

## Toxoplasma Diagnostics

Detects both IgM and IgG

- Kits and single reagents
- Screening and confirmatory antibody testing
- Human and veterinary diagnostics
- Easy to read results

# Toxoplasma Diagnostics

## Overview of test systems

### Toxoplasma Latex Reagent

- Suitable for human and veterinary diagnostic use
- Screening for antibodies to *Toxoplasma gondii* detects both IgG and IgM
- All reagents supplied
- Obvious agglutination, easy to read results
- Simple and quick procedure

### Toxoplasma IFA

- Suitable for human and veterinary diagnostic
- Detects IgG and/or IgM in human and veterinary serum/plasma
- Ready to use reagents
- Single components available
- Suitable for automated or manual testing

### Veterinary diagnostics

Most animals that have toxoplasma show no sign of illness. Disease is most often seen and the most severe symptoms are shown in young animals, such as puppies or kittens. In adult animals, particularly sheep, the most commonly noted sign is abortion. Cats may have signs of pneumonia or damage to the nervous system or eyes. Affected dogs may show signs of encephalitis, such as seizures, head tilt, tremors or paralysis.

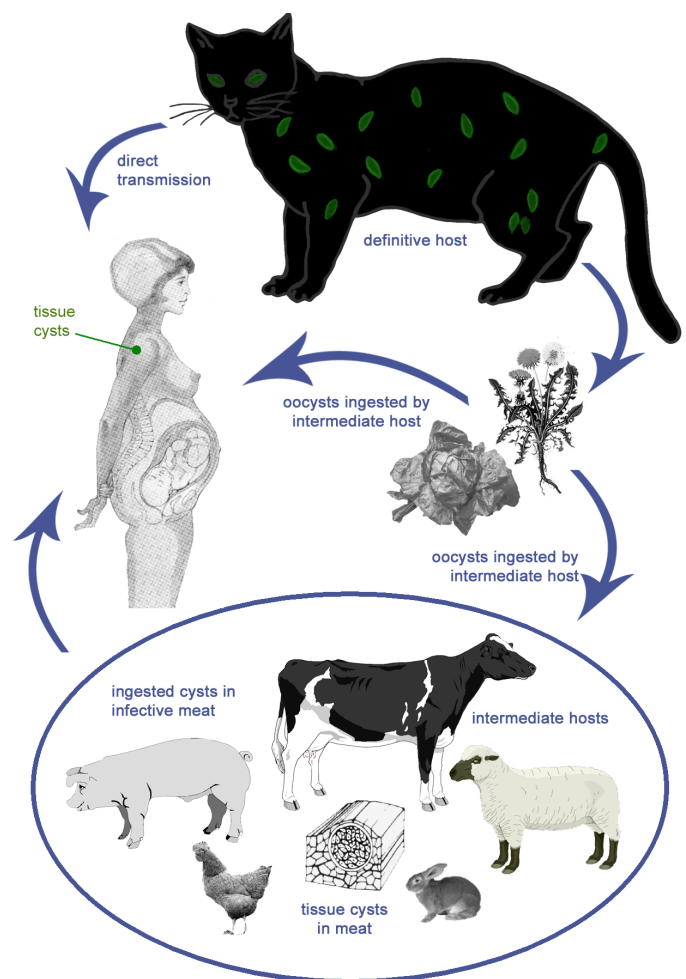
Pregnant women with unknown immune status or indeterminate immunity are at risk of direct pathogen transfer from animal sources e.g. cats to pregnant women or eating meat containing *Toxoplasma* cysts.

### Clinical relevance

#### Implications of *Toxoplasma* infection for pregnant women

- Risk of pathogen transfer to the foetus increases during pregnancy but the severity of symptoms decreases.
- Determination of antibodies to toxoplasma is recommended before pregnancy in cases of:
  - Infertility
  - Problems during previous pregnancies or in neonatal case history

- Unknown immunological status
- Recommended antibody determination during pregnancy
- Unknown immune status or 'indeterminate' immunity after infertility treatment or during previous pregnancies or in neonatal case history
- Indeterminate immunity after infertility treatment or during previous pregnancies or neonatal case history



### Significance for the Neonate

Newborns should be tested for a prenatal *Toxoplasma gondii* infection if the mother acquired initial infection during pregnancy.

