



Diagnostic solutions for human  
infectious diseases

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**Diagnostic solutions for human infectious diseases**  
wide range of ready-to-use kits

INTERNATIONAL PRODUCT CATALOGUE

## Corporate

VIRCELL is a biotechnology company established from private capital in 1991. Founded by **clinical microbiologists** with previous professional experience in hospitals, our activity is focused on the production of ready-to-use kits for the diagnosis of infectious diseases, by means of different techniques.

Our international projection translates into worldwide **export** of our products. VIRCELL is well introduced in laboratories of more than 60 countries from most European countries, the Middle East, Asia and America.

Since the company foundation, our three main **objectives** are: to produce reagents of the highest quality, to provide accessible technical staff to ensure prompt and personal assistance in the use of these reagents, and to develop products bringing significant advances.

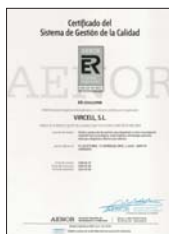
## Certifications



ISO 13485:2003



CE



ISO 9001:2008



IQNet

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## Highlights

- 1991** Company foundation.
- 1992** Commercialization of our ready-to-use cell cultures in Spain.
- 1994** First manufacture of diagnostic kits for IFA serological assays.
- 1996** Beginning of our export activity with Cell Culture and IFA kits.
- 1997** Expansion to new facilities. Development of Brucellapt<sup>®</sup> and the first ELISA kits.
- 1998** Achievement of ISO 9002:1994.
- 2000** Production of monoclonal antibodies.
- 2001** First steps toward CE mark.
- 2002** Creation of the R&D Molecular Biology Department.
- 2003** Creation of the R&D Rapid Tests Department. Adaptation to ISO 9001:2000 and achievement of CE mark. Obtention of SARS' recAg.
- 2004** Acquisition of new facilities. Start of our own production and development of recAg. Opening of the Line Blot and PCR ELISA research lines.
- 2005** Achievement of ISO 13485:2003. Registration as a provider for the Secretariat General of Health of the Gulf countries. Launching of the first products of Molecular Biology, PCR Controls.
- 2006** Participation in the project "Development of a rapid test for the diagnosis of Tuberculosis", funded by the European Commission. New Generation of PCR Controls.
- 2007** Extension of ELISA product line. New facilities for Molecular Biology Department. Speed-oligo<sup>®</sup> launching with all the advantages of Molecular Biology in a quick detection.
- 2008** Extension of Speed-oligo<sup>®</sup>, ELISA and IFA product lines. Completion of the last stage of development for Rapid Tests.
- 2009** Extension of Molecular Biology product line: Speed-oligo<sup>®</sup> and PCR Controls. Launching of the new Rapid Tests: VIRapid<sup>®</sup>. Adaptation to ISO 9001:2008.
- 2010** SFDA approval for PNEUMOSLIDE IgM commercialization in China. Extension of Molecular Biology and Rapid Test product lines. Land acquisition for new facilities



## Diagnostic solutions for human infectious diseases

wide range of ready-to-use kits

### ELISA kits

ELISA single tests for detecting antibodies against Herpesvirus, TORCH and a wide range of infectious agents causing respiratory diseases, sexually transmitted diseases and others.

ELISA multitests for pneumonia diagnosis.

2

### IFA kits

Single tests for detection of bacteria, fungi, viruses and parasites.

Multitests for pneumonia diagnosis.

4

### BRUCELLACAPT®

A single-step immunocapture-agglutination assay for the diagnosis of chronic brucellosis.

6

### PCR Controls

PCR Controls containing complete purified DNA or RNA from a wide range of infectious agents.

8

### Speed-oligo®

Oligochromatographic tests for qualitative detection of different infectious diseases.

10

### VIRapid®

Immuno-chromatographic tests for qualitative detection of different infectious diseases.

12

### Transport Media

Collection and transport system for virus, chlamydia and mycoplasma.

13

### Cell lines

The most frequently used cell lines for clinical virology applications.

14

### Monoclonal Antibodies

Monoclonal antibody kits for the direct investigation of those viruses, bacteria and protozoa associated to human infections, usually diagnosed by cell culture.

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# ELISA Kits

## Single tests for antibody detection

Enzyme-linked immunosorbent assay, also called ELISA, is a biochemical technique mainly used in immunology to detect the presence of antibodies in a sample.

Even if some infectious diseases have a different gold standard, ELISA is by far the favorite technique for the diagnosis of infectious diseases. It is a partial or totally automated technique, easy to perform that offers objective results within one working day in the laboratory.

With more than 14 years of experience, Vircell offers ELISA single tests for detecting specific antibodies against Herpesvirus, TORCH and a wide range of infectious agents causing respiratory diseases and sexually transmitted diseases, among others, in human serum/plasma samples.

### PRODUCT FEATURES

- High performance and guaranteed stability with lyophilized conjugates when necessary.
- Additional semi quantification protocols where quantification is relevant for diagnosis.
- Suitable for automated ELISA systems.
- No sample pre-dilution required.
- Coloured, ready-to-use liquid reagents.
- Colour-coded plates with individual break-apart wells.
- IgM detection in indirect ELISA: absorption of IgG directly in the well using VIRCELL ELISA SORBENT.
- G/M presentations allowing the performance of all possible combinations of IgG and IgM determinations.

### Ordering Information

#### Adenovirus

| Cat. No. |                          | Pack size |
|----------|--------------------------|-----------|
| G/M1004  | ADENOVIRUS ELISA IgG/IgM | 96 tests  |

#### Brucella

| Cat. No. |                    | Pack size |
|----------|--------------------|-----------|
| G1003    | BRUCELLA ELISA IgG | 96 tests  |
| M1006    | BRUCELLA ELISA IgM | 96 tests  |

#### Chagas (*Trypanosoma cruzi*)

| Cat. No. |                      | Pack size |
|----------|----------------------|-----------|
| T1020    | CHAGAS ELISA IgG+IgM | 96 tests  |

#### Chlamydia

| Cat. No. |   | Pack size |
|----------|---|-----------|
| G/M1003  | CHLAMYDIA ELISA IgG/IgM   | 96 tests  |
| A1017    | CHLAMYDIA TRACHOMATIS ELISA IgA   | 96 tests  |
| G/M1017  | CHLAMYDIA TRACHOMATIS ELISA IgG/IgM   | 96 tests  |
| A1007    | CHLAMYDOPHILA PNEUMONIAE ELISA IgA  | 96 tests  |
| G1007    | CHLAMYDOPHILA PNEUMONIAE ELISA IgG<br><i>includes additional semi quantification protocol</i> | 96 tests  |
| M1007    | CHLAMYDOPHILA PNEUMONIAE ELISA IgM  | 96 tests  |

#### Coxiella burnetii (phase II)

| Cat. No. |                             | Pack size |
|----------|-----------------------------|-----------|
| G1001    | COXIELLA BURNETII ELISA IgG | 96 tests  |
| M1001    | COXIELLA BURNETII ELISA IgM | 96 tests  |

#### Cytomegalovirus

| Cat. No. |   | Pack size |
|----------|---|-----------|
| G1004    | CYTOMEGALOVIRUS ELISA IgG<br><i>includes additional semi quantification protocol</i>    | 96 tests  |
| M1004    | CYTOMEGALOVIRUS ELISA IgM CAPTURE<br><i>μ-Capture technique. Lyophilized conjugates</i> | 96 tests  |

#### Dengue

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1018    | DENGUE ELISA IgG   | 96 tests  |
| M1018    | DENGUE ELISA IgM CAPTURE<br><i>MAC capture technique. Lyophilized conjugates</i> | 96 tests  |

#### Epstein-Barr virus

| Cat. No. |                             | Pack size |
|----------|-----------------------------|-----------|
| G1205    | EPSTEIN-BARR EA ELISA IgG   | 96 tests  |
| G1105    | EPSTEIN-BARR EBNA ELISA IgG | 96 tests  |
| G1005    | EPSTEIN-BARR VCA ELISA IgG  | 96 tests  |
| M1005    | EPSTEIN-BARR VCA ELISA IgM  | 96 tests  |

#### Helicobacter pylori

| Cat. No. |                               | Pack size |
|----------|-------------------------------|-----------|
| G1022    | HELICOBACTER PYLORI ELISA IgG | 96 tests  |

Ordering Information

**Herpes simplex virus**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G/M1012  | HERPES SIMPLEX 1 ELISA IgG/IgM<br><i>gG1 recombinant</i> | 96 tests  |
| G/M1013  | HERPES SIMPLEX 2 ELISA IgG/IgM<br><i>gG2 purified</i>    | 96 tests  |
| G/M1016  | HERPES SIMPLEX 1+2 ELISA IgG/IgM                         | 96 tests  |

**Hydatidosis (*Echinococcus granulosus*)**

| Cat. No. |                       | Pack size |
|----------|-----------------------|-----------|
| G1006    | HYDATIDOSIS ELISA IgG | 96 tests  |

**Influenza virus**

| Cat. No. |                           | Pack size |
|----------|---------------------------|-----------|
| G/M1007  | INFLUENZA A ELISA IgG/IgM | 96 tests  |
| G/M1008  | INFLUENZA B ELISA IgG/IgM | 96 tests  |

