

Biological reagents

Quality reagents for quality testing

APHA Scientific offers a wide range of specialist biological reagents and diagnostic kits for effective and reliable laboratory testing. They are available for sale to the animal health industry and veterinary diagnostic laboratories worldwide. The agency has over 100 years experience in the diagnosis and control of diseases of farm livestock and other animals. Our products benefit from:

Extensive expertise

Our scientists have a unique breadth of veterinary and scientific expertise and a comprehensive knowledge of animal and zoonotic diseases. Many of the reagents and products available are used by national and international reference laboratories.

Excellent specialist facilities

The reagents are manufactured in a dedicated reagent production unit certified to ISO9001. In addition there are 'state of the art' high disease containment facilities for the production of specialist reagents.

A comprehensive and quality delivery service

Our reagents are available either from our network of distributors covering Europe, the Middle East and Asia or direct from APHA Scientific for other areas.

APHA Scientific products, which include antisera, antigens diagnostic kits, are available for:

- Bacterial diseases
- Avian viral diseases
- Mammalian viral diseases
- Monoclonal antibodies
- Salmonella antisera
- Bacterial isolates

APHA Scientific Distributors

Asifac

Address

220 Pham The Hien Street
District 8
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Vietnam

T +84 8851 5503

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E asifac@hcm.vnn.vn

Countries covered by distributor

Vietnam

Products

All Products

Bionote

Address

2-9 Seogu-dong
Hwaseong-si
Gyeonggi-do
445-170
Korea, Republic of

T +82 31 211 0516

F +82 31 8003 0618

E jason@bionote.co.kr

W www.bionote.co.kr

Countries covered by distributor

Korea, Republic of

Products

All Products

Genomica S.A.U

Address

Parque Empresarial Alvento - Edificio B
Via de los Poblados, 1-1a Planta
28033 Madrid

Spain

T +34 91 674 8993

F +34 91 674 8994

E comercial@genomica.es

W www.genomica.es

Countries covered by distributor

Portugal, Spain

Products

All Products

Lillidale Animal Health Ltd

Address

Pig Oak Farm
Holt Lane, Holt
Wimborne
Dorset
BH21 7DG
United Kingdom

T +44 (0)1202 848456

F +44 (0)1202 848570

E sales@lillidale.co.uk

W www.lillidale.co.uk

Countries covered by distributor

Algeria, Bahrain, Cyprus, Egypt, Ethiopia, India, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Nepal, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen

Products

All Products

Pro-Lab Diagnostics [Exclusive Partner for Salmonella Antisera]

Address

3 Bassendale Road
Bromborough
Wirral
Merseyside
CH62 3QL
United Kingdom

T +44 (0)151 353 1613

F +44 (0)151 353 1614

E uksupport@pro-lab.com

W www.pro-lab.com

Countries covered by distributor

Worldwide

Star Ecotronics SRL

Address

Via Quarenghi, 27
20151
Milan
Italy

T +39 (0)2 89540225

F +39 (0)2 45479084

E offerte@starecotronics.it

W www.starecotronics.it

Countries covered by distributor

Italy

Products

All Products

Tin Hang Technology

Address

Unit 1904-1906, 19F
340 Queens Road Central
Hong Kong

T +852 2817 2121

F +852 2580 7763

E dennis@tinhangtech.com

Countries covered by distributor

Hong Kong

Products

All Products

Orders

When ordering please identify all items using the catalogue number e.g. RAA0066 and a description of the items.

Telephone orders will be accepted but must be confirmed by fax or e-mail within 48 hours, and be marked '**confirmation of telephone order**'. Your order number should be quoted on all correspondence following confirmation of order.

Please give the full address for delivery (and for the invoice where this is different) including telephone, fax number and email address.

Reagent orders are processed either by APHA Scientific Product Sales or by a Distributor appointed by APHA.

If you reside in a country without an appointed Distributor please contact **APHA Scientific Product Sales** (details below).

If you reside in a country with an appointed Distributor please contact the distributor. **A list of appointed APHA Scientific Distributors and the regions they cover can be accessed by clicking the APHA Scientific Distributors link on the left.**

OVERSEAS CUSTOMERS (from countries without Distributors) MUST ENSURE THAT ALL NECESSARY IMPORT PERMITS ACCOMPANY THE ORDER.

THE CONDITIONS OF SALE APPLY TO ALL ORDERS RELATING TO PRODUCTS AND PROFICIENCY TESTING. CLICK THE TERMS AND CONDITIONS LINK TO THE LEFT FOR DETAILS.

