
Lab Dept: Serology

Test Name: TOXOCARA ANTIBODY

General Information

Lab Order Codes: TOXA

Synonyms: Toxocara IgG; Toxocara Serology by ELISA

CPT Codes: 86682 – Antibody; helminth, not elsewhere specified

Test Includes: Toxocara total Ig as Antibody not detected or antibody detected.

Logistics

Test Indications: Serological diagnosis of toxocariasis.

Toxocara canis is a nonhuman ascarid nematode that undergoes limited development in humans. Only the larval form occurs in human tissues, especially the liver, eye and central nervous system. Infection is acquired by ingesting eggs which are excreted in the feces of dogs or cats infected with adult worms. The eggs hatch in the human intestine liberating larvae which enter the vascular system and migrate to various tissues including the visceral organs and the eye (visceral or ocular larva migrans).

Humans are not infected with adult *Toxocara* and thus, eggs are not shed in stools. Diagnosis is made on the basis of clinical signs and symptoms or the histopathologic identification of larvae in various tissues. Serologic testing can support the clinical and histopathologic findings. The enzyme-linked immunosorbent assay is a screen for antibodies against *Toxocara canis* in serum.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: TOXOC)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 7 days, test set up Tuesday and Thursday

Special Instructions: N/A

Specimen

Specimen Type:	Blood
Container:	SST (Gold, marble or red) tube Alternate tube: Red NO GEL
Draw Volume:	1.5 mL (Minimum: 0.6 mL) blood
Processed Volume:	0.5 mL (Minimum: 0.2 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen, remove aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than serum; warm specimens; mislabeled or unlabeled specimens

Interpretive

Reference Range:	Negative See Limitations
Critical Values:	N/A
Limitations:	<ul style="list-style-type: none">● A single negative result does not rule out infection. Assay sensitivity may be decreased depending on the site of infection, in cases of low parasitic burden, and timing of sample collection relative to exposure.● False-negative results may occur in severely immunosuppressed patients.● Positive results should be interpreted with patient's clinical status and exposure history.● Positive results by this assay do not distinguish acute versus remote infection.● False-positive results may occur in patients with other helminth infections.● This assay uses synthetic antigens derived from <i>Toxocara canis</i>. Studies evaluating the sensitivity of this assay in patients infected with <i>T. cati</i> have not been performed.
Methodology:	Enzyme – Linked Immunosorbent Assay (ELISA)
References:	Mayo Medical Laboratories October 2018

Updates:

11/11/2008: Testing now referred to Focus Diagnostics from Mayo. Previously performed at Mayo. Total Ig now reported, previously IgG specific.

2/25/2013: Reference range update.

12/21/2017: Collection container update.

11/5/2018: Testing moved by MML to internal test, no longer forwarded to Focus. Updated draw volumes and storage info.