MegaFLUO® VET

Veterinary tests with laboratory precision

Indirect immunofluorescence test for the semiquantitative detection of specific IgG / IgM antibodies in plasma or serum of different animals





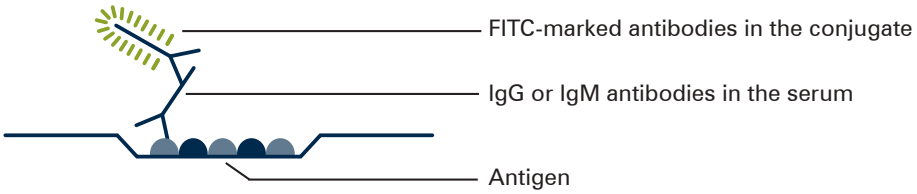


- Gold Standard for antibody detection
- Quantitative determination of the final titre
- Acute infection detection by 2–4-fold titre increase in the serum pair (within 2–4 weeks)
- For all species by use of antibody-specific detector conjugates
- Format: Test-kit or 10 slides or 50 slides
  Single components (Positive Control, Negative Control, IgG / IgM Conjugate, Mounting medium)

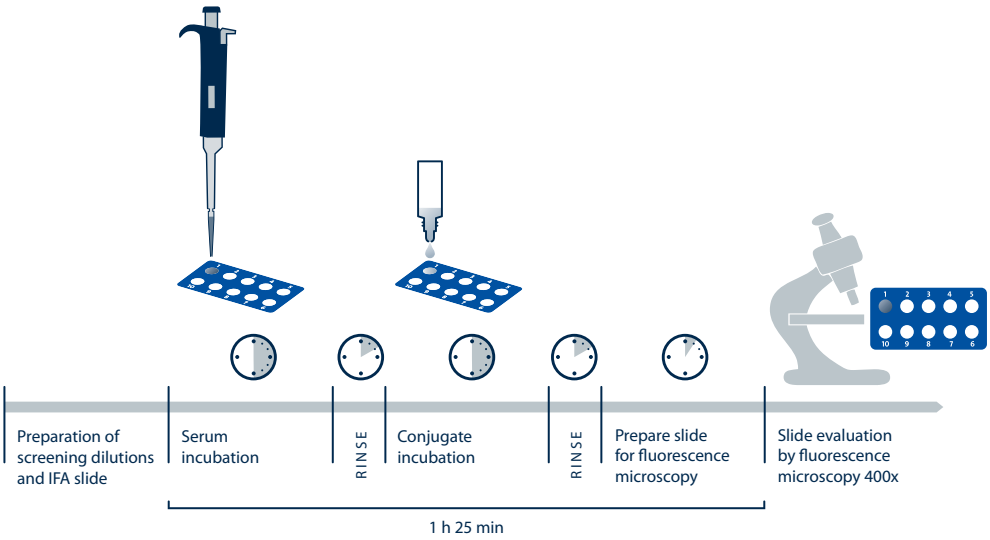
EN 02/2025

Test principle

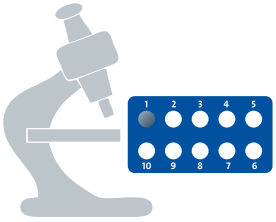
For the indirect immunofluorescence test (IFT), diluted plasma or serum is dropped onto the slide wells to allow an antigen-antibody reaction at 37 °C in case of a positive sample.
By subsequent washing, non-bound unspecific serum proteins are washed off. In the next step, species-specific fluorescin-marked FLUO FITC antibodies in the conjugate bind to the antigen-antibody complexes.
Evaluation is done with a fluorescence microscope (filter system for FITC) with 400× magnification.



Test procedure



Test evaluation



Positive illustrations
(e. g. *Borrelia*, *Ehrlichia canis, Toxoplasma gondii*)



Products / test parameters



Dog

MegaFLUO® ANA HEp2
MegaFLUO® ANAPLASMA ph
MegaFLUO® BABESIA canis
MegaFLUO® BORRELIA canis
MegaFLUO® BRUCELLA canis
MegaFLUO® CDV
MegaFLUO® CHV
MegaFLUO® COXIELLA burnetii
MegaFLUO® CPV
MegaFLUO® EHRLICHIA canis
MegaFLUO® EHRLICHIA chaffeensis *
MegaFLUO® ENCEPHALITOZOON c. *
MegaFLUO® HCC
MegaFLUO® LEISH
MegaFLUO® LEPTOSPIRA
MegaFLUO® NEOSPORA caninum
MegaFLUO® RICKETTSIA conorii
MegaFLUO® RICKETTSIA massiliae *
MegaFLUO® RICKETTSIA raoultii *
MegaFLUO® RICKETTSIA rickettsii
MegaFLUO® TOXOPLASMA g.