Orders should be sent to:

APHA Scientific Product Sales

Animal and Plant Health Agency
New Haw
Addlestone
Surrey
KT15 3NB
United Kingdom

T +44 (0) 1932 357641

F +44 (0) 1932 357701

E salesdesk@apha.gsi.gov.uk

Technical Services and Advice

Documentation is supplied with all catalogue products, and technical services and advice are also available. In addition to the products listed in this catalogue APHA has a wide range of research grade biological products for laboratory use. If you have any special requirements or require further advice, please contact APHA Scientific Product Sales at the above address.

Prices

The price charged will be that prevailing at the time of despatch.

All prices are exclusive of VAT, which will be added to UK orders at the rate prevailing at the time of the invoice. For EC orders please provide VAT registration number otherwise VAT will be charged at the UK prevailing rate.

Delivery charges are not included and will be charged accordingly - Incoterms 2000 EX Works.

All and any import duties, value added taxes or other charges of whatever nature leviable or chargeable on the goods on importation into the country of destination shall be paid by the Overseas Buyer.

We reserve the right to amend prices without notification.

Payment

Payment is due within 30 days on receipt of the invoice, *in pounds sterling*, by bankers order or cheque drawn on a UK clearing bank made payable to '**Animal and Plant Health Agency**'. Cheques must show the UK Bank Sort Code. Payment is also available through BACS. APHA's bank details for payment by this method are available on request from Product Sales at APHA. Payment can also be made by Credit/Debit Card.

In some cases it will be necessary to clear payment before despatch.

UNLESS OTHERWISE STATED, AND AGREED IN WRITING, PROPERTY AND TITLE OF THE GOODS WILL NOT PASS TO THE CUSTOMER UNTIL THE WHOLE PRICE HAS BEEN RECEIVED BY US.

Returns

Biological reagents are not generally accepted for return. Should the need arise, please contact APHA Scientific Product Sales (using the contact details on the Contact Us page) before sending any goods for return.

Product Liability

Products listed are intended for use as in-vitro animal diagnostics. Those products for use in veterinary in-vivo diagnostic procedures or disease prophylaxis are clearly specified. It is the responsibility of the user to ensure that they possess the necessary technical skills to determine the appropriateness of these products for the proposed application. APHA accepts no responsibility for results obtained from these products, as they are also dependent on conditions of use and the variability of materials beyond our control.

In no event shall APHA be held responsible for the loss of profits, or for indirect or consequential loss including, but not limited to, personal injury arising from the use of these products.

Customers are advised that APHA accepts no responsibility for the non-delivery of goods, or for damages in transit unless it can be proved to have resulted from our negligence. Claims for goods damaged in transit should be made within three working days of receipt. Any replacements are made strictly as an act of goodwill, and should in no way be construed as an acceptance of liability on our part.

Live and Infectious Materials

Many of the products are infectious. Please ensure that:

- all necessary precautions are taken when handling live infectious material
- full operator safety precautions are observed when handling material which may be infectious to humans
- operators are fully informed as to the nature of the material they are handling
- instructions for use and safe disposal are carried out
- overseas orders are accompanied by all the import documents necessary for this class of materials

Brucella

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigens

Code	Name	Description	
RAA0048	<i>Brucella abortus</i> Milk Ring Test Antigen	Inactivated antigen for use in the Milk Ring Test for the detection of antibodies to <i>B.abortus</i> . 30µl required per test. All batches are adjusted to have a comparable level of sensitivity when tested against dilutions made in milk of the International Standard Serum to <i>B.abortus</i> . <i>Brucella abortus</i> (Strain 99) stained with haematoxylin dye and suspended in phenol saline.	PT
RAA0054	<i>Brucella abortus/melitensis/suis</i> Serum Agglutination Test	Inactivated antigen for use in the Serum Agglutination Test for the detection of antibodies to <i>B.abortus/melitensis/suis</i> . Working dilution x10 concentrate. At working strength the antigen is standardised to give 50% agglutination with a 1/650 dilution of the International Standard Serum to <i>B.abortus</i> . Volume per tube, 500µl, volume per microtitre well, 50µl.	PT
RAA0060	Brucella Rose Bengal Test (Standard)	Inactivated antigen for use in the Rose Bengal Test for the detection of antibodies to all smooth strains of Brucella. The antigen is standardised to give a positive reaction with a 1/45 dilution of the International Standard Serum (OIEISS) (30µl per test).	PT
RAA0066	<i>Brucella abortus/melitensis/suis</i> Complement Fixation Test	Inactivated antigen for use in the Complement Fixation Test for the detection of antibodies to <i>B.abortus/melitensis/suis</i> . Working dilution x10 concentrate. Volume per microtitre well 25µl. Standardised to give 50% fixation with a 1/200 dilution of the International Standard Serum to <i>B.abortus</i> .	PT
RAA2016	Brucella Rose Bengal Test (Sensitive)	Inactivated antigen for use in the Rose Bengal Test for the detection of antibodies to all smooth Brucella strains and recommended for the detection of Brucella antibodies in sheep and goats. Distribution in the UK is restricted to authorised laboratories. The antigen is standardised to give positive reaction with a 1/47.5 dilution of the International Standard Serum (OIEISS) (30µl per test).	PT

