

Toxoplasma Diagnostics Overview of test systems

Toxoplasma Latex Reagent

- Suited 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

- Suited for human and veterinary diagnostic
- Detects IgG and/or IgM in human and veterinary serum
- 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.

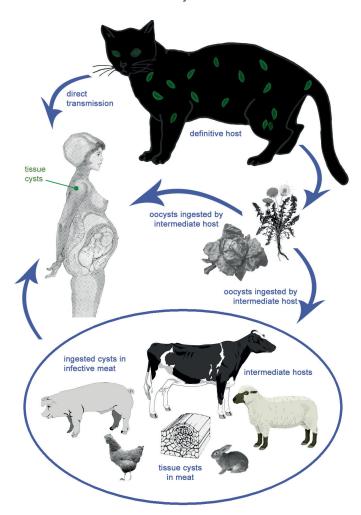
Pregnant women with unknown immune status or indeterminate immunity are at risk of direct pathogen transfer from animal sources e.g. cats to pregnant women or eating meat containing Toxoplasma cysts.

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 1:64

 ∇

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

 ∇

 $Add \ 1 \ drop \ (20\text{--}25 \ \mu\text{L})$ 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 μ L) 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
- c µL Diluent Buffer
- d μL of 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

а	1	2	3	4	5	6	7	8
b	1:16	1:32	1:64	1:128	1:256	1:512	1:1024	1:2048
С	25	25	25	25	25	25	25	25
d	25							
е	\rightarrow	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

Immunofluorescence assays

Order Code	Product C€2797	Pack Size
631182	MASTAFLUOR™ Toxoplasma Screen test pack	10 x 10
631184	MASTAFLUOR™ Toxoplasma IgG test pack	10 x 10

Single components

Order Code	Product	Pack Size
641182	IFA Toxoplasma slide	10 x 10
621181	IFA Toxoplasma IgG pos.control	0,5 mL
621185	IFA Toxoplasma IgM pos.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 (γ-chain) 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

Agglutination assay

Order Code	Product (€2797	Pack Size
RST7001	Toxoreagent detection kit	60 tests

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United Kingdom Mast Group Ltd. Mast House, Derby Road, Bootle Merseyside L20 1EA

Tel: +44 (0)151 933 7277 Fax: +44 (0)151 944 1332 e-mail: sales@mastgrp.com Germany Mast Diagnostica GmbH Feldstraße 20 DE-23858 Reinfeld

Tel: +49 (0)4533 2007 0 Fax: +49 (0)4533 2007 68 e-mail: mast@mast-diagnostica.de France
Mast Diagnostic
12 rue Jean-Jacques Mention
CS91106, 80011 Amiens, CEDEX 1

Tél: +33 (0)322 80 80 67 Fax: +33 (0)322 80 99 22 e-mail: info@mast-diagnostic.fr