**Legionella pneumophila**

| Cat. No. |   | Pack size |
|----------|---|-----------|
| G1000    | LEGIONELLA PNEUMOPHILA SG 1 ELISA IgG       | 96 tests  |
| M1000    | LEGIONELLA PNEUMOPHILA SG 1 ELISA IgM       | 96 tests  |
| T1001    | LEGIONELLA PNEUMOPHILA SG 1-6 ELISA IgG+IgM | 96 tests  |

**Leishmania infantum**

| Cat. No. |                          | Pack size |
|----------|--------------------------|-----------|
| T1000    | LEISHMANIA ELISA IgG+IgM | 96 tests  |

**Measles**

| Cat. No. |                       | Pack size |
|----------|-----------------------|-----------|
| G/M1001  | MEASLES ELISA IgG/IgM | 96 tests  |

**Mumps**

| Cat. No. |                     | Pack size |
|----------|---------------------|-----------|
| G/M1014  | MUMPS ELISA IgG/IgM | 96 tests  |

**Mycoplasma pneumoniae**

| Cat. No. |                                     | Pack size |
|----------|-------------------------------------|-----------|
| G1002    | MYCOPLASMA PNEUMONIAE ELISA IgG     | 96 tests  |
| G/M1015  | MYCOPLASMA PNEUMONIAE ELISA IgG/IgM | 96 tests  |
| M1002    | MYCOPLASMA PNEUMONIAE ELISA IgM     | 96 tests  |

**Parainfluenza virus**

| Cat. No. |                               | Pack size |
|----------|-------------------------------|-----------|
| G/M1009  | PARAINFLUENZA 1 ELISA IgG/IgM | 96 tests  |
| G/M1010  | PARAINFLUENZA 2 ELISA IgG/IgM | 96 tests  |
| G/M1011  | PARAINFLUENZA 3 ELISA IgG/IgM | 96 tests  |

**Parvovirus**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1031    | PARVOVIRUS ELISA IgG   | 96 tests  |
| M1031    | PARVOVIRUS ELISA IgM CAPTURE<br><i>μ-Capture technique. Lyophilized conjugates</i> | 96 tests  |

**Respiratory syncytial virus**

| Cat. No. |   | Pack size |
|----------|---|-----------|
| G/M1006  | RESPIRATORY SYNCYTIAL VIRUS ELISA IgG/IgM | 96 tests  |

Ordering Information

**Rickettsia conorii**

| Cat. No. |                                  | Pack size |
|----------|----------------------------------|-----------|
| G/M1005  | RICKETTSIA CONORII ELISA IgG/IgM | 96 tests  |

**Rubella**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1026    | RUBELLA ELISA IgG<br><i>includes additional semi quantification protocol</i> | 96 tests  |
| M1026    | RUBELLA ELISA IgM CAPTURE<br><i>μ-Capture technique</i>                      | 96 tests  |

**Syphilis (*Treponema pallidum*)**

| Cat. No. |                        | Pack size |
|----------|------------------------|-----------|
| G1060    | SYPHILIS ELISA IgG     | 96 tests  |
| T1060    | SYPHILIS ELISA IgG+IgM | 96 tests  |

**Tetanus**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1008    | TETANUS ELISA IgG<br><i>includes additional semi quantification protocol</i> | 96 tests  |

**Toxoplasma gondii**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1027    | TOXOPLASMA ELISA IgG<br><i>includes additional semi quantification protocol</i>    | 96 tests  |
| M1027    | TOXOPLASMA ELISA IgM CAPTURE<br><i>μ-Capture technique. Lyophilized conjugates</i> | 96 tests  |

**Varicella- Zoster virus**

| Cat. No. |                                | Pack size |
|----------|--------------------------------|-----------|
| G/M1002  | VARICELLA-ZOSTER ELISA IgG/IgM | 96 tests  |

**Multitests for antibody detection**

Enzyme-linked immunosorbent assays for the simultaneous screening of different ethiological agents in human serum/plasma. The ELISA multitests contain control sera and conjugates for the different types of antigens.

Ordering Information

**Pneumonia**

| Cat. No. |  | Pack size |
|----------|--|-----------|
| G1040    | PNEUMOBACT ELISA IgG<br><i>Legionella pneumophila sg 1, Mycoplasma pneumoniae, Coxiella burnetii and Chlamydomphila pneumoniae</i> | 96 tests  |
| M1040    | PNEUMOBACT ELISA IgM<br><i>Legionella pneumophila sg 1, Mycoplasma pneumoniae, Coxiella burnetii and Chlamydomphila pneumoniae</i> | 96 tests  |
| G1050    | PNEUMOVIRUS ELISA IgG<br>RSV, Influenza A, Influenza B, Parainfluenza 1, Parainfluenza 2 and Parainfluenza 3                       | 96 tests  |

**Other ELISA products**

Ordering Information

| Cat. No. |   | Pack size  |
|----------|---|------------|
| S001     | ELISA SORBENT (2,4 ml)                  | 92 tests   |
| S001-100 | ELISA SORBENT (100 ml)                  | 4000 tests |
| B0001    | WASH BUFFER FOR ELISA KITS (500 ml 20x) | 3000 tests |
| B0003    | SERUM DILUENT FOR ELISA KITS (500 ml)   | 5000 tests |

All Vircell ELISA IgA and IgM references are adjusted for performance with Vircell ELISA SORBENT only.

# IFA Kits

## Single tests for antibody detection

Indirect immunofluorescent assays to detect antibodies against viruses, bacteria, parasites and fungi. The P- references contain all the necessary reagents to perform the technique: slides, controls, PBS, mounting medium, conjugates and sorbent when necessary. The S- references stand for the slides.

Vircell has 17 years of experience in the IFA product line, which is considered as a gold standard technique for parameters such as chlamydia, coxiella or bartonella.

### Ordering Information

#### Adenovirus

| Cat. No. |                      | Pack size |
|----------|----------------------|-----------|
| PADNG    | ADENOVIRUS IFA IgG   | 100 tests |
| PADNM    | ADENOVIRUS IFA IgM   | 100 tests |
| SADN     | ADENOVIRUS IFA SLIDE | 100 tests |

#### Bartonella henselae and Bartonella quintana

| Cat. No. |  | Pack size |
|----------|--|-----------|
| PBAHQG   | BARTONELLA HENSELAE & QUINTANA IFA IgG   | 100 tests |
| PBAHQM   | BARTONELLA HENSELAE & QUINTANA IFA IgM   | 100 tests |
| SBAHQ    | BARTONELLA HENSELAE & QUINTANA IFA SLIDE | 100 tests |

#### Candida albicans

| Cat. No. |                          | Pack size |
|----------|--------------------------|-----------|
| PCAAIG   | CANDIDA ALBICANS IFA IgG | 25 tests  |

#### Chagas (Trypanosoma cruzi)

| Cat. No. |                    | Pack size |
|----------|--------------------|-----------|
| PCHAG    | CHAGAS IFA IgG+IgM | 100 tests |

#### Chlamydia pneumoniae

| Cat. No. |                                    | Pack size |
|----------|------------------------------------|-----------|
| PCHPNG   | CHLAMYDOPHILA PNEUMONIAE IFA IgG   | 100 tests |
| PCHPNM   | CHLAMYDOPHILA PNEUMONIAE IFA IgM   | 100 tests |
| SCHPN    | CHLAMYDOPHILA PNEUMONIAE IFA SLIDE | 100 tests |

#### Coxiella burnetii

| Cat. No.   |  | Pack size |
|------------|--|-----------|
| PCOBUG     | COXIELLA BURNETII IFA IgG              | 100 tests |
| PCOBUM     | COXIELLA BURNETII IFA IgM              | 100 tests |
| PCOBU I+II | COXIELLA BURNETII I+II IFA IgG/IgM/IgA | 100 tests |
| SCOBU      | COXIELLA BURNETII IFA SLIDE            | 100 tests |

#### Influenza virus

| Cat. No. |                       | Pack size |
|----------|-----------------------|-----------|
| PINFAG   | INFLUENZA A IFA IgG   | 100 tests |
| PINFAM   | INFLUENZA A IFA IgM   | 100 tests |
| SINF     | INFLUENZA A IFA SLIDE | 100 tests |
| PINFBG   | INFLUENZA B IFA IgG   | 100 tests |
| PINFBM   | INFLUENZA B IFA IgM   | 100 tests |
| SINF     | INFLUENZA B IFA SLIDE | 100 tests |

### Ordering Information

#### Legionella

| Cat. No. |                                       | Pack size |
|----------|---------------------------------------|-----------|
| PLEPNG   | LEGIONELLA PNEUMOPHILA IFA IgG        | 100 tests |
| PLEPNM   | LEGIONELLA PNEUMOPHILA IFA IgM        | 100 tests |
| SLEPN    | LEGIONELLA PNEUMOPHILA IFA SLIDE      | 100 tests |
| PLESXG   | LEGIONELLA PNEUMOPHILA SG 1-6 IFA IgG | 100 tests |
| PLESPG   | LEGIONELLA SP IFA IgG                 | 100 tests |

#### Leishmania

| Cat. No. |                      | Pack size |
|----------|----------------------|-----------|
| PLEDOG   | LEISHMANIA IFA IgG   | 100 tests |
| SLEDO    | LEISHMANIA IFA SLIDE | 100 tests |

#### Mycoplasma pneumoniae

| Cat. No. |                                 | Pack size |
|----------|---------------------------------|-----------|
| PMYPNG   | MYCOPLASMA PNEUMONIAE IFA IgG   | 100 tests |
| PMYPNM   | MYCOPLASMA PNEUMONIAE IFA IgM   | 100 tests |
| SMYPN    | MYCOPLASMA PNEUMONIAE IFA SLIDE | 100 tests |