Cat

MegaFLUO® BARTONELLA henselae
MegaFLUO® CHLAM felis
MegaFLUO® COXIELLA burnetii *
MegaFLUO® ENCEPHALITOZOON c. *
MegaFLUO® FCoV
MegaFLUO® FCV
MegaFLUO® FHV
MegaFLUO® FIV
MegaFLUO® FRANCISELLA tularensis *
MegaFLUO® LEISH *
MegaFLUO® PAN
MegaFLUO® TOXOPLASMA g.



Rodent

MegaFLUO® BABESIA microti
MegaFLUO® COXIELLA burnetii *
MegaFLUO® EHRLICHIA muris *
MegaFLUO® ENCEPHALITOZOON c.
MegaFLUO® FRANCISELLA tularensis *



Bird

MegaFLUO® CHLAM psittaci *
MegaFLUO® COXIELLA burnetii *



Horse

MegaFLUO® ANAPLASMA ph
MegaFLUO® BABESIA caballi
MegaFLUO® BORRELIA horse
MegaFLUO® EHV I+IV
MegaFLUO® ENCEPHALITOZOON c. *
MegaFLUO® THEILERIA equi



Cattle / Calf

MegaFLUO® BABESIA bigemina *
MegaFLUO® BABESIA bovis
MegaFLUO® BABESIA divergens *
MegaFLUO® BESNOITIA besnoiti
MegaFLUO® NEOSPORA caninum



Sheep

MegaFLUO® FRANCISELLA tularensis *
MegaFLUO® LISTERIA monocytogenes



Pig

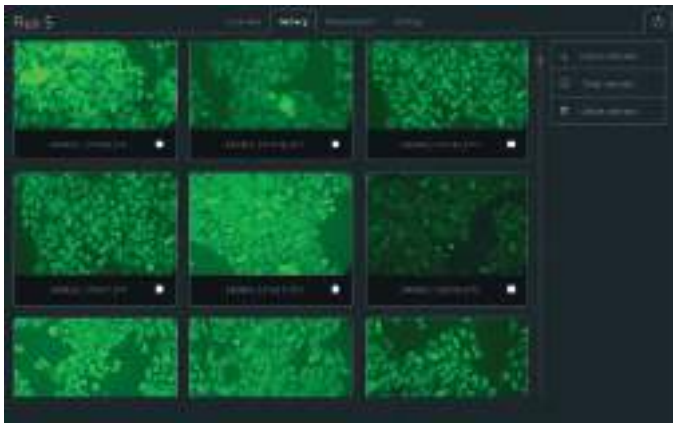
MegaFLUO® LAWSONIA intracellularis *

* only as slides, no test-kit!

MegaFLUO® ScanVet S

Entry-level automatic indirect immunofluorescence analyzer





- Objective results
- No darkroom required
- Average scanning speed 40 sec / well
- Up to 2 slides per scanning session
- Slide digitization and archiving with advanced search queries
- End titre detection
- Built-in pattern guide for side-by-side comparison of images

MegaFLUO® ScanVet M

Advanced automatic indirect immunofluorescence analyzer



- Objective results
- No darkroom required
- Average scanning speed 40 sec / well
- Up to 5 slides per scanning session
- Slide digitization and archiving with advanced search queries
- End titre detection
- Built-in pattern guide for side-by-side comparison of images

	Screening assay & end titre detection
Leishmania infantum	available
Ehrlichia canis	ca. March 2025
Borrelia canis	ca. April 2025
Neospora caninum	ca. June 2025
Toxoplasma gondii	ca. June 2025
Encephalitozoon cuniculi	ca. June 2025

Features

MegaFLUO® ScanVet S

Hardware
- ✓ Reflected-light microscope
- ✓ Built-in 40× objective
- ✓ 2.3 MP, CMOS camera
- ✓ Autofocusing technology
- ✓ Built-in filters: FITC, Cy5
- ✓ Scanning speed: 40 seconds per well
- ✓ Integrated 10“ touch display

Software
- ✓ User-friendly touchscreen interface
- ✓ Slide selection, well editor and slide loading
- ✓ Manual or automatic operation
- ✓ Test report can be printed or stored in different formats
- ✓ Atlas/Pattern guide (reference cells and patterns data gallery)
- ✓ LIS/Middleware by most common protocols: Bidirectional, HL7
- ✓ Image acquisition in all fluorescence channels
- ✓ Customer-specific protocol creation
- ✓ Remotely operated and updated by technical support