- Risk of infection and clinical manifestation is dependent on:
  - Time of infection
  - Dose rate of the causative agent
  - Immune status of the mother and transplacental antibody transfer

# Flowsheet for Toxoplasma IFAs

## Screen IgG / IgM / IgA

Predilute sample with serum diluent 1:16



Apply 20–25 µL prediluted samples or controls to the slides



Incubate in a moisture chamber for 30 min at room temperature (18–24 °C)



Wash slides with PBS for 15 min



Add 1 drop (20–25 µL) of FITC-labelled conjugate (polyvalent)



Incubate in a moisture chamber for 30 min at room temperature (18–24 °C)



Wash slides with PBS for 15 min



Coverslip using a minimal amount of mounting medium



Read slides with a fluorescence microscope (Excitation filter 490 nm, barrier filter 510 nm)

Reaction time: 90 min

## IgG

Predilute sample with serum diluent 1:64



Apply 20–25 µL prediluted samples or controls to the slides



Incubate in a moisture chamber for 30 min at room temperature (18–24 °C)



Wash slides with PBS for 15 min



Add 1 drop (20–25 µL) of FITC-labelled IgG conjugate



Incubate in a moisture chamber for 30 min at room temperature (18–24 °C)



Wash slides with PBS for 15 min



Coverslip using a minimal amount of mounting medium



Read slides with a fluorescence microscope (Excitation filter 490 nm, barrier filter 510 nm)

Reaction time: 90 min

### Key to Table

- a - Well number
- b - Serum dilution  
Con = control well
- c - µL Buffer solution
- d - µL of reconstituted Positive Control or 1:8 diluted serum samples
- e - Mix diluted serum + diluent and transfer
- f - Add latex Reagent to all wells

## Toxoplasma Latex Reagent titration method

a	1	2	3	4	5	6	7	8
b	1:16	1:32	1:64	1:128	1:256	1:512	1:1024	Con
c	25	25	25	25	25	25	25	25
d	25							
e	→	25 →	25 →	25 →	25 →	25 →	25 →	25 → discard
f	Add 25 µL Latex Reagent to all wells.							
	Mix contents of wells.							
	Leave tray at room temperature for at least 12 hours.							
	Read agglutination patterns.							

## Order information

### Agglutination Latex Test

Order Code	Product	Pack Size
RST7001	Mast Toxoplasma Latex reagent kit	50 tests

### MASTAFLUOR™ Immunofluorescence Tests

All products available to Special Order - Lead time 2-3 weeks

Order Code	Product	Pack Size
631181	Toxoplasma Screen	10 × 5
631182	Toxoplasma Screen	10 × 10
631183	Toxoplasma IgG complete test kit	10 × 5

Complete test kits contain slides, buffers, controls, mounting medium, conjugate & cover slips

### Single Components

All products available to Special Order - Lead time 2-3 weeks

Order Code	Product	Pack Size
641181	IFA Toxoplasma Slide	10 × 5
641182	IFA Toxoplasma Slide	10 × 10
621181	IFA Toxoplasma IgG positive control	0.5 ml
621185	IFA Toxoplasma IgM positive control	0.5 ml
626291	Anti-human IgG (γ-chain) FITC labelled (ready for use)	2 ml
626284	Anti-human IgG (γ-chain) FITC labelled (ready for use)	3 ml
626283	Anti-human IgG, IgA, IgM (polyvalent) FITC labelled (ready for use)	10 ml
626290	Anti-human IgG, IgA, IgM (polyvalent) FITC labelled (ready for use)	2 ml
626286	Anti-human IgG, IgA, IgM (polyvalent) FITC labelled (ready for use)	3 ml
621015	Anti-human IgG, IgA, IgM (polyvalent) FITC labelled (ready for use)	10 ml

### DIESSE ENZYWELL and Latex Tests

Available to Special Order - Lead time 6-8 weeks

Order Code	Product	Pack Size
91043	Toxoplasma EIA IgA	12 × 8 tests
91040	Toxoplasma EIA IgG	12 × 8 tests
91041	Toxoplasma EIA IgM - Capture Method	12 × 8 tests
91098	Toxoplasma EIA IgG Avidity	3 × (2 × 8) tests

All products  marked

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