Antisera

Code	Name	Description	
RAB0075	<i>Brucella ovis</i> negative control serum		PT
RAB0701	<i>Brucella abortus</i> negative control serum		PT
RAB1003	<i>Brucella abortus</i> positive control serum	Compared against the International Standard Serum to <i>B.abortus</i> . <i>B.abortus</i> positive control serum for monitoring diagnostic tests.	PT

Diagnostic Kits

Code	Name	Description	
RAI0991	BRUCELISA-160M	An indirect ELISA kit for the detection of antibodies to <i>Brucella abortus</i> in bovine milk samples. Each kit contains sufficient reagents, including antigen coated plates, to test up to 160 samples.	PT
RAI2005	COMPELISA-160	A competition ELISA kit for the detection of circulating antibodies to Brucella infection in the serum of all animal species. COMPELISA-160 contains sufficient reagents and standard sera to test 160 samples.	PT
RAI2006	COMPELISA-400	A competition ELISA kit for the detection of circulating antibodies to Brucella infection in the serum of all animal species. COMPELISA-400 contains sufficient reagents and standard sera to test 400 samples.	PT

Campylobacter

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Kit for Transportation of Samples

Code	Name	Description
RAI0800	Campyculture Kit	The methodology and transport of enrichment media were developed at APHA for the successful sampling and culturing of <i>Campylobacter fetus</i> spp. from bulls and cows. The kit contains a filter and sufficient reagents for sampling one bull or two cows. Each kit is supplied with a set of user instructions, a leaflet providing details of contents together with two laboratory sample submission forms. It should be noted that inserion tubes and syringes are not supplied. This kit can also be used for the transport of Trichomoniasis samples.

Escherichia coli

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antibodies - Monoclonal

For specific detection and identification of the fimbrial adhesins in animal isolates of E.coli.

Code	Name	Description
RAE0235	<i>E.coli</i> K88a fimbrial adhesin	<p>A murine class IgG1 monoclonal antibody to the K88a fimbrial adhesin of E. coli, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay.</p> <p>MAB available in conjugated form on request.</p>
RAE0236	<i>E.coli</i> K88b fimbrial adhesin	<p>A murine class IgG1 monoclonal antibody to the K88b fimbrial adhesin of E. coli, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay.</p> <p>MAB available in conjugated form on request.</p>
RAE0237	<i>E.coli</i> 987P fimbrial adhesin	<p>A murine class IgG3 monoclonal antibody to the 987p fimbrial adhesin of E. coli, prepared by fusion with NS-1 myeloma cells. The hybridoma was grown in serum free media and the supernatant was concentrated by ultrafiltration and by water removal, using polyethylene glycol crystals. The finished product was standardised to a concentration of 1 mg/ml by BCA assay.</p> <p>MAB available in conjugated form on request.</p>
RAE0239	<i>E.coli</i> K99 fimbrial adhesin	<p>A murine class IgG2a monoclonal antibody to the K99 fimbrial adhesin of E. coli, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay.</p> <p>MAB available in conjugated form on request.</p>

Bovine Antisera - Polyclonal

A comprehensive range of antisera for use in Slide Agglutination Tests for the presumptive identification of pathogenic E.coli from cows. All E.coli antisera contain agglutinins to both 'O' and 'K' antigens. Sera are of rabbit origin and are presented in liquid form ready to use. Store at 4°C.

Code	Name	Description
RAB0978	<i>E.coli</i> O78:K80 typing serum OK 'RVC330'	Rabbit serum containing antibodies to <i>Escherichia coli</i> O78:K80 (K'RVC330'), intended for use in slide agglutination tests for the presumptive identification of pathogenic <i>E. coli</i> .

Avian Antisera - Polyclonal

A comprehensive range of antisera for use in Slide Agglutination Tests for the presumptive identification of pathogenic *E.coli* from birds. All *E.coli* antisera contain agglutinins to both 'O' and 'K' antigens. Sera are of rabbit origin and are presented in liquid form ready to use. Store at 4°C.

Code	Name	Description
RAB0976	<i>E.Coli</i> O1:K1 typing serum OK 'F1' (avian strain)	Rabbit serum containing antibodies to <i>Escherichia coli</i> F1 (O1:K1).
RAB0977	<i>E.coli</i> O78:K80 typing serum OK 'F103' (avian strain)	Rabbit serum containing antibodies to <i>Escherichia coli</i> K'F103' O78:K80, intended for use in slide agglutination tests for the presumptive identification of pathogenic <i>E. coli</i> from birds.
RAB1002	<i>E.coli</i> O2:K1 typing serum OK 'F21' (avian strain)	Rabbit serum containing antibodies to <i>Escherichia coli</i> F21 (O2:K1)

Porcine Antisera - Polyclonal: Polyvalent A and constituents

A comprehensive range of antisera for use in Slide Agglutination Tests for the presumptive identification of pathogenic *E.coli* from pigs. All *E.coli* antisera contain agglutinins to both 'O' and 'K' antigens. Sera are of rabbit origin and are presented in liquid form ready to use. Store at 4°C.