MegaFLUO® ScanVet M

Hardware
- ✓ Reflected-light microscope
- ✓ Built-in 40× objective
- ✓ 2.3 MP, CMOS camera
- ✓ Motorized xy-positioning
- ✓ Autofocusing technology
- ✓ Built-in filters: FITC, Cy5
- ✓ Scanning speed: 40 seconds per well
- ✓ External monitor

Software
- ✓ User-friendly interface
- ✓ Slide selection, well editor and slide loading
- ✓ Manual or automatic operation
- ✓ Test report can be printed or stored in different formats
- ✓ Atlas/Pattern guide (reference cells and patterns data gallery)
- ✓ LIS/Middleware by most common protocols: Bidirectional, HL7
- ✓ Image acquisition in all fluorescence channels
- ✓ Customer-specific protocol creation
- ✓ Remotely operated and updated by technical support

MegaFLUO® DROP

A New Experience in Veterinary Laboratory Automation



- Stand-alone pipetting robot
- Walk-away machine **Stand-Alone Device with low Hands-on Time**
- Handles all IFA procedure steps
- Compact footprint
- Incubators inside
- Easy to use software

Technical specifications

- ✓ Capacity in 64 serum samples
- ✓ Samples barcode reader
- ✓ Two slides rack, 5 slides capacity each
- ✓ Slides racks for 10 and 12 wells slides
- ✓ Metal cover lids for slides racks
- ✓ Incubation temperature control (37 °C)
- ✓ Slides rack humidity contol
- ✓ Dilution plate 96 wells (single-use)
- ✓ Titration plate 96 wells (single-use)
- ✓ One washable metal tip for all purposes
- ✓ 8-channel coaxial washing device
- ✓ Reagent rack contains:
  - o Controls: 6 tubes
  - o Conjugates: 6 tubes
  - o Diluents: 2 bottles
  - o Solutions: 2 bottles
- ✓ Waste bottle (Liquid detection sensor inside)
- ✓ Buffer bottle (Liquid detection sensor inside)
- ✓ System rinsing module

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Indirect Immunofluorescence Automatisation



MegaFLUO®ScanVet
S - series



MegaFLUO®ScanVet
M - series

MegaFLUO®ScanVet

S-series

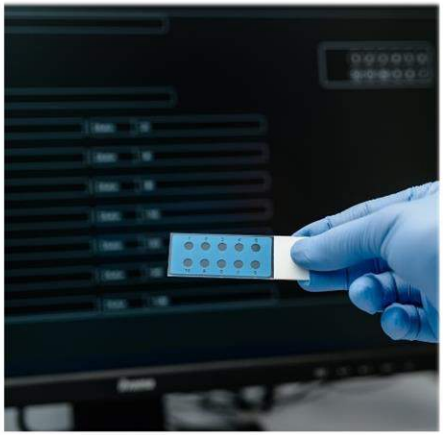


- Epifluorescence microscope
- Built-in 40x objective
- 2.3 MP, CMOS camera
- Autofocusing technology
- Built-in filters: FITC, Cy5
- Samples: up to 2 slides
- Slide type: 10 and 12 wells MEGACOR
- Scanning speed: up to 40 seconds per well
- Integrated 10“ touch display
- Dimensions: 32 cm x 28 cm x 46 cm
- Total weight: 15 kg

DIAGNOSTIK MEGACOR

MegaFLUO®ScanVet







- User-friendly touchscreen interface
- Manual or Automatic operation
- Slide selection, well editor
- Sample positioning and focusing
- Test report in different formats
- LIS protocols: Bidirectional, HL7
- Image in 2 fluorescence channels
- Customer-specific protocol creation
- Remote technical support

MegaFLUO®ScanVet



- Inverse fluorescence microscope
- Built-in 40x objective
- 2.3 MP, CMOS camera
- Contrast-based autofocus technology
- Built-in filters: FITC, Cy5
- Slide QR reader on board
- Slides: up to 5 slides
- Slide type: 10 and 12 wells MEGACOR design
- Scanning speed: up to 40 seconds per well
- External monitor and keyboard
- Dimensions: 39 cm x 49 cm x 32 cm
- Total weight: 18 kg

MegaFLUO®ScanVet







- User-friendly interface
- Manual or Automatic operation
- Slide Barcode/QR information reading
- Sample positioning and focusing
- Test report in different formats
- Sample well images archiving
- LIS protocols: Bidirectional, HL7
- Image in 2 fluorescence channels
- Remote technical support

