biobest 2024 Price List

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Welcome to the 2024 Biobest price list and brochure. Biobest offer a comprehensive veterinary laboratory service focused on quality, customer service and value for money. Initially Biobest was established as a referral laboratory specialising primarily in virology and over the past 20 years our service has expanded to incorporate all the elements of a full laboratory provision for the veterinary market. In recent years we have also invested heavily in laboratory automation and robotics in order to further improve the service we offer our customers.

Our skills and the quality standards we operate to allow us to provide bespoke contract research services to the wider veterinary market. This includes vaccine safety and efficacy studies, disinfectant trials, composter validations and GMP testing of human and veterinary medicinal products.

Over the past 20 years we have also developed our stem cell services. Initially we offered autologous stem cell products for the equine industry and were the first commercial VMD approved Equine Stem Cell Centre. Our services have recently expanded to include stem cells for canine and feline patients and our dedicated vets and cell scientists are always happy to discuss potential cases and applications.



In order to ensure that your samples are tested efficiently, you should aim to have them delivered to us <u>the day before</u> tests are set up. We will always aim to provide a quick turnaround time for all samples, but if you have a specific urgent case please contact us directly to discuss your requirements.

There are a few simple steps you can take when submitting samples to ensure that they are tested as quickly as possible and allow us to provide you with the best possible customer service:

- Ensure that submission forms are completed in full.
- Ensure you have clearly indicated what testing is required for every sample submitted.
- For farm animal samples remember to include the animal ID(s) and the farmer's name on the submission form. We can supply sample labels and pre-populated submission forms for cattle health scheme members who have granted us CTS access or nominated us as a ScotMoves agent.
- Where relevant, include a concise clinical history to assist our vets when writing reports.
- For tissue, swab, cytology smears and fluid, please include details of the sampling site.
- It is important that you send the correct sample type and sufficient volume for your chosen test(s).
- Please ensure that the lids of all sample tubes and pots are leakproof and firmly closed.
- Do not send faecal samples in plastic bags or gloves, instead use rigid plastic pots.
- When sending a large number of samples try to ensure tubes are in numerical order.

DISCLAIMER - All standard testing days subject to change without prior notice. Turnaround times may increase as a result of problems with tests or samples.

The Biobest team have strong and varied academic and technical experience, as well as enthusiasm for delivering the best for our customers. We offer our unique blend of expertise in virology and molecular testing with commercial dynamism and excellent customer service.



Paul Burr BSc(VetSci)Hons BVM&S PhD MRCVS - Laboratory Director

Paul has 5 years experience of farm practice, followed by over 20 years of diagnosis and research in infectious diseases. Advising both vets and farmers on infectious disease problems and health scheme operation remains an important and enjoyable part of his role at Biobest. Paul has regularly presented papers at British Cattle Veterinary Association meetings and often does talks to vets and farmer meetings on infectious disease.



Stuart Marshall BSc (Hons) MBA - Chief Operations Officer

Stuart graduated from the University of Edinburgh with an honours degree in Virology in 1998. He joined Biobest in 1999 following a 12-month placement with the IBR research team at the Moredun Research Institute. Stuart also has an MBA from the University of Warwick where his thesis was on the use of lean manufacturing techniques within the laboratory environment. In his role as Chief Operations Officer of the Biobest lab group Stuart has day-to-day management responsibility for all the Biobest lab sites.



Susan Duthie BVM&S PhD CertVR MRCVS - Veterinary Manager

Susan graduated from the University of Glasgow Vet School and went straight into mixed practice. Five years later, she returned to Glasgow to complete a PhD encompassing veterinary virology. After completing a related post-doctoral study, she joined Biobest in 2003. Susan has daily involvement with the HiHealth Herdcare Cattle Health Scheme, providing reports and advice for members, and is a member of the CHeCS Technical group.



Jennifer Bunyan BSc (Hons) Cert Mgmt (Open) - Laboratory Manager

After graduating with an honours degree in Neuroscience from the University of Edinburgh, Jennifer started with Biobest in 2001. Since then Jennifer has progressed within the company to Laboratory Manager overseeing a team of 22 scientists and technicians. In 2010 she also obtained an Open University professional certificate in management winning the Derek Pugh award for best student. At Biobest she takes responsibility for all aspects of laboratory management to ensure we provide our customers with the highest possible standards of testing in an efficient and timely fashion.