Code	Name	Description
RAB0086	<i>E.coli</i> Polyvalent A typing serum	Rabbit serum containing antibodies to <i>Escherichia coli</i> G205, E65, E57, E68II, E145, G1253 and Abbotstown.
RAB0089	<i>E.coli</i> G205 typing serum O8:K87,K88ac	Rabbit serum containing antibodies to <i>Escherichia coli</i> G205
RAB0090	<i>E.coli</i> E65 typing serum O45:K 'E65'	Rabbit serum containing antibodies to <i>Escherichia coli</i> E65, O45:K'E65'
RAB0091	<i>E.coli</i> E57 typing serum O138:K81	Rabbit serum containing antibodies to <i>Escherichia coli</i> E57 (O138:K81)
RAB0092	<i>E.coli</i> E6811 typing serum O141:K85ab	Rabbit serum containing antibodies to <i>Escherichia coli</i> E68II (O141:K85ab)
RAB0093	<i>E.coli</i> E145 typing serum O141:K85ac	Rabbit serum containing antibodies to <i>Escherichia coli</i> E145 O141:K85ac
RAB0094	<i>E.coli</i> G1253 typing serum O147:K89,K88ac	Rabbit serum containing antibodies to <i>Escherichia coli</i> G1253
RAB0095	<i>E.coli</i> Abbotstown typing serum O149:K91,K88ac	Rabbit serum containing antibodies to <i>Escherichia coli</i> O149:K91,K88ac (Abbotstown)

Porcine Antisera - Polyclonal: Polyvalent B and constituents

A comprehensive range of antisera for use in Slide Agglutination Tests for the presumptive identification of pathogenic *E.coli* from pigs. All *E.coli* antisera contain agglutinins to both 'O' and 'K' antigens. Sera are of rabbit origin and are presented in liquid form ready to use. Store at 4°C.

Code	Name	Description
RAB0087	<i>E.coli</i> Polyvalent B typing serum	Rabbit serum containing antibodies to <i>Escherichia coli</i> P16,

Code	Name	Description
		V142, V189, non-VT E4, and V17. Non-VT E4 contains antibodies to Escherichia coli O139:K82. This product was produced from a non verocytotoxic (non-VT) strain.
RAB0096	<i>E.coli</i> P16 typing serum O9:K103,987P	Rabbit serum containing antibodies to Escherichia coli P16 O9:K103, 987p
RAB0097	<i>E.coli</i> V142 typing serum O64:K 'V142'	Rabbit serum containing antibodies to Escherichia coli V142 O64:K'V142'
RAB0098	<i>E.coli</i> V189 typing serum O108:K 'V189'	Rabbit serum containing antibodies to Escherichia coli V189 (O108:K'V189')
RAB0099	<i>E.coli</i> E4 typing serum O139:K82	Rabbit serum containing antibodies to Escherichia coli E4 (O139:K82)
RAB0100	<i>E.coli</i> V17 typing serum O157:K 'V17'	Rabbit serum containing antibodies to Escherichia coli V17 O157:K'V17'.

Porcine Antisera - Polyclonal: Polyvalent C and constituents

A comprehensive range of antisera for use in Slide Agglutination Tests for the presumptive identification of pathogenic *E.coli* from pigs. All *E.coli* antisera contain agglutinins to both 'O' and 'K' antigens. Sera are of rabbit origin and are presented in liquid form ready to use. Store at 4°C.

Code	Name	Description
RAB0088	<i>E.coli</i> Polyvalent C typing serum	Rabbit serum containing antibodies to Escherichia coli V50, V79, V165 and V113.
RAB0101	<i>E.coli</i> V50 typing serum O10:K 'V50'	Rabbit serum containing antibodies to Escherichia coli V50 O10:K'V50'.
RAB0102	<i>E.coli</i> V79 typing serum O35:K 'V79'	Rabbit serum containing antibodies to Escherichia coli V79 O35:K'V79'.
RAB0103	<i>E.coli</i> V165 typing serum O115:K 'V165'	Rabbit serum containing antibodies to Escherichia coli V165 O115:K'V165'.
RAB0104	<i>E.coli</i> V113 typing serum O119:K'V113'	Rabbit serum containing antibodies to Escherichia coli V113 (O119:K'V113')
RAB0108	<i>E.coli</i> K91 typing serum containing antibodies to <i>E.coli</i> antigen K91	Rabbit serum containing antibodies to Escherichia coli K91
RAB0109	<i>E.coli</i> K89 typing serum containing antibodies to <i>E.coli</i> antigen K89	Rabbit serum containing antibodies to Escherichia coli antigen K89 intended for use in slide agglutination tests for the presumptive identification of pathogenic <i>E.coli</i> from pigs.
RAB0110	<i>E.coli</i> K103 typing serum containing antibodies to <i>E.coli</i> antigen K103	Rabbit serum containing antibodies to Escherichia coli K103
RAB0975	<i>E.coli</i> K87 typing serum containing antibodies to <i>E.coli</i> antigen D271(O2:K87)	Rabbit serum containing antibodies to Escherichia coli K87