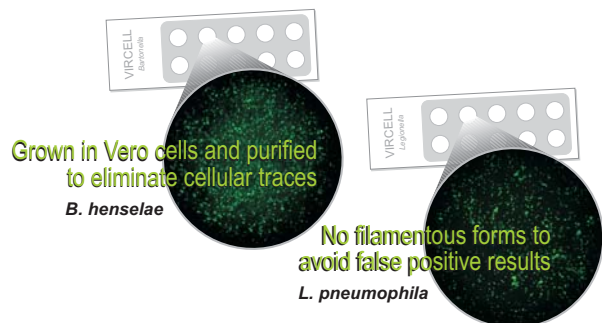
#### Respiratory syncytial virus

| Cat. No. |                                       | Pack size |
|----------|---------------------------------------|-----------|
| PVSRG    | RESPIRATORY SYNCYTIAL VIRUS IFA IgG   | 100 tests |
| PVSRM    | RESPIRATORY SYNCYTIAL VIRUS IFA IgM   | 100 tests |
| SVSR     | RESPIRATORY SYNCYTIAL VIRUS IFA SLIDE | 100 tests |

#### Rickettsia conorii

| Cat. No. |                              | Pack size |
|----------|------------------------------|-----------|
| PRICOG   | RICKETTSIA CONORII IFA IgG   | 100 tests |
| SRICO    | RICKETTSIA CONORII IFA SLIDE | 100 tests |

Avoid false positives with the **Gold Standard** technique!





### Multitests for antibody detection

Indirect immunofluorescent assays to detect antibodies against the main ethiological agents causing infectious diseases of the respiratory tract.

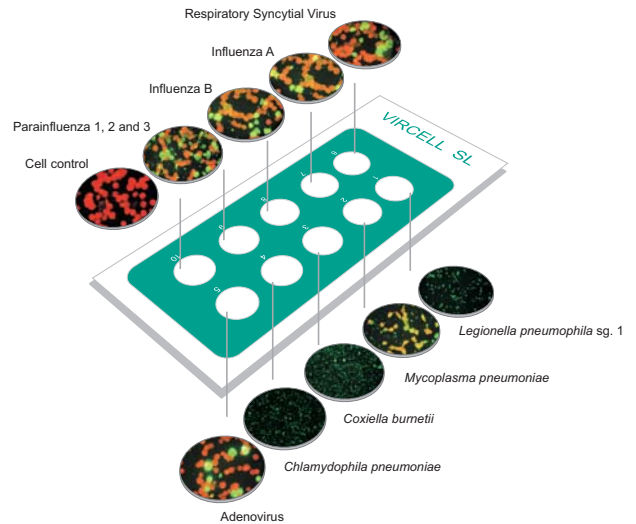
Multitest kits provide a great advantage by allowing systematization of laboratory orders into diagnostic panels. This type of kits helps to achieve a better organized work, rendering more efficient results together with considerable savings in logistics. Discover the IFA solution to pneumonia serological diagnosis.

## Pneumoslide

Simultaneous detection of the **bacteria** and **viruses** most frequently associated with human respiratory infections, by using a single slide.

**Pneumoslide IgG** is designed to carry out a presumptive diagnosis by means of IgG antibody detection. The kit contains 20 slides of 10 wells each, PBS, positive and negative control, anti-human IgG FITC conjugate and mounting medium.

**Pneumoslide IgM** allows presumptive diagnosis by measuring IgM responses. The kit contains 10 slides of 10 wells each, PBS, positive and negative control, anti-human IgM FITC conjugate, mounting medium and anti-human IgG globulin (sorbent).



PNEUMOSLIDE (Refs. NSLIDEG and NSLIDEM)

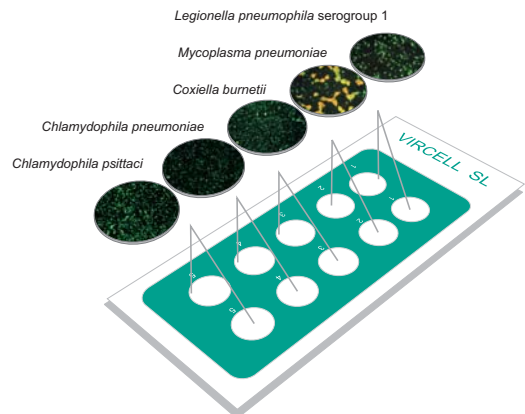
#### Ordering Information

| Cat. No.  | Pack size |
|---|-----------|
| NSLIDEG PNEUMOSLIDE IgG   | 20 tests  |
| <i>Legionella pneumophila</i> sg 1, <i>Mycoplasma pneumoniae</i> , <i>Coxiella burnetii</i> , <i>Chlamydomphila pneumoniae</i> , Adenovirus, RSV, Influenza A, Influenza B and Parainfluenza 1, 2 and 3 |           |
| NSLIDEM PNEUMOSLIDE IgM   | 10 tests  |
| <i>Legionella pneumophila</i> sg 1, <i>Mycoplasma pneumoniae</i> , <i>Coxiella burnetii</i> , <i>Chlamydomphila pneumoniae</i> , Adenovirus, RSV, Influenza A, Influenza B and Parainfluenza 1, 2 and 3 |           |

## Pneumobact

Simultaneous detection of the **bacteria** most frequently associated with human respiratory infections, by using a single slide.

**Pneumobact** is aimed at the performance of presumptive diagnosis through IgG and IgM antibody detection. The kit contains 10 slides with two rows of 5 wells each, PBS, positive and negative controls, anti-human IgG FITC conjugate, anti-human IgM FITC conjugate, mounting medium and anti-human IgG globulin (sorbent).

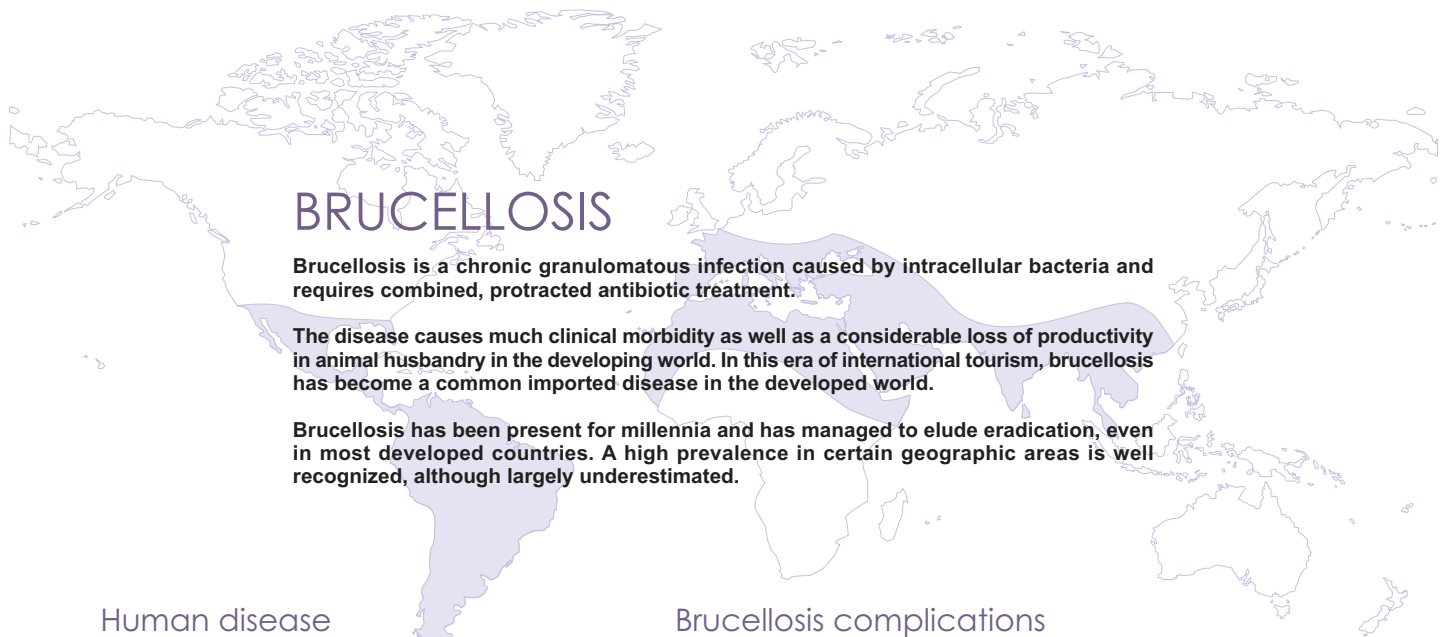


PNEUMOBACT (Ref. NBACT)

#### Ordering Information

| Cat. No.  | Pack size |
|---|-----------|
| NBACT PNEUMOBACT  | 20 tests  |
| <i>Legionella pneumophila</i> sg 1, <i>Mycoplasma pneumoniae</i> , <i>Coxiella burnetii</i> , <i>Chlamydomphila pneumoniae</i> and <i>Chlamydomphila psittaci</i> |           |





# BRUCELLOSIS

**Brucellosis is a chronic granulomatous infection caused by intracellular bacteria and requires combined, protracted antibiotic treatment.**

**The disease causes much clinical morbidity as well as a considerable loss of productivity in animal husbandry in the developing world. In this era of international tourism, brucellosis has become a common imported disease in the developed world.**

**Brucellosis has been present for millennia and has managed to elude eradication, even in most developed countries. A high prevalence in certain geographic areas is well recognized, although largely underestimated.**

## Human disease

Transmission of brucellosis to humans occurs through the consumption of infected, unpasteurized animal-milk products, through direct contact with infected animal parts (such as the placenta by inoculation through ruptures of skin and mucous membranes), and through the inhalation of infected aerosolized particles.