MegaFLUO®ScanVet

Software Interface Video

Manual mode

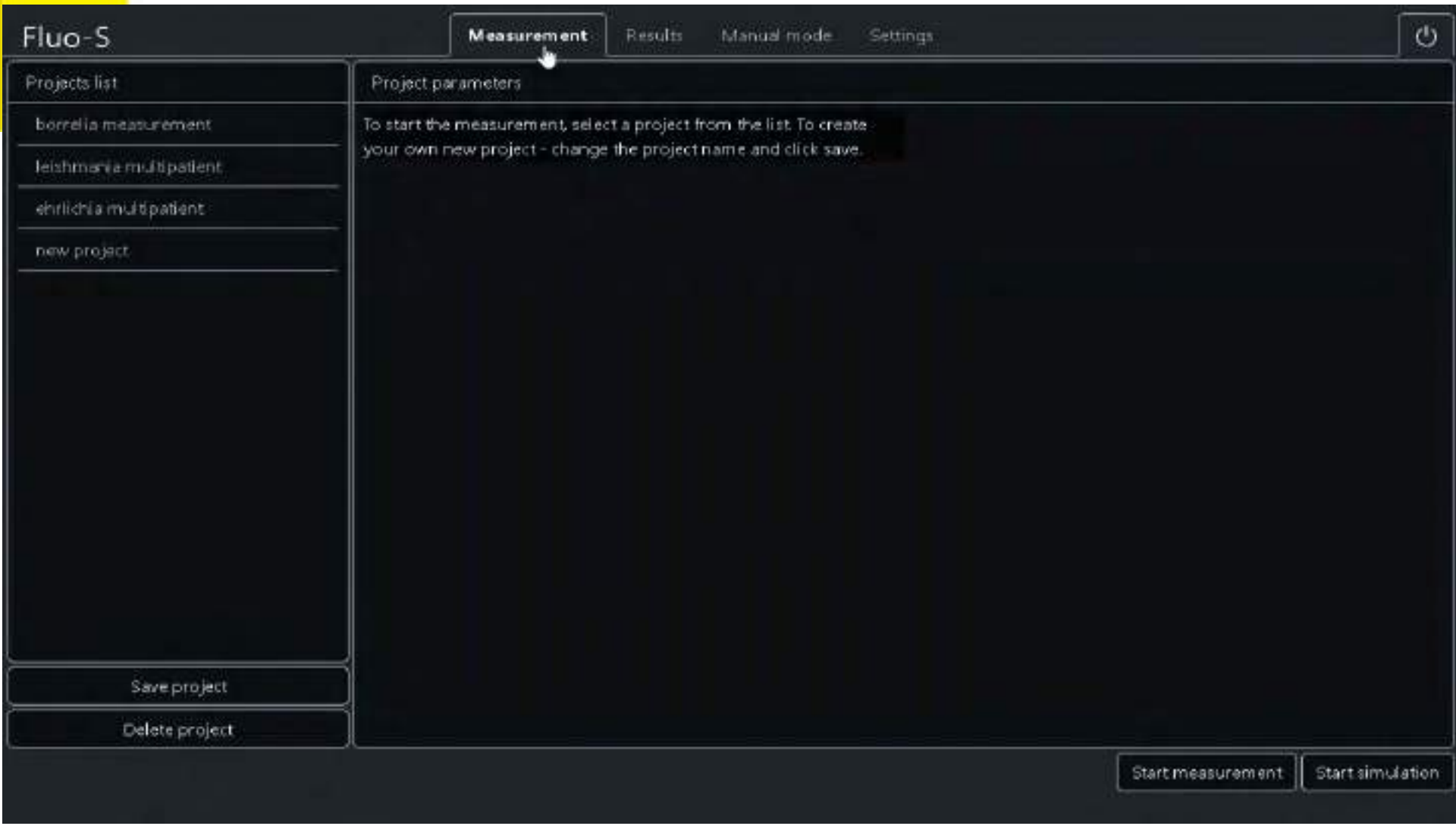


DIAGNOSTIK MEGACOR

MegaFLUO®ScanVet

Software Interface Video

Measurement mode



DIAGNOSTIK MEGACOR

MegaFLUO®ScanVet

MegaFLUO

Slide Id 171_25 **1/1**

Test: leishmania

Report date: 02-19-2025

Project: 20250219_110246_leishmania Multi Serums

10		1	
Dilution	Control positive	Dilution	1:320
Exposure time	8	Exposure time	15
Leishmania count	252	Leishmania count	329
Mean intensity	214	Mean intensity	102
Result	positive	Result	positive
well Id	P.C.	well Id	3404A
9		2	
Dilution	1:1280	Dilution	1:640
Exposure time	188	Exposure time	38
Leishmania count	166	Leishmania count	341
Mean intensity	26	Mean intensity	70
Result	negative	Result	positive
well Id	3386A	well Id	3404A
8		3	
Dilution	1:640	Dilution	1:1280
Exposure time	106	Exposure time	60
Leishmania count	262	Leishmania count	282
Mean intensity	32	Mean intensity	43
Result	negative	Result	uncertain
well Id	3386A	well Id	3404A
7		4	
Dilution	1:320	Dilution	1:320
Exposure time	55	Exposure time	40
Leishmania count	225	Leishmania count	262
Mean intensity	49	Mean intensity	72
Result	positive	Result	positive
well Id	3386A	well Id	3401A
6		5	
Dilution	1:1280	Dilution	1:640
Exposure time	109	Exposure time	60
Leishmania count	165	Leishmania count	190
Mean intensity	33	Mean intensity	41
Result	negative	Result	uncertain
well Id	3401A	well Id	3401A

Assay report:

- Project/test name;
- Test date;
- Slide ID;
- Well ID (serum ID);
- Sample dilution;
- Well exposure time;
- Number of target cells;
- Cells mean fluorescent intensity;
- Controls information;
- Test result: Positive;
  Uncertain;
  Negative

MegaFLUO® – Product range

IFA kits







Dog + Cat

- MegaFLUO® ANA HEp2