Diagnostic Kits

FIMBEX kits combine latex agglutination technology with monoclonal antibody specificity to provide rapid, easy-to-perform tests for the presence of fimbrial adhesins on cultures of enterotoxigenic *E.coli* (ETEC). Coloured latex makes test results easy to read and end-points are reached in a few minutes. Each kit is specific for one of the fimbrial adhesins and contains disposable agglutination test cards and reagents for 60 tests performed individually, or 90 tests when performed in multiples of three. In addition to the monoclonal antibody-coated latex, the kit also contains a control reagent to detect non-specific agglutination, an inactivated positive control antigen, and suspension buffer, all supplied in convenient dropper bottles; only mixing sticks are required in order to carry out the test. Reagents are presented in liquid form and are ready for use.

Code	Name	Description
RAI0261	FIMBEX K99	A latex agglutination test comprising latex particles coated with monoclonal antibody (MAb) to detect the K99 (F5) fimbrial adhesin of cultured enterotoxigenic <i>E. coli</i> . The coloured latex particles aid visual interpretation and the MAb ensures specificity. A control latex (latex particles coated with mouse serum) identifies non-specific reactions and a positive control antigen (a killed cell preparation of K99 fimbrial adhesins) is included to ensure that the latex are valid for testing.
RAI0263	FIMBEX K88	A latex agglutination test kit utilizing latex particles coated with monoclonal antibody (MAb) that detect the K88 (F4) fimbrial adhesin of cultured enterotoxigenic <i>E. coli</i> . The latex particles are coloured to aid visual interpretation and the MAb ensures specificity. A control latex (latex particles coated with mouse serum) identifies non-specific reactions and a positive control antigen (a killed cell preparation of K88 fimbrial adhesins) is included to ensure that the latex are valid for testing.

Mycoplasma

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Diagnostic Kits

Code	Name	Description
RAI6223	BoviLAT	A latex agglutination test for the serological detection of Contagious Bovine Pleuropneumonia (CBPP). Can be used on the farm or in the laboratory. There is sufficient reagent for 100 tests.
RAI6224	CapriLAT	A latex agglutination test for the serological detection of Contagious Caprine Pleuropneumonia (CCPP). Can be used on the farm or in the laboratory. There is sufficient reagent for 100 tests.

Salmonella

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigens

Code	Name	Description
RAA0191	<i>Salmonella Pullorum</i> stained antigen	Inactivated antigen for use in the Rapid Slide Agglutination Test. Contains both standard and variant strains of S.Pullorum stained with crystal violet and suspended in buffered formol saline. There is sufficient reagent for 500 tests.

Avian Adenovirus (CELO)

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description
RAA0026	Avian Adenovirus (CELO)	Live antigen prepared for use in the Gel Immunodiffusion Test. Grown in the chorio-allantoic membrane of Specific Pathogen Free (SPF) hen eggs.

Antisera

Code	Name	Description
RAB0027	Avian Adenovirus (CELO) positive serum	Chicken antiserum to avian adenovirus (CELO) for use as a positive reference serum in the Gel Immunodiffusion Test.

Avian Influenza Virus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description	
RAA7002	H5N1 Inactivated Antigen	A/Ck/Scot/59 (H5N1) inactivated antigen.	PT
RAA7003	H5N2 Inactivated Antigen	A/Ost/Den/72420/96 (H5N2) inactivated antigen.	PT
RAA7006	H7N1 Inactivated Antigen	A/Afr.starling/Eng/983/79 (H7N1)inactivated antigen	PT
RAA7007	H7N7 Inactivated Antigen	A/Tky/Eng/647/77 (H7N7) inactivated antigen.	PT
RAA7008	H5N3 Inactivated Antigen	A/Teal/England/7394-2805/06 (H5N3) inactivated antigen.	PT