Brucellosis is an occupational disease in shepherds, abattoir workers, veterinarians, dairy-industry professionals, and personnel in microbiology laboratories. One important epidemiologic step in containing brucellosis in the community is the screening of household members of infected persons.

Four species of brucella can cause human disease: *B. melitensis*, *B. abortus*, *B. suis*, and *B. canis*. The vast majority of cases worldwide are attributed to *B. melitensis*. A recent study did not report any clinical differences between cases caused by *B. melitensis* and those caused by *B. abortus*.

Human brucellosis is traditionally described as a disease of protean manifestations. However, fever is invariable and can be spiking and accompanied by rigors, if bacteremia is present, or may be relapsing, mild, or protracted. Malodorous perspiration is almost pathognomonic. Constitutional symptoms are generally present. Physical examination is generally nonspecific, though lymphadenopathy, hepatomegaly, or splenomegaly is often present.

## Brucellosis complications

**Osteoarticular disease** is universally the most common complication of brucellosis, and three distinct forms exist — peripheral arthritis, sacroiliitis, and spondylitis. Peripheral arthritis is the most common and is nonerosive, since it usually involves the knees, hips, ankles, and wrists in the context of acute infection. Prosthetic joints can also be affected in peripheral arthritis. Brucellosis has also been proposed as a cause of reactive arthritis. A second form, characterized by sacroiliitis, is readily diagnosed, also usually in the context of acute brucellosis.

On the other hand, a third form of osteoarticular disease, spondylitis, remains notoriously difficult to treat and often seems to result in residual damage.

The **reproductive system** is the second most common site of focal brucellosis. Brucellosis can present as epididymoorchitis in men and is often difficult to differentiate from other local disease.

The effect of the local inflammation on subsequent testicular function has not been adequately studied.

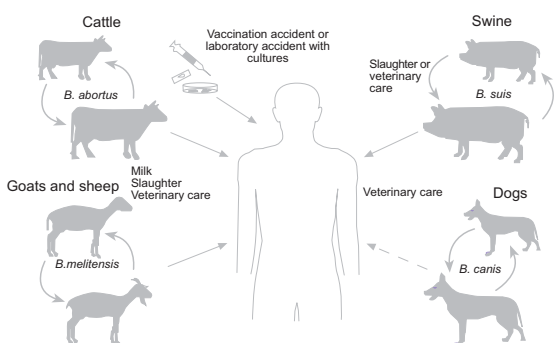
Brucellosis in pregnancy poses a substantial risk of spontaneous abortion.

**Hepatitis** is common, usually manifesting as mild transaminasemia. Liver abscess and jaundice are rare. Granulomas can be present in liver-biopsy specimens in cases of both *B. melitensis* and *B. abortus*. Ascites is often present, either as a temporary exacerbation of preexisting hepatic disease or as frank peritonitis.

The **central nervous system** is involved in 5 to 7 percent of cases in most studies, and such complications often have an ominous prognosis. Meningitis, encephalitis, meningoencephalitis, meningovascular disease, brain abscesses, and demyelinating syndromes have all been reported.

**Endocarditis** remains the principal cause of mortality in the course of brucellosis. It usually involves the aortic valve and typically requires immediate surgical valve replacement. Early recognition, adequate antibiotic treatment, and the absence of signs of heart failure can guide the practitioner toward prolonged, conservative treatment.

**Respiratory complications** of brucellosis are considered rare. A recent multinational review of cases with respiratory complications indicated that approximately 16 percent of cases had pulmonary involvement that included lobar pneumonia and pleural effusions.



**In sum, practically every organ and system of the human body can be affected in brucellosis — a fact that underscores the importance of including brucellosis in the differential diagnosis in areas of endemic disease, even if clinical features are not entirely compatible.**

# BRUCELLACAPT®

## Immunocapture technique for the diagnosis of CHRONIC brucellosis

BRUCELLACAPT® is specially recommended for the diagnosis of chronic brucellosis and treatment follow-up. Based on an immunocapture technique, it allows the detection, in a single step, of the non-agglutinating IgG and IgA antibodies, as well as the agglutinating antibodies.

The high variety of clinical manifestations of human brucellosis makes it difficult to diagnose.

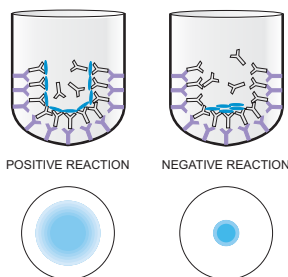
Direct agglutination, Rose Bengal test, Coombs' test and ELISA are the most widely used techniques for the serological diagnosis of brucellosis. While in acute forms all these techniques are sensitive enough, in more evolved forms, only Coombs' test is reliable to serologically discard a diagnosis of the disease. In this test, incomplete non-agglutinating antibodies are detected by adding an anti-human immunoglobulin serum that facilitates the reaction. Yet, Coombs' test is tiresome to perform and thus not carried out routinely in many laboratories, leading to a considerable number of misdiagnosed cases.

**BRUCELLACAPT®**, with the highest correlation with Coombs' tests, is performed in an easy and direct way. Its great sensitivity and specificity have been reflected in scientific literature.

Other advantages of **BRUCELLACAPT®** over Coombs' test are: immediate performance, simple use and handling, all reagents included in the kit, no washing required and easy reading in 24 hours.

### Principle of the test

The test consists of U-bottom well-strips coated with anti-human immunoglobulins. After addition and dilution of serum, the antigen is added and strips are incubated for 24 hours until agglutination takes place. This assay allows the detection of both agglutinating and incomplete antibodies which, otherwise, could only be measured by means of Coombs' test.



### Sample interpretation

BRUCELLACAPT® offers visual results with a simple interpretation. The test is positive if a net covering the whole well surface appears. A button of bacteria in the center of the well indicates a negative result.



## PRODUCT FEATURES

### User-friendly

- Fast and simple performance
- Visual reading in 24 hours
- No washing required
- Coloured serum diluent facilitates dispensation and avoids pipetting errors
- No sample predilution required

### Performance

- Highest sensitivity and specificity
- International recognition shown in scientific literature

### Flexibility

- 96- well plates with individual break-apart wells
- Allows for screening and titration protocols

### Ordering Information

| Cat. No. |   | Pack size   |
|----------|---|-------------|
| BRUCAPT  | BRUCELLACAPT®<br>allows for screening (96 tests) and titration (24 tests) | 96/24 tests |
| B0002    | SERUM DILUENT FOR BRUCELLACAPT®<br>allows for 500 tests in screening      | 500 ml      |

### Designed for the diagnosis of CHRONIC brucellosis

In chronic brucellosis, reinfections and relapses, the immune response is characterized by the predominance of non-agglutinating IgG antibodies, specially detectable by BRUCELLACAPT®.

### More SENSITIVE than Rose Bengal

BRUCELLACAPT® may be more costly than the standardized technique, Rose Bengal. However, the latter is not suitable for the diagnosis of the chronic phase of the illness.

### An EXCLUSIVE technology to discover

BRUCELLACAPT® is an exclusive Vircell's technology. It is a quantitative technique, very useful in endemic areas. In order to appreciate its qualities, we recommend the trial of the product.

## Rose Bengal

Rose Bengal technique is a fast, simple and sensitive assay widely used as screening test in the diagnosis of brucellosis.

### Ordering Information

| Cat. No. |             | Pack size |
|----------|-------------|-----------|
| RB001    | ROSE BENGAL | 125 tests |

# PCR Controls

Vircell's range of PCR controls has been developed to allow the amplification and testing of any region of the genome which is present in natural infections.

Our controls are obtained from whole microorganisms, serving as positive controls in nucleic acid amplification reactions, as well as controls for extraction.

## Product description

PCR controls containing complete purified DNA or RNA from a wide range of infectious agents.

## Presentation

Lyophilized controls for reconstitution in sterile bidistilled water.

## Shelf life

30 months for DNA and 24 months for RNA maximum, following storage recommendations.

## Storage and transport conditions

No special conditions are required for transport. In lyophilized presentation, the PCR controls can be stored refrigerated. When using the product, users are advised to reconstitute the controls, make aliquots, and store them at temperatures between -5 and -40°C for DNA and between -70 and -90°C for RNA.

### Ordering Information

#### *Acanthamoeba castellani*

Cat. No.

MBC054 ACANTHAMOEBA CASTELLANI DNA CONTROL

#### Adenovirus

Cat. No.

MBC001 ADENOVIRUS DNA CONTROL  
12500 copies/µl

#### *Aspergillus fumigatus*

Cat. No.

MBC002 ASPERGILLUS FUMIGATUS DNA CONTROL

#### *Bacillus cereus*

Cat. No.

MBC004 BACILLUS CEREUS DNA CONTROL

#### *Bartonella*

Cat. No.

MBC005 BARTONELLA HENSELAE DNA CONTROL  
MBC006 BARTONELLA QUINTANA DNA CONTROL

#### BK virus

Cat. No.