- MegaFLUO® ANAPLASMA ph
- MegaFLUO® BABESIA canis
- MegaFLUO® BARTONELLA henselae
- MegaFLUO® BORRELIA canis
- MegaFLUO® BRUCELLA canis
- MegaFLUO® CDV
- MegaFLUO® CHLAM felis
- MegaFLUO® CHV
- MegaFLUO® COXIELLA burnetii *
- MegaFLUO® CPV
- MegaFLUO® EHRLICHIA canis
- MegaFLUO® EHRLICHIA chaffeensis *
- MegaFLUO® ENCEPHALITOZOON c. *
- MegaFLUO® FCoV
- MegaFLUO® FCV
- MegaFLUO® FHV
- MegaFLUO® FIV
- MegaFLUO® FRANCISELLA tularensis *
- MegaFLUO® HCC
- MegaFLUO® LEISH
- MegaFLUO® LEPTOSPIRA
- MegaFLUO® NEOSPORA caninum
- MegaFLUO® PAN
- MegaFLUO® RICKETTSIA conorii
- MegaFLUO® RICKETTSIA massiliae *
- MegaFLUO® RICKETTSIA raoultii *
- MegaFLUO® RICKETTSIA rickettsii
- MegaFLUO® TOXOPLASMA g.

*** Only single slides available**

DIAGNOSTIK MEGACOR

MegaFLUO® – Product range

Horse

- MegaFLUO® **ANAPLASMA** ph
- MegaFLUO® **BABESIA** caballi
- MegaFLUO® **BORRELIA** horse
- MegaFLUO® **EHV** I+IV
- MegaFLUO® **ENCEPHALITOZOON** c. *
- MegaFLUO® **THEILERIA** equi

Cattle/Calf

- MegaFLUO® **BABESIA** bigemina
- MegaFLUO® **BABESIA** bovis
- MegaFLUO® **BABESIA** divergens *
- MegaFLUO® **BESNOITIA** besnoiti
- MegaFLUO® **NEOSPORA** caninum

* Only single slides available

Sheep

- MegaFLUO® **FRANCISELLA** tularensis *
- MegaFLUO® **LISTERIA** monocytogenes

Pig

- MegaFLUO® **LAWSONIA** intracellularis *





MEGACOR Diagnostik GmbH – The Company

Subject	Biotechnology – Veterinary Diagnostics
Founder	Dr. med. vet. Mario D. Löwenstein
Head office	Hörbranz, Vorarlberg, **AUSTRIA,** Lochauer Str. 2
Sales	Worldwide
Management	Dr. Mario Löwenstein (CEO), Claudia Schäfer-Löwenstein (COO)
Website	www.megacor.com
E-mail	fluo@megacor.at info@megacor.at

DIAGNOSTIK MEGACOR



MegaRSAT® BRUCELLA canis ad us. vet.