Antisera

Code	Name	Description	
RAB7000	H5N1 Antiserum	Chicken antiserum to A/Ck/Scot/59 (H5N1)	PT
RAB7001	H5N2 Antiserum	Chicken antiserum to A/Ost/Den/72420/96 (H5N2).	PT
RAB7004	H7N1 Antiserum	Chicken antiserum to A/Afr. starling/Eng/983/79 (H7N1).	PT
RAB7005	H7N7 Antiserum	Chicken antiserum to A/Tky/Eng/647/77 (H7N7).	PT
RAB7009	H5N3 Antiserum	Chicken antiserum to A/Teal/England/7394-2805/06	PT

Avian Paramyxovirus (PMV 3)

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antisera

Code	Name	Description
RAB0033	PMV 3 positive serum	<p>Chicken antiserum to avian paramyxoviruses sub-type 3. Prepared as a positive control serum to be used in the Haemagglutination Inhibition Test.</p> <p>Other subtypes are available for commercial supply but they are strictly limited. Please contact Product Sales for details.</p>

Avian Reovirus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description
RAA0028	Avian Reovirus	Live antigen prepared for use in the Gel Immunodiffusion Test. Grown in the chorio-allantoic membrane of SPF hen eggs.

Antisera

Code	Name	Description
RAB0029	Avian Reovirus positive serum	Chicken antiserum to avian reovirus for use as a positive reference serum in the Gel Immunodiffusion Test.

Egg Drop Syndrome '76

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description
RAA0081	Egg drop syndrome '76	Live antigen produced by growth of the EDS '76 virus in the allantoic sac of duck eggs and harvested as allantoic fluid. Intended for use as an antigen in the Haemagglutination Inhibition Test.

Antisera

Code	Name	Description
RAB0082	Egg drop syndrome '76 positive serum	Chicken antiserum to EDS '76 virus for use as a positive reference serum in the Haemagglutination Inhibition Test.

Infectious Bronchitis Virus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigens

Live antigen produced by growth of the specified strain of infectious bronchitis virus in the SPF hen eggs and harvested as allantoic fluid. Enzyme treated; intended for use as antigen in the Haemagglutination Inhibition Test.

Code	Name	
RAA0121	Infectious bronchitis virus M41	PT
RAA0715	Infectious bronchitis virus D274	PT
RAA0716	Infectious bronchitis virus D1466	PT
RAA2003	Infectious bronchitis virus CVL793/B	PT
RAA5041	Infectious bronchitis virus 755/03	PT

Antisera

Chicken antiserum to infectious bronchitis virus for use as a positive reference serum in the Haemagglutination Inhibition Test.

Code	Name	
RAB0122	Infectious bronchitis virus positive serum M41	PT
RAB2004	Infectious bronchitis virus positive serum CVL793/B	PT
RAB5040	Infectious bronchitis virus positive serum 755/03	PT

Infectious Bursal Disease (Gumboro Disease) Virus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description	
RAA0123	Infectious bursal disease virus	Live antigen (Type 1) produced from the bursae of infected SPF chickens. Prepared for use as antigen in the Gel Immunodiffusion Test.	PT

Antisera

Code	Name	Description	
RAB0124	Infectious bursal disease virus (type 1) positive serum	Chicken antiserum to infectious bursal disease virus (type 1) for use as a positive reference serum in the Gel Immunodiffusion Test.	PT

Marek's Disease Virus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description
RAA0156	Marek's disease virus	Live antigen for Gel Immunodiffusion Test (HPRS-16).

Antisera

Code	Name	Description
RAB0157	Marek's disease virus positive serum	For use as a positive control serum for the Gel Immunodiffusion Test.

Newcastle Disease Virus

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antigen

Code	Name	Description
RAA0158	Newcastle disease virus	Inactivated antigen for Haemagglutination Inhibition Test.

Antisera

Code	Name	Description
RAB0155	Newcastle disease virus positive serum	Chicken antiserum to Newcastle disease virus for use as a positive reference serum in the Haemagglutination Inhibition Test.

Bovine Viral Diarrhoea / Border Disease Viruses

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antibodies - Monoclonal (mAb) - Murine origin: Pan-pestivirus reactive monoclonal antibodies

A pool of two non-competing monoclonal antibodies, which have reacted with all pestiviruses tested at APHA to date, including BVD, CSF and BD viruses as well as uncharacterised viruses from other ruminants. Suitable for indirect labelling techniques for detection of pestivirus antigens in cell cultures and tissue sections.

We are able to offer our range of monoclonal antibodies conjugated to horse radish peroxidase and biotin upon request.

Code	Name	Description	
RAE0801	WB103/105 Monoclonal Antibody to Pestiviruses (Group Specific)	<p>A pool of two murine monoclonal antibodies WB103 (class IgG1) and WB105 (class IgG2a), prepared by fusion with NS-1 myeloma cells. The hybridoma supernatants were concentrated by ultrafiltration and affinity purified using Protein-G. The finished products were standardised to a concentration of 1 mg/ml by BCA assay and pooled at a ratio of 1:1. The monoclonals were raised against the Oregon C24V strain of BVDV from USA. The final product was tested by IPX assay against the C24V virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin. Pooled mAbs available individually on request.</p>	PT

Antibodies - Monoclonal (mAb) - Murine origin: Bovine viral diarrhoea virus (BVDV) monoclonal antibodies

A pool of four monoclonal antibodies, which detects a wider range of BVDV antigens in tissue cultures. This pool is preferable to RAE0801 for detecting bovine pestiviruses.