MBC051 BK VIRUS DNA CONTROL  
12500 copies/µl

#### *Bordetella*

Cat. No.

MBC092 BORDETELLA HOLMESII DNA CONTROL  
12500 copies/µl  
MBC007 BORDETELLA PARAPERTUSSIS DNA CONTROL  
MBC008 BORDETELLA PERTUSSIS DNA CONTROL

#### *Borrelia*

Cat. No.

MBC078 BORRELIA AZFELII DNA CONTROL  
12500 copies/µl  
MBC076 BORRELIA BURGENDORFERI DNA CONTROL  
12500 copies/µl  
MBC077 BORRELIA GARINII DNA CONTROL  
12500 copies/µl

#### *Brucella abortus*

Cat. No.

MBC009 BRUCELLA ABORTUS DNA CONTROL

### Ordering Information

#### *Campylobacter jejuni*

Cat. No.

MBC088 CAMPYLOBACTER JEJUNI DNA CONTROL  
12500 copies/µl

#### *Candida albicans*

Cat. No.

MBC010 CANDIDA ALBICANS DNA CONTROL

#### Chlamydia

Cat. No.

MBC012 CHLAMYDIA TRACHOMATIS DNA CONTROL  
12500 copies/µl  
MBC011 CHLAMYDOPHILA PNEUMONIAE DNA CONTROL  
12500 copies/µl  
MBC013 CHLAMYDOPHILA PSITTACI DNA CONTROL  
12500 copies/µl

#### *Coccidioides immitis*

Cat. No.

MBC014 COCCIDIOIDES IMMITIS DNA CONTROL

#### Coronavirus

Cat. No.

MBC090 CORONAVIRUS RNA CONTROL  
≥ 12500 copies/µl

#### *Coxiella burnetii*

Cat. No.

MBC018 COXIELLA BURNETII DNA CONTROL  
12500 copies/µl

#### Coxsackie virus

Cat. No.

MBC063 COXSACKIE A6 RNA CONTROL  
MBC061 COXSACKIE B1 RNA CONTROL  
MBC062 COXSACKIE B5 RNA CONTROL

#### *Cryptococcus neoformans*

Cat. No.

MBC015 CRYPTOCOCCUS NEOFORMANS DNA CONTROL

#### Cytomegalovirus

Cat. No.

MBC016 CYTOMEGALOVIRUS DNA CONTROL  
12500 copies/µl

#### Dengue virus

Cat. No.

MBC055 DENGUE 1 VIRUS RNA CONTROL  
MBC056 DENGUE 2 VIRUS RNA CONTROL  
MBC057 DENGUE 3 VIRUS RNA CONTROL  
MBC058 DENGUE 4 VIRUS RNA CONTROL

#### Echovirus

Cat. No.

MBC064 ECHOVIRUS 5 RNA CONTROL

#### Enterovirus

Cat. No.

MBC019 ENTEROVIRUS 71 RNA CONTROL  
≥ 12500 copies/µl

#### *Escherichia coli*

Cat. No.

MBC022 ESCHERICHIA COLI (VTEC) DNA CONTROL  
12500 copies/µl

#### Epstein-Barr virus

Cat. No.

MBC065 EPSTEIN-BARR VIRUS DNA CONTROL  
12500 copies/µl

#### Haemophilus

Cat. No.

MBC021 HAEMOPHILUS DUCREYI DNA CONTROL  
MBC020 HAEMOPHILUS INFLUENZAE DNA CONTROL  
12500 copies/µl

Ordering Information

**Herpes virus**

Cat. No.

|        |   |
|--------|---|
| MBC023 | HERPES SIMPLEX 1 DNA CONTROL<br>12500 copies/µl |
| MBC024 | HERPES SIMPLEX 2 DNA CONTROL<br>12500 copies/µl |
| MBC025 | HHV-6 DNA CONTROL<br>12500 copies/µl            |

**Influenza virus**

Cat. No.

|        |   |
|--------|---|
| MBC028 | INFLUENZA A H1 RNA CONTROL<br>≥ 12500 copies/µl                 |
| MBC029 | INFLUENZA A H3 RNA CONTROL<br>≥ 12500 copies/µl                 |
| MBC052 | INFLUENZA A H5 RNA CONTROL<br>≥ 12500 copies/µl                 |
| MBC030 | INFLUENZA B RNA CONTROL<br>≥ 12500 copies/µl                    |
| MBC081 | NOVEL INFLUENZA A H1N1 (plasmid) DNA CONTROL<br>12500 copies/µl |
| MBC082 | NOVEL INFLUENZA A H1N1 RNA CONTROL<br>≥ 12500 copies/µl         |

**Legionella pneumophila**

Cat. No.

|        |   |
|--------|---|
| MBC031 | LEGIONELLA PNEUMOPHILA DNA CONTROL<br>12500 copies/µl |
|--------|---|

**Leishmania**

Cat. No.

|        |                                 |
|--------|---------------------------------|
| MBC060 | LEISHMANIA CHAGASI DNA CONTROL  |
| MBC032 | LEISHMANIA INFANTUM DNA CONTROL |

**Listeria monocytogenes**

Cat. No.

|        |                                    |
|--------|------------------------------------|
| MBC033 | LISTERIA MONOCYTOGENES DNA CONTROL |
|--------|------------------------------------|

**Measles virus**

Cat. No.

|        |                     |
|--------|---------------------|
| MBC046 | MEASLES RNA CONTROL |
|--------|---------------------|

**Mumps virus**

Cat. No.

|        |                   |
|--------|-------------------|
| MBC040 | MUMPS RNA CONTROL |
|--------|-------------------|

**Mycobacterium**

Cat. No.

|        |   |
|--------|---|
| MBC086 | MYCOBACTERIUM AVIUM DNA CONTROL<br>12500 copies/µl          |
| MBC087 | MYCOBACTERIUM INTRACELLULARE DNA CONTROL<br>12500 copies/µl |
| MBC034 | MYCOBACTERIUM TUBERCULOSIS DNA CONTROL<br>12500 copies/µl   |

**Mycoplasma**

Cat. No.

|        |  |
|--------|--|
| MBC085 | MYCOPLASMA GENITALIUM DNA CONTROL<br>12500 copies/µl |
| MBC084 | MYCOPLASMA HOMINIS DNA CONTROL<br>12500 copies/µl    |
| MBC035 | MYCOPLASMA PNEUMONIAE DNA CONTROL<br>12500 copies/µl |

**Neisseria**

Cat. No.

|        |   |
|--------|---|
| MBC075 | NEISSERIA GONORRHOEAE DNA CONTROL<br>12500 copies/µl              |
| MBC036 | NEISSERIA MENINGITIDIS SEROGROUP A DNA CONTROL<br>12500 copies/µl |
| MBC066 | NEISSERIA MENINGITIDIS SEROGROUP B DNA CONTROL<br>12500 copies/µl |
| MBC053 | NEISSERIA MENINGITIDIS SEROGROUP C DNA CONTROL<br>12500 copies/µl |

**Papillomavirus**

Cat. No.

|        |  |
|--------|--|
| MBC067 | PAPILLOMAVIRUS TYPE 16 (Ca Ski cells) DNA CONTROL<br>12500 copies/µl |
| MBC068 | PAPILLOMAVIRUS TYPE 18 (HeLa cells) DNA CONTROL<br>12500 copies/µl   |

Ordering Information

**Parainfluenza virus**

Cat. No.

|        |  |
|--------|--|
| MBC037 | PARAINFLUENZA 1 RNA CONTROL<br>≥ 12500 copies/µl |
| MBC038 | PARAINFLUENZA 2 RNA CONTROL<br>≥ 12500 copies/µl |
| MBC039 | PARAINFLUENZA 3 RNA CONTROL<br>≥ 12500 copies/µl |

**Parvovirus**

Cat. No.

|        |   |
|--------|---|
| MBC080 | PARVOVIRUS B19 (plasmid) DNA CONTROL<br>12500 copies/µl |
|--------|---|

**Respiratory syncytial virus**

Cat. No.

|        |  |
|--------|--|
| MBC041 | RESPIRATORY SYNCYTIAL VIRUS (subtype A) RNA CONTROL<br>≥ 12500 copies/µl |
| MBC083 | RESPIRATORY SYNCYTIAL VIRUS (subtype B) RNA CONTROL<br>≥ 12500 copies/µl |

**Rhinovirus**

Cat. No.

|        |   |
|--------|---|
| MBC091 | RHINOVIRUS RNA CONTROL<br>≥ 12500 copies/µl |
|--------|---|

**Rickettsia conorii**

Cat. No.

|        |                                |
|--------|--------------------------------|
| MBC042 | RICKETTSIA CONORII DNA CONTROL |
|--------|--------------------------------|

**Salmonella**

Cat. No.

|        |   |
|--------|---|
| MBC003 | SALMONELLA ENTERITIDIS DNA CONTROL<br>12500 copies/µl |
| MBC044 | SALMONELLA TYPHI DNA CONTROL                          |

**SARS coronavirus**

Cat. No.

|        |   |
|--------|---|
| MBC017 | SARS CORONAVIRUS (plasmid) DNA CONTROL<br>12500 copies/µl |
|--------|---|

**Shigella flexneri**

Cat. No.

|        |  |
|--------|--|
| MBC089 | SHIGELLA FLEXNERI DNA CONTROL<br>12500 copies/µl |
|--------|--|

