; ship ambient. CSF: 1 ml fluid frozen; submitted in a sterile, leakproof tube; ship on dry ice. Amniotic Fluid: 1-4 ml submitted in a sterile, leakproof tube; ship ambient. BAL: 1-4 ml submitted in a sterile, leak proof tube; ship ambient. Other: Please inquire.
Specificity	The primers and probes used in this assay are specific for known <i>Toxoplasma gondii</i> strains based on similarity search algorithms. Additionally, no cross reactivity was detected with any viral or protozoa pathogens.
Assay Range	500 copies/ml to 1 x 10 ¹⁰ copies/ml
Turnaround Time	Within 24 hours of receiving specimen

PCR tests are performed pursuant to a license agreement with Roche Molecular Systems, Inc.

This assay was developed and the performance characteristics were determined at ViraCor Laboratories. This test is performed in a CLIA certified laboratory. FDA approval is not required for the performance of this test.

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