BRUCELLOSIS – an underestimated danger for the breeding stock

Rapid **S**lide **A**gglutination **T**est for the qualitative detection of **antibodies against *Brucella canis*** in serum of the dog

Fast indirect detection

At clinical suspicion

♀ "bitch does not conceive", foetus resorption, early abortion

♂ mating aversion, "poor fertility", testicular abnormalities



Canine abortion prevention program for recognition of asymptomatic carriers

– annual testing of all females in the breeding stock (approx. 3 weeks before their expected oestrus)

– annual testing of every stud dog (before mating; esp. European foreign-bred dogs)

– screening of every female and male to be introduced into breeding colonies (esp. European foreign-bred)



- Simple test procedure with serum
- Fast test interpretation after 2 minutes
- Reliable clinical diagnostics
- Storage at 2–8 °C)
- Long shelf life
- Compact test box with 25 tests

MegaRSAT® BRUCELLA canis ad us. vet.

Brucella canis is a gram-negative bacterium appearing world-wide and being a potential danger for dogs and humans (zoonosis).

Although the prevalences are very low or *B. canis* is partially seen rather obliterated in countries with high breeding standards, increased attention must be paid to brucellosis, especially in dog breedings. By mating with dogs from abroad (with lower breeding standards), brucellosis can be imported easily and unnoticed.

The pathogen mainly propagates via infectious abortion material or vaginal fluids, by mating or vertically from bitch to puppies.

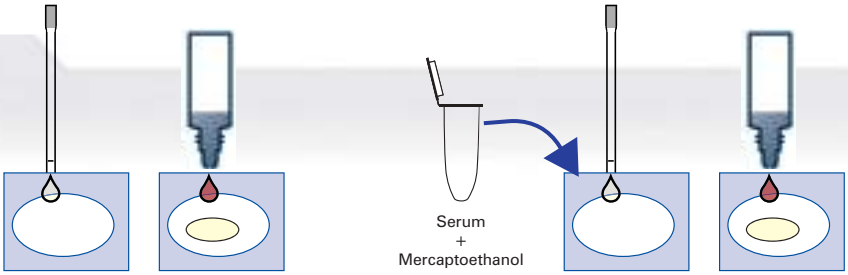
Infected animals show failure in gravidity or infertility as well as atypical symptoms (e.g. uveitis). In about 75 % of the cases, females abort after 45 to 55 days of gestation. Early embryonic death and absorption or abortion 10 to 20 days after mating is reported, too. These abortions may go unnoticed, and the female then is often presented with the preliminary report "failure to conceive".

In males, the main signs are epididymitis, testicular atrophy and a moist scrotal dermatitis, in addition to bad semen quantity (esp. with chronic brucellosis) and quality.

Besides to missing or misunderstood symptoms, antibody levels in chronic animals can drop under the limit of detection. Hence, breeding dogs should be routinely tested for antibodies with serological methods to prevent the danger of propagation via venereal transmission.

Being fast, simple and reliable, **MegaRSAT® BRUCELLA** canis enables the veterinarian to have a complete on-site predication of the brucellosis status of the single animal or the complete breeding. Therapeutic and prevention measures can be applied immediately, adapted to dog and breeder needs.

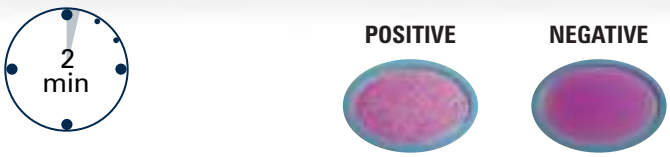
Test procedure



1. Agglutination test

2. Mercaptoethanol test: exclusion of unspecific agglutinines (exclusion of false-positive results)

Test interpretation



In principle, an initial test using **MegaRSAT® BRUCELLA** canis should only be carried out 3–4 weeks after infection and, if the result is negative or there is an existing clinic / suspicion, a second test should be carried out 2–4 weeks later in order to detect seroconversion (positive antibody test).

Other serological detection methods for *Brucella* diagnostics: ***FASTest®* BRUCELLA** canis / **MegaFLUO® BRUCELLA** canis.