**Staphylococcus aureus**

Cat. No.

|        |   |
|--------|---|
| MBC073 | STAPHYLOCOCCUS AUREUS (mecA-) DNA CONTROL |
| MBC074 | STAPHYLOCOCCUS AUREUS (mecA+) DNA CONTROL |

**Streptococcus**

Cat. No.

|        |   |
|--------|---|
| MBC071 | STREPTOCOCCUS AGALACTIAE DNA CONTROL<br>12500 copies/µl |
| MBC070 | STREPTOCOCCUS PNEUMONIAE DNA CONTROL<br>12500 copies/µl |

**Toxoplasma gondii**

Cat. No.

|        |  |
|--------|--|
| MBC047 | TOXOPLASMA GONDII DNA CONTROL<br>12500 copies/µl |
|--------|--|

**Trichomonas vaginalis**

Cat. No.

|        |  |
|--------|--|
| MBC079 | TRICHOMONAS VAGINALIS DNA CONTROL<br>12500 copies/µl |
|--------|--|

**Trypanosoma**

Cat. No.

|        |  |
|--------|--|
| MBC059 | TRYPANOSOMA CRUZI DNA CONTROL                      |
| MBC093 | TRYPANOSOMA RANGELI DNA CONTROL<br>12500 copies/µl |

**Varicella-Zoster virus**

Cat. No.

|        |   |
|--------|---|
| MBC048 | VARICELLA-ZOSTER VIRUS DNA CONTROL<br>12500 copies/µl |
|--------|---|

**West Nile virus**

Cat. No.

|        |                             |
|--------|-----------------------------|
| MBC069 | WEST NILE VIRUS RNA CONTROL |
|--------|-----------------------------|

New products are under development. Please consult our Sales Department for information on other controls available.

# Speed-oligo®

## Quick visual oligochromatographic tests

Based on a PCR technique, Speed-oligo® provides all the advantages of Molecular Biology in a quick detection, allowing an immediate result, highly sensitive and specific.

This new technique, developed by Vircell, takes place in 3 steps: DNA extraction, amplification of the specific oligo pair (PCR) and detection of the amplified product with the strip. The reading of the results can be done either visual or automatically.

Speed-oligo® contains all the reagents necessary to perform the PCR reaction and the detection step.

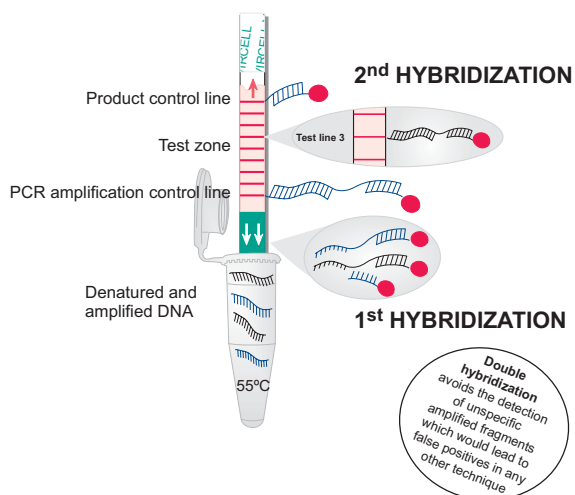


### Principle of the test (detection step)

The denatured PCR products (specific microorganism amplicon and control amplicon) are diluted in the hybridization solution and come into contact with the strip.

When flowing along the strip, the specific and control amplicons react with the complementary probes coupled to colloidal gold.

When reaching the visualization zone, the complexes of specific and control amplicons and the colloidal gold conjugates, react with a second probe which is bound to the membrane, leading to a coloured band. The excess of conjugate reacts with a complementary probe on the control line.



### Highly specific technique due to its double hybridization

The oligo probes -for specific and control amplicon- are immobilized in the membrane. The detection method is done by means of a double hybridization: on one hand with the immobilized probes in the membrane and on the other hand with a colloidal gold marker. The double hybridization avoids the detection of unspecific amplified fragments which would lead to false positives in any other technique.

### One of the most affordable techniques in Molecular Biology

Since its creation, Speed-oligo® was conceived as a technique that brings the advantages of Molecular Biology closer to the daily work in most of the laboratories.

### Minimal equipment required

Speed-oligo® is also considered an affordable technique because of the little equipment required. It is possible to assay the complete technique just by using a thermocycler and thermoblock, very usual instruments in current laboratories. Moreover, these instruments can also be used for other techniques conducted in the laboratory, avoiding thus space problems.

### Stands out for its fast results

In just 5 minutes hybridization of the strips takes place and it is followed by the reading and interpretation of the results, visual or automatically: for visual reading the kit includes a reading and interpretation card, for an automatic reading Vircell offers a software applied to a scanner. Please contact us for further information ([sales@vircell.com](mailto:sales@vircell.com))

### Very easy technology that requires little manipulation

Vircell R+D Department has considered all the possible features maintaining the easy performance of the technique. Neither specific knowledge nor previous experience to conduct or interpret the technique are required.

Maintaining the lowest level of manipulation is another important feature performed by the team that has developed Speed-oligo®. The product contains all the necessary reagents to conduct the technique including prepared PCR mix. This characteristic implies an important reduction in time and avoids possible contaminations.

### Avoids using hazardous substances

Speed-oligo® incorporates all the advantages of the Molecular Biology in a quick detection, avoiding the use of ethidium bromide. This new technology solves the revealing and interpretation of the PCR technique in an easy and fast way.

### Offers possibilities for the multitest diagnosis

Speed-oligo® technology is characterized by double hybridization, which allows the diagnosis of different parameters in the same strip. This concept may result very useful in some cases such as the identification of mycobacteria or the detection of the bacterial meningitis causing agents.



Quick Visual Oligochromatography

PRODUCT FEATURES

- High sensitivity and specificity
- Fast- test results within 90 minutes
- Easy to use- no handling of toxic substances
- Cost effective- minimum equipment required
- Lyophilized presentation- transport costs savings
- Prepared PCR mix- prevents contaminations
- Allows for multitest detection

Single tests

Ordering Information

**Chlamydomphila pneumoniae**

| Cat. No. | Pack size                                      |
|----------|--|
| SP003    | SPEED-OLIGO® CHLAMYDOPHILA PNEUMONIAE 40 tests |

**Group B Streptococcus**

| Cat. No. | Pack size                                    |
|----------|--|
| SP004    | SPEED-OLIGO® GROUP B STREPTOCOCCUS* 40 tests |

**Legionella pneumophila**

| Cat. No. | Pack size                                    |
|----------|--|
| SP002    | SPEED-OLIGO® LEGIONELLA PNEUMOPHILA 40 tests |

**Mycoplasma pneumoniae**

| Cat. No. | Pack size                                   |
|----------|---|
| SP001    | SPEED-OLIGO® MYCOPLASMA PNEUMONIAE 40 tests |

Multitests

Ordering Information

**Bacterial meningitis**

| Cat. No. | Pack size  |
|----------|--|
| SP006    | SPEED-OLIGO® BACTERIAL MENINGITIS 24 tests<br>3 test lines for <i>Streptococcus pneumoniae</i> , <i>Haemophilus influenzae</i> and <i>Neisseria meningitidis</i> |

**Bordetella**

| Cat. No. | Pack size  |
|----------|--|
| SP011    | SPEED-OLIGO® BORDETELLA 40 tests<br>3 test lines for <i>B. parapertussis</i> , <i>Bordetella sp.</i> and <i>B. pertussis</i> |

**Influenza A**

| Cat. No. | Pack size  |
|----------|--|
| SP015    | SPEED-OLIGO® NOVEL INFLUENZA A H1N1 40 tests<br>2 test lines for influenza A and pandemic influenza A H1N1 |

**Mycobacteria**

| Cat. No. | Pack size   |
|----------|---|
| SP005    | SPEED-OLIGO® MYCOBACTERIA* 40 tests<br>7 test lines for <i>M. tuberculosis</i> complex, <i>M. avium/ intracellulare/ scrofulaceum</i> complex, <i>M. chelonae/ abscessus</i> complex, <i>M. fortuitum</i> , <i>M. kansasii/ gastri</i> complex, <i>M. gordonae</i> and <i>Mycobacterium</i> genus. (For culture identification) |
| SP016    | SPEED-OLIGO® DIRECT MYCOBACTERIUM TUBERCULOSIS** 40 tests<br>2 test lines for <i>Mycobacterium</i> genus and <i>M. tuberculosis</i> complex. (For direct samples)   |

Combi products

Ordering Information

**Bacterial pneumonia**

| Cat. No. | Pack size  |
|----------|--|
| SP008    | SPEED-OLIGO® BACTERIAL PNEUMONIA COMBI 24 tests<br>3 types of strips for <i>Chlamydomphila pneumoniae</i> , <i>Legionella pneumophila</i> and <i>Mycoplasma pneumoniae</i> (3x8 tests) |

\* reagents for a rapid extraction included in the kit  
\*\* reagents for a rapid extraction from respiratory samples included in the kit

Products under development

At Vircell we seek for innovation, therefore our R&D Department continues with new products development. Please consult our Sales Department for information on other products available.

- SPEED-OLIGO® CHAGAS
- SPEED-OLIGO® DENGUE
- SPEED-OLIGO® ENTEROVIRUS
- SPEED-OLIGO® RSV & METAPNEUMOVIRUS
- SPEED-OLIGO® TOXOPLASMA



# VIRapid®

## Immunochromatographic tests

Immunochromatographic tests have been a popular platform for diagnostic tests since their introduction. The ability to provide test results rapidly to the patient is one of the most important properties that make rapid diagnostic tests useful.