Ami Patrick Bsc (Hons) - Cell and Stem Cell Culture Supervisor

Ami graduated from the University of Edinburgh in 2015 with a BSc in Biological Sciences (Zoology). Since joining Biobest in 2016, Ami has worked in several different departments, being promoted to Cell Culture Supervisor in 2022 and, most recently, taking on the role of Cell and Stem Cell Culture Supervisor in 2023. Ami predominantly works in our stem lab, culturing canine, equine and feline mesenchymal stem cells but is also a member of our Technical Team, maintaining stock levels of reagents.



Maggie Carson BSc - Farm Animal Manager

Maggie joined Biobest in 2014 as the bovine administrator for the HiHealth Herdcare team. She was promoted to Deputy Farm Animal Manager in 2016 and subsequently to Farm Animal Manager in 2019. A University of Edinburgh chemistry graduate, she spent a few summers working and travelling in America before taking on her role here at Biobest. Maggie is responsible for the day-to-day management of bovine testing; writing reports and preparing accreditation and sales certificates. She also plays an active role in advising new and current members.





Karen Johnston Bsc MBE - Deputy Cattle Health Scheme Manager

Karen joined the Biobest team in 2011 when HiHealth and Herdcare merged to form HiHealth Herdcare and has been working from the Orkney office based within Orkney Auction Mart since 2001. As well as being secretary of Orkney Livestock Association she is Deputy Cattle Health Scheme Manager of HiHealth Herdcare. Karen was awarded an MBE in 2011 for services to farming. Her main roles include scheme promotion, member support and livestock sales.



Rebecca Mearns, MA VetMB CertSHP MRCVS - Senior Veterinary Advisor

Rebecca joined Biobest as Senior Veterinary Advisor in January 2015 to offer advice and expertise across the board on ruminants (cattle, sheep and goats). Before starting her role at Biobest, Rebecca was a Veterinary Investigation Officer at Penrith Veterinary Investigation Centre and prior to that worked in a similar role at SAC Edinburgh, having started out in general veterinary practice. She is an RCVS Advanced Practitioner in Sheep Health and Production and current Senior Vice-President of the Sheep Veterinary Society.



Lucy Fletcher BVetMed MRCVS - Veterinary Advisor

Lucy graduated from the Royal Veterinary College and since has worked solely in farm animal practice, mostly in the South West of England then locuming around Scotland and New Zealand. She joined the Biobest team in 2023 to pursue her interest in infectious disease control. Lucy's role is mainly advising vets and farmers and reporting results.



Emily Anderson BVM&S MVetSci MRCVS - Veterinary Advisor

Emily joined the Biobest veterinary team at the start of 2021. Her role includes reporting and providing veterinary support to submitting vets and health scheme members. She graduated in 2006 from the Royal (Dick) Vet School and has subsequently worked in mixed practice in Aberdeenshire, the Scottish Borders and New South Wales, Australia. She has also undertaken voluntary veterinary work with charities in Thailand, Fiji and the Cook Islands. Most recently she returned to Edinburgh to complete a research Masters on bovine TB.



Claire Pearson BVetMed MRCVS - Veterinary Advisor

Claire joined the Biobest veterinary team at the start of 2021. She graduated from the Royal Veterinary College in 1999 and worked in mixed practice for a number of years before moving on to small animal practice. She has worked in charity and private sectors around the UK. Claire is excited to be a part of a team dedicated to improving the health and welfare of farm animals. Claire's roles at Biobest include reporting and providing veterinary support to submitting vets and health scheme members.



Heather Nicholls BVM&S BVSc CertAVP MRCVS - Veterinary Advisor

Heather graduated from the University of Edinburgh (Royal Dick) Vet School in 2012, completing an Honours degree in Infectious Diseases as part of her studies. After gaining a broad range of clinical experience in equine, small animal and farm animal practice in different regions of the UK, she decided to return to her interest in infectious diseases and joined the Biobest team in 2021. Heather provides reports and advice to vets and farmers including members of HiHealth Herdcare.