We are able to offer our range of monoclonal antibodies conjugated to horse radish peroxidase and biotin upon request.

Code	Name	Description	
RAE2020	Monoclonal Antibodies to Pestiviruses (mAb mix) (BVD Specific)	<p>A pool of four murine monoclonal antibodies, WB103 (class IgG1), WB112 (class IgG2a), WB166 (class IgG1) and WB214 (class IgG1), each prepared by fusion with NS-1 myeloma cells. The hybridoma supernatants were concentrated by ultrafiltration and affinity purified using Protein-G. The finished products were pooled in a ratio of 1:1:1:1 and the final product was standardised to a concentration of 1 mg/ml by BCA assay. The WB103 and WB112 monoclonals were raised against the Oregon C24V strain of BVDV from USA. The WB166 and WB214 monoclonals were raised against the NADL strain of BVDV from USA. The final product was tested by IPX assay against the C24V and NADL viruses and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin. Pooled mAbs available individually on request.</p>	PT

Antibodies - Monoclonal (mAb) - Murine origin: Bovine viral diarrhoea (BVD) and Border disease (BD) virus monoclonal antibodies

Ruminant pestiviruses can be divided into BVDV1, BVDV2 and BDV. No single monoclonal antibody binds specifically to all three subtypes but the products below taken together will recognise most strains and indicate to which subtype they belong. None of these monoclonal antibodies bind to the CSF virus, so the panel may be used in conjunction with RAE0242 or RAE0826 for the differentiation of BVD/BD and CSF isolates from pigs as recommended by the EC.

Further discriminatory mAbs are available on request. Please contact Product Sales.

We are able to offer our range of monoclonal antibodies conjugated to horse radish peroxidase and biotin upon request.

References: Edwards S, Sands J J, Paton D J (1991) Vet. Microbiol 29, 101-108. Paton D J, Sands J J, Edwards S (1994) Arch.Virol. 135, 241-252. Edwards S, Sands J J, Harkness J W (1988) Arch.Virol. 102,197-206.

Code	Name	Description	
RAE0241	WB160 Monoclonal Antibody to Pestiviruses (BVDV/BDV Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the NADL strain of BVDV from the USA. The final product was tested by IPX assay against the NADL virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>	PT
RAE0822	WB162 Monoclonal Antibody to Pestiviruses (BVDV-1 Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the Oregon C24V strain of BVDV from the USA. The final product was tested by IPX assay against the C24V virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>	PT
RAE0823	WB210 Monoclonal Antibody to Pestiviruses (BVDV-1 Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G by BCA assay. The finished product was standardised to a concentration of 1 mg/ml. The monoclonal was raised against the Oregon C24V strain of BVDV from the USA. The final product was tested by IPX assay against the C24V virus and found to have a working strength of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>	PT
RAE0824	WB215 Monoclonal Antibody to Pestiviruses (BVDV-1 Specific)	<p>A murine class IgG2b monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the Oregon C24V strain of BVDV from the USA. The final product was tested by IPX assay against the C24V virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse</p>	PT

Code	Name	Description
		radish peroxidase and biotin.
RAE0825	WS363 Monoclonal Antibody to Pestiviruses (BDV Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the SF87/6 strain of border disease virus isolated from a pig in the UK. The final product was tested by IPX assay against the SF87/6 virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>
RAE0992	WS433 Monoclonal Antibody to Pestiviruses (BVDV-2 Specific)	<p>A murine class IgG2a monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the Vosges strain of atypical pig pestivirus from France. The final product was tested by IPX assay against the Vosges virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>
RAE0993	WS538 Monoclonal Antibody to Pestiviruses (BVDV-2 Specific)	<p>A murine class IgG2a monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the UK pestivirus 59386, isolated from a lamb in 1985. The final product was tested by IPX assay against the 59386 virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>
RAE4173	WB166 Monoclonal Antibody to Pestiviruses (BVD/BD Specific)	<p>A murine class IgG1 monoclonal antibody prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the NADL strain of BVDV from USA. The final product was tested by IPX assay against the NADL virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>
RAE4174	WB214 Monoclonal Antibody to Pestiviruses (BVD/BD Specific)	<p>A murine class IgG1 monoclonal antibody prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the NADL strain of BVDV from USA. The final product was tested by IPX assay against the NADL virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>

