

Toxoplasma gondii test update

UTCVM PARASITOLOGY LABORATORY

November 1, 2023, the parasitology laboratory discontinued the TgMAT and replaced it with the *Toxoplasma* ELISA (IVD Technologies) for the detection of anti-*Toxoplasma gondii* antibody in serum and plasma samples of any host species. The ELISA test is a common diagnostic method across a wide spectrum of tested animal species and yields a positive or negative result based on the detection of IgG antibodies.

SAMPLE TYPE

0.5 mL of serum or plasma
(not lipemic, hemolyzed or icteric)

TEST SCHEDULE

Thursday afternoons
(samples must be received by noon and reported same day)

AVAILABLE FOR
ALL MAMMALS & BIRDS

Interpretation

Results are reported as positive or negative. The optical densities (OD) of the controls and samples read by a plate reader at 450 nm are used to calculate a sample to negative ratio (S/N ratio). Serum or plasma samples that yield a sample to negative ratio greater than 1.0 are interpreted as positive for anti-*Toxoplasma* IgG antibody, sample to negative ratios less than 1.0 are interpreted as negative. This testing method will reduce the subjectivity of the test interpretation and increase the accuracy of the diagnostic testing for *Toxoplasma gondii*.

Test Value Thresholds	Interpretations
S/N Ratio < 1.0	Negative (No anti <i>T. gondii</i> antibodies)
S/N Ratio ≥ 1.0	Positive (Presence of anti <i>T. gondii</i> antibodies)

Considerations/Limitations

As with any toxoplasmosis assay, the life cycle of *T.gondii* may impact antibody detection. Acute infections may yield negative results and dormant (chronic and asymptomatic) infections can yield positive results for the life of the animal regardless of treatment.