Victoria Enoch BVM&S CertAVP MRCVS - Veterinary Advisor

After graduating from Edinburgh in 2005, Vicky began her veterinary career in mixed practice before moving into small animal and gaining her certificate in advanced veterinary practice. She has worked in both private and charity sectors and was involved in undergraduate teaching at the Royal (Dick) School of Veterinary Studies for several years. Vicky joined Biobest in summer 2021 as a Veterinary Advisor and her responsibilities include reporting results and providing advice to both vets and farmers.



Supplying specialist contract research and laboratory support services in infectious diseases, clinical pathology and cell culture.

Working with the major pharmaceutical companies and contract research organisations to complete non-regulatory research studies.

Additional activities include disinfectant testing and virological reagent sales.

We hold a GMP Test Site (Biologicals) certificate from the MHRA. This means that we are authorised to perform biological QC testing in accordance with Article 111(1) of directive 2001/83/EC.

biobest diagnostics

Providing testing services for a wide range of species including cattle, sheep, goats, dogs, cats, horses, pigs, birds, poultry and fish, with a particular emphasis on virology, DNA testing and serology. As a specialist laboratory we have the skills to develop and use the best available assay technology.

Biobest gives you:

- The best available diagnostic test
- Expert interpretation on all test results
- Fast and efficient service
- The best prices



A leading CHeCS accredited cattle health scheme provider. HiHealth Herdcare is a partnership with the farmer, their practice vet and the cattle team at Biobest. Together we can work within the guidelines of CHeCS to help you:

- Eliminate BVD, Johne's, IBR, Lepto and Neospora from your herd and obtain accreditation
- Improve biosecurity on your farm and prevent reintroduction of the five diseases into your herd
- Help you identify accredited sources of breeding cattle

biobest

diagnostics

Providing a comprehensive service for all species covering haematology, biochemistry, cytology, histopathology, parasitology and bacteriology.

Biobest ClinPath is an independent, client-orientated quality service providing:

- Analytical accuracy, speed and reliability
- Access to a veterinarian to discuss cases
- Result interpretation
- Provision of information rich,
- jargon free reports
- Flexibility to suit individual practice needs
- Value for money



flockcare

A flexible membership plan helping you to get the most out of lab diagnostics for your sheep. Members receive expert advice and discounted testing in the following areas to improve flock health and productivity:

- Parasitology
- Clinical chemistry including trace elements
- Infectious disease testing

Testing can be used to monitor flock status and to investigate common problems such as barren ewes, thin ewes, ill thrift in lambs and worm and fluke control.

The team at Biobest work with farmers and their own vet to provide guidance and advice.



Royal Mail should accept all samples for routine diagnostic testing. Royal Mail do not accept Category A infectious material, but this should not affect routine veterinary samples. General guidance is that samples (blood, tissue, excreta, secreta etc.) from humans or animal are considered to be Category B infectious substances. These samples are then assigned to UN3373 and must be packaged according to IATA PI:650 for transport. There is an added complication that for Category B samples each individual package must hold a total of less than 50ml of liquid or 50g of tissue.

Samples which are taken for routine screening from healthy animals are exempt from UN3373. Specimens for which there is minimal likelihood that pathogens are present are not subject to the regulations (meaning volumes over 50ml/50g can be sent) if the sample is sent in a manner which will prevent any leakage and which is marked with the words "Exempt animal specimen" or "Exempt human specimen" as appropriate.

Please ensure all samples arrive the day before the test is scheduled to be set up.

Check our 'Sending Samples' guide on p24-25. Incorrectly packaged samples could result in an increased Health and Safety risk to our staff and/or cause additional time and cost in processing. We reserve the right to add an additional charge to cover these costs.