Distribution:

EN 01-2023

MegaELISA® VET

Veterinary tests with laboratory precision

Enzyme immunoassay for the qualitative detection of specific IgG antibodies, antigens or proteins



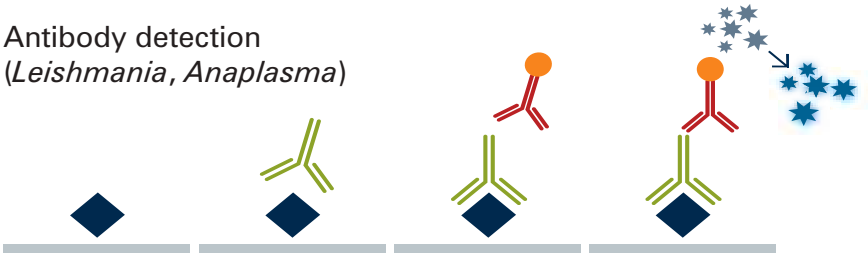


- **Standardised test procedure**
- **Manual or automated processing / evaluation**
- **Parallel analysis of large sample numbers** with plasma or serum / with feces
- **Routine diagnostics**
- **Format: 48 or 96 wells; ready to use**

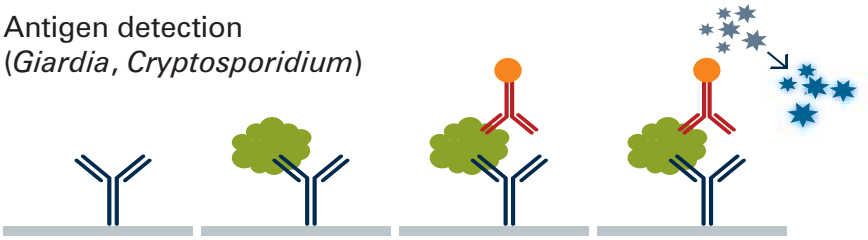
EN 10/2022

Test principle

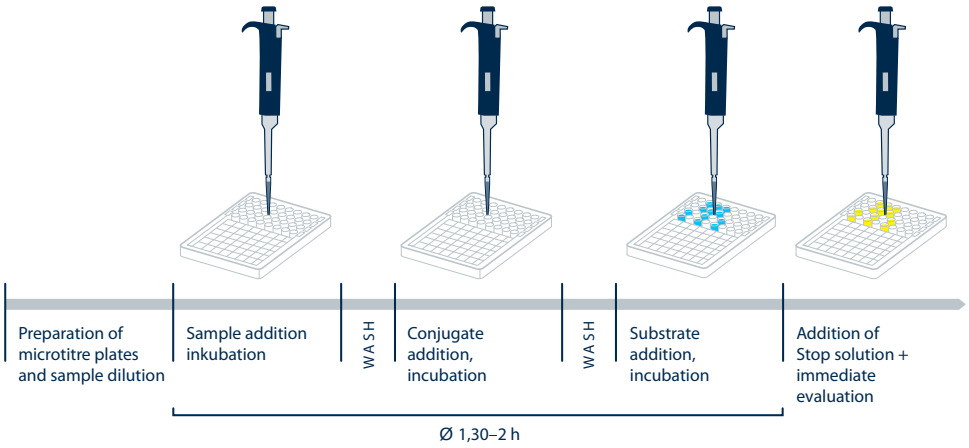
Antibody detection
(*Leishmania*, *Anaplasma*)



Antigen detection
(*Giardia*, *Cryptosporidium*)



Test procedure



Test evaluation



ELISA reader
(quantitative)

POSITIVE



OD > cut off

NEGATIVE



OD < cut off

DIAGNOSTIK MEGACOR

Focused on Veterinary Diagnostics

Art. No.	
600048EK1	**MegaELISA® ANAPLASMA** (48 tests)
600096EK1	**MegaELISA® ANAPLASMA** (96 tests) Qualitative detection of IgG antibodies against *Anaplasma phagocytophilum* in plasma or serum of the dog
870096EG1	**MegaELISA® CRYPTO** (96 tests) Qualitative detection of *Cryptosporidium parvum* in feces of pocket pets, pets and farm animals
989096EG1	**MegaELISA® DIRO** Antigen (96 tests) Qualitative detection of *Dirofilaria immitis* antigens in plasma or serum of the dog
991048EK1	**MegaELISA® EHRLICHIA** canis (48 tests)
991096EK1	**MegaELISA® EHRLICHIA** canis (96 tests) Qualitative detection of IgG antibodies against *Ehrlichia canis* in plasma or serum of the dog
825048EK1	**MegaELISA® ENCEPHALITOZOON** cuniculi (48 tests)
825096EK1	**MegaELISA® ENCEPHALITOZOON** cuniculi (96 tests) Qualitative detection of IgG antibodies against *Encephalitozoon cuniculi* in plasma or serum of the rabbit
821048EK1	**MegaELISA® FCoV** (48 tests)
821096EK1	**MegaELISA® FCoV** (96 tests) Qualitative detection of IgG antibodies against the Feline Coronavirus (FCoV) in plasma, serum or effusion of the cat
950048EG1	**MegaELISA® FeLV** Antigen (48 tests)
950096EG1	**MegaELISA® FeLV** Antigen (96 tests) Qualitative detection of Feline Leukaemia Virus (FeLV) antigens in plasma or serum of the cat
804096EK1	**MegaELISA® FIV** (96 Tests) Qualitative detection of antibodies against the Feline Immunodeficiency Virus (FIV) in plasma or serum of the cat
850096EG1	**MegaELISA® GIARDIA** (96 tests) Qualitative detection of *Giardia duodenalis* in feces of pocket pets, pets and farm animals
987048EK1	**MegaELISA® LEISH** canine (48 tests)
987096EK1	**MegaELISA® LEISH** canine (96 tests) Qualitative detection of antibodies against *Leishmania infantum* in plasma or serum of the dog

