**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 (Test# FFOX) Forward to Focus Diagnostics (Test# 40945)  
**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 Friday  
**Special Instructions:** N/A
**Specimen**

**Specimen Type:** Blood  
**Container:** SST (Gold, marble or red) tube  
**Draw Volume:** 3 mL (Minimum: 1.5 mL) blood  
**Processed Volume:** 1 mL (Minimum: 0.5 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 refrigerated 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:** Results of this assay must be interpreted with caution, as broad variations in antibody response occur, and levels may remain elevated for years after infection. Further, as with many parasitic serology assays, antibodies induced by other parasitic infections may crossreact in this assay. Although a negative result usually rules out infection with Toxocara spp., parallel testing of serial samples may prove useful in following patients with suspected Toxocara infection.  
**Methodology:** Enzyme – Linked Immunosorbent Assay (ELISA)  
**References:** Mayo Medical Laboratories December 2017  
**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.