Code	Name	Description
RAE4750	WS371 Monoclonal Antibody to Pestiviruses (BDV Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the SF87/6 strain of border disease virus isolated from a pig in the UK. The final product was tested by IPX assay against the SF87/6 virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>
RAE4751	WS373 Monoclonal Antibody to Pestiviruses (BDV Specific)	<p>A murine class IgG1 monoclonal antibody, prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the SF87/6 strain of border disease virus isolated from a pig in the UK. The final product was tested by IPX assay against the SF87/6 virus and found to have a working dilution of at least 1/100.</p> <p>We offer all of our monoclonal antibodies conjugated to horse radish peroxidase and biotin.</p>

Antibodies - Polyclonal

Code	Name	Description
RAB0042	Bovine Viral Diarrhoea virus positive serum	<p>For use as a positive control for serum antibody assays, in antigen detection procedures and within research applications. Hyperimmune bovine serum derived from new born calves.</p>

Classical Swine Fever Virus

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Antibodies - Monoclonal

Two monoclonals which detect the CSF virus specific antigenic domain on the major envelope glycoprotein of the virus. They bind to all strains of the CSF virus and with no other pestiviruses. The monoclonals may be used for the specific identification of CSF virus isolates as recommended by the EC. Reference: Lin M, Lin F, Mallory M, Clavijo A (2000) JVirol 74, 11619-11625
Not available in UK without prior approval of Defra. Please contact Product Sales for further details.

Code	Name	Description	
RAE0242	WH211 Monoclonal Antibody to Pestiviruses (Classical Swine Fever Specific)	A murine monoclonal antibody WH211 (class IgG1), prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the Baker A strain of CSF virus from the USA. The final product was tested by IPX assay against the Baker A virus and found to have a working dilution of at least 1/100.	PT
RAE0826	WH303 Monoclonal Antibody to Pestiviruses (Classical Swine Fever Specific)	A murine monoclonal antibody WH303 (class IgG1), prepared by fusion with NS-1 myeloma cells. The hybridoma supernatant was concentrated by ultrafiltration and affinity purified using Protein-G. The finished product was standardised to a concentration of 1 mg/ml by BCA assay. The monoclonal was raised against the 86/2 strain of CSF virus from the UK. The final product was tested by IPX assay against the SF86/2 virus and found to have a working dilution of at least 1/100. MAb available in conjugated form on request.	PT

Maedi-Visna

If a product is covered by a Proficiency Testing Scheme click the PT icon for further information.

Antisera

PLEASE NOTE These antisera are suitable for use with the MAEDITECT diagnostic kit. One vial of freeze-dried reagent to be stored at 4°C. Once reconstituted with 2ml of sterile distilled water, store at 4°C for up to one month.

Code	Name	
RAB0858	MV/CAE negative control serum	PT
RAB0969	MV/CAE weak positive serum to gp-135	PT
RAB0970	MV/CAE positive serum to gp-135	PT

Diagnostic Kits

Code	Name	Description	
RAI0259	MAEDITECT `100`	Test kits for the serological diagnosis of Maedi-Visna (MV) in sheep by the Agar Gel Immunodiffusion Test (AGIDT). Kits consist of precipitating antiserum to the glycosylated envelope polypeptide (gp 135) antigen of MV virus and MV antigen. MAEDITECT `100` contains sufficient reagents for 100 tests.	PT
RAI0260	MAEDITECT `1000`	Test kits for the serological diagnosis of Maedi-Visna (MV) in sheep by the Agar Gel Immunodiffusion Test (AGIDT). Kits consist of precipitating antiserum to the glycosylated envelope polypeptide (gp 135) antigen of MV virus and MV antigen. MAEDITECT `1000` contains sufficient reagents for 1000 tests.	PT
RAI0267	Agar gel `100/30`	The `100/30` agar gel pack contains sufficient gel for 100 tests.	
RAI0268	Agar gel `1000/300`	The `1000/30` agar gel pack contains sufficient gel for 1000 tests.	
RAK0266	Agar gel cutter		

Miscellaneous

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Chick Embryo Cells

Code	Name	Description
RAF3740	Chick Embryo Fibroblasts (CEF)	A Suspension of fibroblast cells prepared from 9 - 11 day old chick embryos seeded at least 1×10^6 cells per ml.

Bovine Prion Protein (PrP) Monoclonal Antibody

Code	Name	Description
RAE5037	Bovine PrP R145/20/1/2/1	A monoclonal antibody from a mouse-rat heterohybridoma, prepared by the fusion of rat splenocytes. Detects PrP in sheep and cattle, but not mouse or rat. MAB available in conjugated form on request.

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Negative Control Serum

Code	Name	Description
RAB0631	Negative Control Serum	Specific Pathogen Free (SPF) chicken serum prepared for use as a negative control in serological tests.