### PRODUCT FEATURES

- **Rapid detection- Visual reading in few minutes**
- **User friendly protocol with little manipulation**
- **All the necessary reagents included in the kit**
- **Product control line on each device**
- **Based on specific and highly purified antigens or antibodies (conjugate and line)**

### Ordering Information

#### Hydatidosis (*Echinococcus granulosus*)

| Cat. No.   | Pack size |
|--|-----------|
| VR004 VIRapid® HYDATIDOSIS<br>total antibodies detection | 25 tests  |

#### Legionella- culture identification

| Cat. No.  | Pack size |
|---|-----------|
| VR002 VIRapid® LEGIONELLA CULTURE<br>antigen detection and identification after culture (multitest) | 25 tests  |

#### Infectious mononucleosis

| Cat. No.  | Pack size |
|---|-----------|
| VR001 VIRapid® MONO M&G<br>antibody detection (multitest) | 25 tests  |

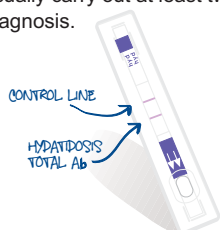
#### Tularemia (*Francisella tularensis*)

| Cat. No.   | Pack size |
|--|-----------|
| VR006 VIRapid® TULAREMIA<br>total antibodies detection | 10 tests  |

### Hydatidosis- total antibody detection

The diagnosis of hydatidosis is usually carried out by imaging techniques such as ultrasound scan or X-ray. However, symptoms of hydatid cyst must be always confirmed by serological assays as it can be confused with other pathologies.

The serological results depend on a large number of factors such as antigen quality, used technique, affected organ, number of hydatid cysts and the variability of immune responses. Due to the variable sensitivity of the different tests, many laboratories usually carry out at least two different techniques for their routine diagnosis.

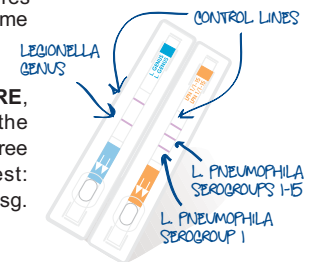


**VIRapid® HYDATIDOSIS** is the first immunochromatographic test in the market for total antibody detection and offers important benefits for both, big and small laboratories, in prevalent areas.

### Legionella- antigen detection and identification after culture

In some countries prevention controls for legionellosis are compulsory in facilities using water for its operation, producing aerosol and being located inside and outside buildings of collective use, industrial facilities and means of transport. The official technique according to the regulation is bacterial culture in specific media, and the subsequent detection and identification with commercial tests available in the market. Vircell offers an interesting alternative to process positive cultures with a simple protocol and reading time of just 30 minutes.

**VIRapid® LEGIONELLA CULTURE**, with multitest format allows for the detection and identification of the three main groups with clinical interest: *Legionella* genus, *L. pneumophila* sg. 1 and *L. pneumophila* sg. 1-15.

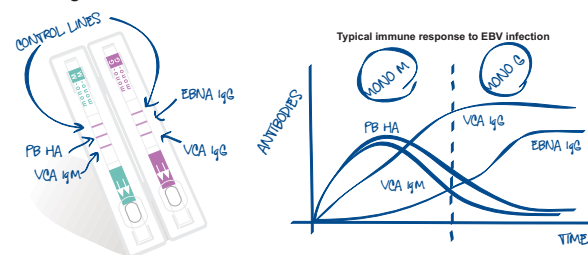


### Infectious mononucleosis- antibody detection

Epstein-Barr virus (EBV) is one of the most common human viruses and it is present worldwide.

When infection with EBV occurs during adolescence or young adulthood, it causes infectious mononucleosis 35% to 50% of the times. Antibodies to several antigen complexes may be measured for detection of Epstein-Bar virus. These antigens are the viral capsid antigen (VCA), the early antigen (EA), and the EBV nuclear antigen (EBNA).

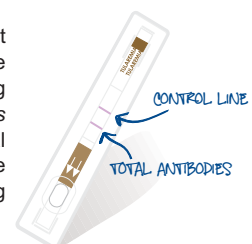
**VIRapid® MONO M&G** is a diagnostic alternative in multitest format that allows the simultaneous detection of the 4 main serological markers for EBV infection.



### Tularemia- total antibody detection

The diagnosis of tularemia by culture can be challenging because the organism grows poorly on routine culture medium. The low sensitivity of culture methods together with the lack of standardization in PCR methodology, make serological assay the most widely used tool for the diagnosis of tularemia.

**VIRapid® TULAREMIA** is the first immunochromatographic test in the market for *F. tularensis* detection, using a lipopolysaccharide from *F. tularensis* membrane, for both conjugate (colloidal gold) and test line, to improve the specificity of the assay while maintaining a high sensitivity.





# Transport Media

## Collection and transport system for virus, chlamydia and mycoplasma

The success of virus diagnosis largely depends on the quality of the specimen and the conditions under which the specimen is transported and stored before it is processed in the laboratory.

Vircell's transport medium avoids the drying up of the sample, improves microorganisms viability between collection and inoculation, and decreases bacterial overgrowth in contaminated samples.

### Assay procedure

Collect the sample with a sterile swab and put the swab into the tube containing the transport medium. Cut off the end of the swab stick standing out of the tube, taking care not to touch the rim of the tube. Close the tube tightly and fill in the data of the patient, type of sample and date and hour of collection.

Send to the laboratory for analysis at room temperature. For prolonged transport, use a refrigerated delivery service at 2-8°C.

### PRODUCT FEATURES

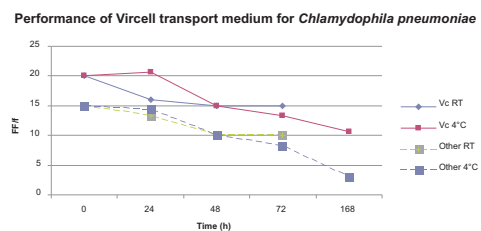
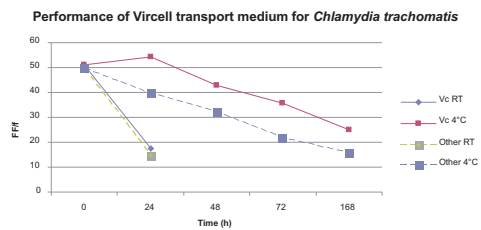
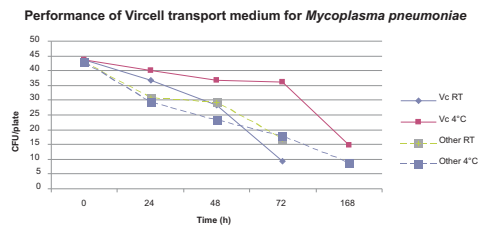
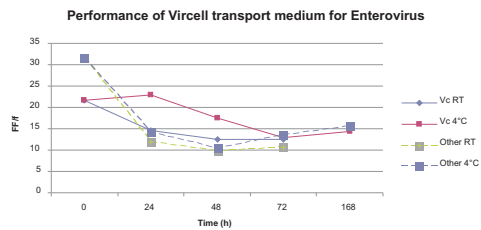
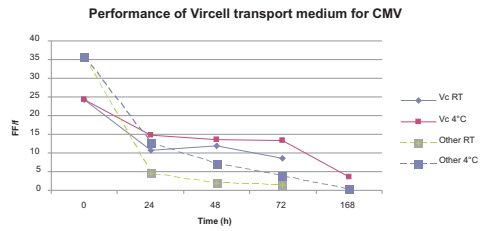
- Versatile medium, valid for different types of samples, microorganisms and diagnostic methods
- Avoids the drying up of the sample
- Improves microorganisms viability between collection and inoculation, and decreases bacterial overgrowth in contaminated samples
- Room temperature viability
- Easily breakable swabs
- Suitable for samples to be assayed by PCR
- Customized solution- product available in different formats

### Ordering Information

| Cat. No. |  | Pack size |
|----------|--|-----------|
| TM001    | TRANSPORT MEDIUM<br>50 x 2 ml with 2 sterile Rayon swabs   | 50 units  |
| TM002    | TRANSPORT MEDIUM<br>50 x 3 ml (without swab)               | 50 units  |
| TM003*   | TRANSPORT MEDIUM<br>50 x 2 ml with 1 sterile Dacron® swab  | 50 units  |
| TM004    | TRANSPORT MEDIUM<br>1 x 100 ml (without swab)              | 1 unit    |
| TM005*   | TRANSPORT MEDIUM<br>50 x 2 ml (without swab)               | 50 units  |
| TM006*   | TRANSPORT MEDIUM<br>50 x 2 ml with 2 sterile Dacron® swabs | 50 units  |
| TM008*   | TRANSPORT MEDIUM<br>50 x 3 ml with 1 sterile Flocked swab  | 50 units  |

\* only manufactured upon request

## Performance studies



# Cell lines

## Cell lines for clinical virology

With the appropriate cells, Clinical Virology does not present any more difficulties than Clinical Bacteriology. It is possible to solve 90% of the identifications just performing simple immunofluorescence, by using fluorescein-labelled antibodies.