Farm Animal Tests

| Ð | Cattle | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
|--------|---|--|---------------|---------------|--|---|
| Bovine | Antibody assays | | | | | |
| 6 | (Most tests can be done on | | | | | |
| Ω | BVD ELISA | Serum Bulk/Individual Milk | Mon, Wed, Fri | Up to 3 days | 4.75 6.00 | BVDS |
| | Johne's ELISA | Serum Bulk/Individual Milk | Mon, Wed, Fri | Up to 3 days | 6.00 5.50 (30+) 6.30 6.00 (30+) | JOHNES JOHNES_30 JOHNES_MLK JOH_30_MLK |
| | Leptospira hardjo ELISA | Serum Bulk/Individual Milk | Tues, Thurs | Up to 4 days | 7.00 7.30 | LEPTOS |
| | IBR ELISA | Serum or Bulk/Individual Milk | Mon, Wed, Fri | Up to 3 days | 6.60 | IBRS |
| | IBR gE marker ELISA | Serum Bulk/Individual Milk | Tues | Up to 7 days | 9.55 19.00 | IBR_GE_SRM IBR_GE_MLK |
| | Neospora caninum ELISA | Serum Bulk/Individual Milk | Thurs | Up to 7 days | 9.20 8.00 (40+) 12.00 | NEO_ELISA NEO_40 |
| | <i>Fasciola hepatica</i> (Liver Fluke) ELISA | Serum Bulk/Individual Milk | Thurs | Up to 7 days | 9.45 9.60 | B_FLUKE |
| | Salmonella ELISA | Serum or Bulk/Individual Milk | Fri | Up to 15 days | 15.00 | SALM_ELISA |
| | RSV ELISA | Serum | Tues | Up to 7 days | 8.50 | RSVS |
| | PI3 ELISA | Serum | Tues | Up to 7 days | 8.50 | PI3S |
| | Mycoplasma bovis ELISA | Serum or Bulk/Individual Milk | Tues | Up to 7 days | 10.00 | M_BOVIS |
| | Total IgG | Serum Individual Milk/Colostrum | As requested | Up to 7 days | 40.00 45.00 | TOTAL_IGG |
| | Rotavirus serology | Colostrum or Individual Milk only | As requested | Up to 10 days | 110.00 | RVS |
| | Coronavirus serology | Colostrum or Individual Milk only | As requested | Up to 10 days | 110.00 | B_CSV |
| | Rotavirus/coronavirus combined | Colostrum or Individual Milk only | As requested | Up to 10 days | 200.00 | RVS_CSV |
| | Ostertagia ostertagi ELISA | Serum or Bulk/Individual Milk | Tues | Up to 7 days | 19.00 | OSTERTAG |
| | Q Fever | Serum | Thurs | Up to 14 days | 14.00 | QFEVER |
| | IBR or BVD VNT | Serum (minimum of 5 samples) | As requested | On demand | ΡΟΑ | IBR_VNT BVD_VNT |
| | Antigen detection | | | | | |
| | BVD antigen* | Serum or Ear tissue | Wed, Fri | Up to 4 days | 7.35 | BVDV |
| | Fluke coproantigen ELISA* Pool | 5g faeces Faeces (up to 10 samples) | Thurs | Up to 7 days | 15.00 30.00 | F_COPRO_BV F_COPRO_PL |

*Please note these samples need to be prepared for testing in advance and as such must arrive at Biobest at least 1 day prior to the official test day.