Distribution products

Bionote
AIV Ab ELISA
PRRS Ab ELISA

TECO
CRP, Haptoglobin

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Dog + cat

***FAST*est® C. diff 2T**
***FAST*est® C. perfringens Toxin**
***FAST*est® CHLAM** Ag
***FAST*est® CRYPTO** Strip
***FAST*est® CRYPTO-GIARDIA** Strip
***FAST*est® CRYPTO-ROTA** D2T
***FAST*est® D-PHYTE** Strip
***FAST*est® GIARDIA** Strip
***FAST*est® HW** Antigen
***FAST*est® PARVO** Card/Strip
***FAST*est® ROTA** Strip
***FAST*est® TOXOPLASMA** g

***FAST*est® ANAPLASMA**
***FAST*est® ANAPLASMA-EHRLICHIA**
***FAST*est® BRUCELLA** canis
***FAST*est® CCoV** Strip
***FAST*est® CDV** Ab
***FAST*est® CDV-CPV** Ab
***FAST*est® CPV** Ab
***FAST*est® CRP** canine
***FAST*est® CVBD 4T**
***FAST*est® DISTEMPER** Strip
***FAST*est® EHRLICHIA** canis
***FAST*est® EHRLICHIA-LEISH**
***FAST*est® FOBT** canine
***FAST*est® LEISH**
***FAST*est® LEPTOSPIRA** IgM
***FAST*est® LYME**
***FAST*est® NEOSPORA** caninum

***FAST*est® FCoV** Strip
***FAST*est® FeLV** /LabSet
***FAST*est® FeLV-FIV**
***FAST*est® FIP**
***FAST*est® FIV** /LabSet
***FAST*est® SAA**

Pocket pets

***FAST*est® CRYPTO** Strip
***FAST*est® CRYPTO-GIARDIA** Strip
***FAST*est® CRYPTO-ROTA** D2T
***FAST*est® D-PHYTE** Strip
***FAST*est® GIARDIA** Strip
***FAST*est® ROTA** Strip

***FAST*est® AIV** Ag
***FAST*est® CHLAM** Ag

***FAST*est® ENCEPH**

Exudate diagnostics
RIVALTA FIP-*VET*ube

Culture diagnostics
MYKODERMO*ASSAY* DTM / TRIO (dermatophytes)
InPouch™ TF-Feline / Bovine (Tritrichomonas)

Blood groups/Coagulation
RapidVet-H Canine
RapidVet-H IC Feline
ACT-*VET*ube
BMBT-Vet. Dog
BMBT-Vet. Cat

Pocket pets: small mammals + birds + reptiles

Large animals/livestock

***FAST*est® C. perfringens Toxin**
***FAST*est® CHLAM** Ag
***FAST*est® CRYPTO** Strip
***FAST*est® CRYPTO-GIARDIA** Strip
***FAST*est® CRYPTO-ROTA** D2T
***FAST*est® D-PHYTE** Strip
***FAST*est® GIARDIA** Strip
***FAST*est® ROTA** Strip

***FAST*est® ANAPLASMA**
***FAST*est® C. diff 2T**
***FAST*est® SAA**

***FAST*est® BCV** Strip
***FAST*est® D4T** bovine
***FAST*est® E.coli-K99** Strip
***FAST*est® IgG** bovine
***FAST*est® NEOSPORA** caninum

***FAST*est® C. diff 2T**

***FAST*est® AIV** Ag
***FAST*est® CHLAM** Ag

***FAST*est® BEE** 3T

Others

***FAST*est® CHLAM** Ag
***FAST*est® NEOSPORA** caninum
***FAST*est® ROTA** Strip

***FAST*est® BOR in TICK**

***FAST*est® PARVO** Card/Strip

Distribution:

info@megacor.at

EN 04-2025

Large animals/livestock: Horses, large and small ruminants, pigs, poultry, bees