With the application of aggressive therapeutic diets for cancer treatment, the enormous development of organ transplants and the appearance of AIDS, the serious viral infections- which often lead to the death of the patient- are common today. On the other hand, the availability of effective treatments has increased the need for a rapid and exact diagnosis of these infections.

A lot of the information that a clinical virology laboratory can provide is also of epidemiological interest: isolation of new variants of the influenza virus, outbreaks of meningitis, conjunctivitis or pneumonia, etc.

Vircell offers most of the cell lines used in cell culture-based microbiological diagnosis, specially those used in human clinical virology.

Our catalogue includes presentations for the isolation of Cytomegalovirus, Herpes Simplex, respiratory viruses (Influenza, Respiratory Syncytial Virus), enterovirus, *C. pneumoniae*, *C. trachomatis* or Toxoplasma, among others.

For meeting customer needs we offer ready-to-use presentations (shell vials and tubes) and other presentations (flasks and suspensions) for preparing cell tubes and plates.

### Tubes

No.: 24 pcs  
Dim.: 16 x 120 mm



### Shell Vials

No.: 24 pcs  
Dim.: 16 x 50 mm

### Flasks

75 or 150 cm<sup>2</sup>



### Suspensions

Vol.: 30 ml (10<sup>6</sup> cells/ml)

## Ordering Information

### Cell mixture

| Cat. No. |                            | Pack size |
|----------|----------------------------|-----------|
| VSMX     | A-549+HEp+MDCK shell vials | 24 units  |

### A-549

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTA5     | A-549 flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSA5     | A-549 shell vials                       | 24 units  |
| VTA5     | A-549 tubes                             | 24 units  |

### BGM

| Cat. No. |                                       | Pack size |
|----------|---------------------------------------|-----------|
| FTBG     | BGM flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSBG     | BGM shell vials                       | 24 units  |
| VTBG     | BGM tubes                             | 24 units  |

### HEp-2

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTHE     | HEp-2 flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSHE     | HEp-2 shell vials                       | 24 units  |
| VTHE     | HEp-2 tubes                             | 24 units  |

### LLC-MK<sub>2</sub>

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTLL     | LLC-MK <sub>2</sub> flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSLL     | LLC-MK <sub>2</sub> shell vials                       | 24 units  |
| VTLL     | LLC-MK <sub>2</sub> tubes                             | 24 units  |

### McCoy

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTMC     | McCoy flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSMC     | McCoy shell vials                       | 24 units  |

### MDCK

| Cat. No. |  | Pack size |
|----------|--|-----------|
| FTMD     | MDCK flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSMC     | MDCK shell vials                       | 24 units  |
| VTMD     | MDCK tubes                             | 24 units  |

### MDCK-SIAT1

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTMS     | MDCK -SIAT1 flask (75 or 150cm <sup>2</sup> ) | 1 unit    |

### MRC-5

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTMR     | MRC-5 flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| SMR      | MRC-5 suspension                        | 1 unit    |
| VSMR     | MRC-5 shell vials                       | 24 units  |
| VTMR     | MRC-5 tubes                             | 24 units  |

### RD

| Cat. No. |                                      | Pack size |
|----------|--------------------------------------|-----------|
| FTRD     | RD flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSRD     | RD shell vials                       | 24 units  |
| VTRD     | RD tubes                             | 24 units  |

### Vero E6

| Cat. No. |   | Pack size |
|----------|---|-----------|
| FTV6     | Vero E6 flask (75 or 150cm <sup>2</sup> ) | 1 unit    |

### Vero

| Cat. No. |  | Pack size |
|----------|--|-----------|
| FTVE     | Vero flask (75 or 150cm <sup>2</sup> ) | 1 unit    |
| VSVE     | Vero shell vials                       | 24 units  |
| VTVE     | Vero tubes                             | 24 units  |

For other cell lines or other formats, please contact us at [sales@vircell.com](mailto:sales@vircell.com)

# Monoclonal Antibodies

## Staining and inoculation kits

Monoclonal antibodies are monospecific antibodies: homogeneous reagents containing a single type of antibody molecule. They can be produced in vitro, avoiding the variability associated to different lots of polyclonal antibodies.

Due to its high specificity, monoclonal antibodies are specially well suited for immunofluorescence techniques, minimising cross-reactions and background fluorescence. Useful tools for direct staining of samples, they are the perfect complement for the identification of pathogens isolated in cell culture, specially through the shell-vial technique.

Vircell offers kits containing monoclonal antibodies and controls (staining kits) and complete kits (inoculation and staining kits) for direct investigation of those viruses, bacteria and protozoa associated with human infections, usually diagnosed by cell culture. Complete kits include monoclonal antibody, controls, shell-vials of the appropriate cell line, antibiotic mixture and growth medium.

### Ordering Information

#### Adenovirus

| Cat. No. |                          | Pack size |
|----------|--------------------------|-----------|
| ACADN    | ADENOVIRUS MAb           | 80 tests  |
| KADN     | ADENOVIRUS MAb & CULTURE | 24 tests  |

#### Chlamydia trachomatis

| Cat. No. |                                     | Pack size |
|----------|-------------------------------------|-----------|
| ACCHTR   | CHLAMYDIA TRACHOMATIS MAb           | 80 tests  |
| KCHTR    | CHLAMYDIA TRACHOMATIS MAb & CULTURE | 24 tests  |

#### Chlamydia pneumoniae

| Cat. No. |                                    | Pack size |
|----------|------------------------------------|-----------|
| ACCHPN   | CHLAMYDIA PNEUMONIAE MAb           | 80 tests  |
| KCHPN    | CHLAMYDIA PNEUMONIAE MAb & CULTURE | 24 tests  |

#### Cytomegalovirus

| Cat. No. |                               | Pack size |
|----------|-------------------------------|-----------|
| ACCMV    | CYTOMEGALOVIRUS MAb           | 80 tests  |
| KCMV     | CYTOMEGALOVIRUS MAb & CULTURE | 24 tests  |
| KCMV-2   | CYTOMEGALOVIRUS MAb & CULTURE | 12 tests  |

#### Enterovirus

| Cat. No. |                           | Pack size |
|----------|---------------------------|-----------|
| ACENT    | ENTEROVIRUS MAb           | 80 tests  |
| KENT     | ENTEROVIRUS MAb & CULTURE | 24 tests  |

#### Herpes simplex virus 1+2

| Cat. No. |                                  | Pack size |
|----------|----------------------------------|-----------|
| ACHERP   | HERPES SIMPLEX 1+2 MAb           | 80 tests  |
| KHERP    | HERPES SIMPLEX 1+2 MAb & CULTURE | 24 tests  |

#### Influenza

| Cat. No. |                                     | Pack size |
|----------|-------------------------------------|-----------|
| ACINF    | INFLUENZA A AND B MAb (40+40 tests) | 80 tests  |
| KINF     | INFLUENZA A AND B MAb & CULTURE     | 24 tests  |
| ACINFA   | INFLUENZA A MAb                     | 40 tests  |
| KINFA    | INFLUENZA A MAb & CULTURE           | 24 tests  |

#### Parainfluenza

| Cat. No. |                         | Pack size |
|----------|-------------------------|-----------|
| ACPI     | PARAINFLUENZA 1+2+3 MAb | 80 tests  |

#### Respiratory syncytial virus

| Cat. No. |                   | Pack size |
|----------|-------------------|-----------|
| ACVSR    | RSV MAb           | 80 tests  |
| KVSR     | RSV MAb & CULTURE | 24 tests  |

#### Respiratory virus

| Cat. No. |   | Pack size |
|----------|---|-----------|
| ACRES    | RESPIRATORY VIRAL SCREENING MAb<br><i>Mix for adenovirus, influenza A+B, RSV and parainfluenza MAb in a single vial</i> | 40 tests  |
| KVSXR    | RESPIRATORY VIRUS MAb & CULTURE<br><i>Separate vials for adenovirus, influenza A+B, RSV and parainfluenza 1+2+3 MAb</i> | 24 tests  |

#### Toxoplasma gondii

| Cat. No. |                          | Pack size |
|----------|--------------------------|-----------|
| ACTOXO   | TOXOPLASMA MAb           | 80 tests  |
| KTOXO    | TOXOPLASMA MAb & CULTURE | 24 tests  |

## Ordering information

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### **Ordering**

When placing an order, please let us know full description, product catalogue number, unit size and quantity required. Please include any special instructions, as well as the correct billing and shipping address.

Orders can be placed by fax or e-mail. Orders by phone are accepted but written confirmation is always required.

### **Free samples policy**

Free of charge samples are available for testing purposes. Please, contact us at [sales@vircell.com](mailto:sales@vircell.com) to obtain our sample request form.

### **Order modification and cancellation**

Any order modification requires a new purchase order to be placed.

In the event of an order cancellation, written notice of the cancellation is required one week in advance for cell culture orders, and three days in advance for the rest of product lines.

## Prices and terms

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### **Prices**

Ex works prices in effect when your order is received will apply, except in the case of standing orders which extend to the following year.

The validity period for preorders/orders awaiting prepayment will be one month. After one month, new confirmation of the order is required.

### **Shipping**

Freight charges will be added to your invoice, unless otherwise specified.

## Technical support

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Our Technical Department will offer you technical and scientific support. Any technical difficulty that may appear in the daily work at laboratories using our products will be addressed on-line within the following 24 hours.

For technical assistance, please contact us at:  
**[customerservice@vircell.com](mailto:customerservice@vircell.com)**



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