| | Cattle | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
|---|--|---|--------------------|---------------|-------------------------------------|--|
| | PCR | | | | | |
| | Johne's* Pool | >20g faeces Faeces (5 samples) | Wed | Up to 7 days | 38.60 47.00 | JOHNES_PCR JOH_PCR_PF |
| | BVD Individual* | Serum (Lithium heparin cannot be used) Bulk milk (semen/tissue on request) | Tues, Thurs | Up to 5 days | 28.50 37.00 | BVD_PCR BVD_PCR_BM |
| | BVD Tag and Test* | Ear tissue | Tues, Thurs | Up to 5 days | 7.00 | BVD_PCR004 |
| | BVD Test only * | Ear tissue | Tues, Thurs | Up to 5 days | 5.45 | BVD_PCR004 |
| | BVD Pool* | Serum (up to 10 samples) | Tues, Thurs | Up to 5 days | 41.40 | BVD_PCR003 |
| | Bactoproof™ mastitis PCR Detects 16 pathogens, see website for further details | Preserved milk (bronopol preservative advised) | Thurs | Up to 7 days | 70.00 | MAST-16 |
| | Respiratory PCR (see p25) | Individual swab | Thurs | Up to 7 days | 72.50 | RESP_PCR |
| | Respiratory PCR (see p25) | Individual BAL or tissue | Thurs | Up to 7 days | 90.00 | RESP_BAL |
| | Respiratory PCR (see p25) | Pool of up to 5 samples - must be same sample type | Thurs | Up to 7 days | 95.00 | RESP_POOL |
| | Leptospirosis PCR | Tissue, EDTA blood or urine | Mon | Up to 7 days | 80.00 | LEPTOS_PCR |
| 1 | Sheep | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
| | Serology | oumpre nequiremento | icoung buyo | Tarrieroana | | couc |
| i | MV/CAE | Serum | Tues | Up to 7 days | 10.40 | MV_CAE |
| | CLA ELISA | | Tues (fortnightly) | Up to 15 days | 11.05 | CLA |
| | EAE (<i>C. abortus</i>) ELISA | | Fri | Up to 10 days | 11.55 | EAE |
| | Toxo ELISA | | As requested | Up to 7 days | 11.55 | OV_TOXO |
| | Johne's disease ELISA | | Mon, Wed, Fri | Up to 3 days | 6.00 | JOHNES |
| | | Bulk Milk | - ,, | | 5.50 (30+) 6.30 6.00 (30+) | JOHNES_30 JOHNES_MLK JOH_30_MLK |
| | Sheep Scab ELISA | Serum | Thurs | Up to 7 days | 12.60 10.40 (2-11) 7.80 (12+) | SCAB_OVINE SCAB_OV_11 SCAB_OV_12 |
| | <i>Fasciola hepatica</i> (Liver Fluke) ELISA | Serum Bulk/Individual Milk | Thurs | Up to 7 days | 9.45 9.60 | B_FLUKE |
| | Border disease ELISA | Serum | As requested | Up to 7 days | 11.50 10.00 (10+) | BDV BDV_10 |
| | Teladorsagia circumcinta IgA ELISA | Serum | As requested | On demand | ΡΟΑ | T-CIRC_L4 |
| | Pathogen Detection | | | | | |
| | Fluke coproantigen ELISA* Pool | 2g faeces Faeces (up to 10 samples) | Thurs | Up to 7 days | 15.00 30.00 | F_COPRO_OV F_COPRO_PL |
| | Border disease PCR* Pool | Serum Serum (up to 10 samples) | Tues, Thurs | Up to 10 days | 28.50 41.40 | BDV_PCR BDV_POOL |
| | Johne's PCR* Pool | >20g faeces Faeces (up to 5 samples) | Wed | Up to 7 days | 38.60 47.00 | JOHNES_PCR |
| | ORF virus PCR* | Scab | As requested | Up to 10 days | 34.00 | ORF_PCR |
| | MCF PCR* | Heparin, EDTA or tissue | As requested | Up to 10 days | 34.00 | MCF_PCR |
| | | | - | | | |

Porcine

We offer a range of porcine serology tests for contract customers including PRRS serology and PCR, and serology for *M. hyopneumonia* and Swine Influenza. Please contact us for enquiries.

Ruminant **Routine biochemistry** Turnaround Price (£) Serum sample required Albumin, ALT, AP, AST, BHB, bilirubin, chloride, cholesterol, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, NEFA, phosphate, potassium, protein, sodium, total calcium, urea 1-4 tests 1-2 days 9.15 5-9 tests 1-2 days 6.00 10 or more tests (or in addition to any profile) 1-2 days 4.95

| Special biochemistry | Sample Requirements | Turnaround | Price (£) | Code |
|--|--|---------------|---------------------|----------------------|
| Copper | Serum or heparin | Up to 2 days | 10.00 7.90 (5+) | COPPER COPPER_4 |
| Copper liver | 5g fresh tissue | Up to 7 days | 44.00 | COPPER_LVR |
| Copper kidney | 5g fresh tissue | Up to 7 days | 44.00 | COPPER_KDY |
| Fibrinogen | Citrate blood | Up to 2 days | 21.00 | FIBRINOGEN |
| Haptoglobin | Serum | Up to 5 days | 22.05 | HAPTO GLOBIN |
| lodine - pooled up to 6 samples | Serum, heparin | Up to 1 month | 27.50 | PII |
| Iron | Serum | Up to 5 days | 26.50 | IRON |
| Iron (total iron binding capacity, % saturation) | Serum | Up to 5 days | 32.30 | IRON_BIND |
| Lead Bovine & Ovine only | Heparin | Up to 5 days | 26.70 | LEAD |
| Lead | 5g fresh tissue | Up to 7 days | 44.00 | LEAD_LVR |
| Manganese | Heparin | Up to 4 days | 24.00 | MN |
| Pepsinogen | Serum | Up to 7 days | 21.00 | PEPSINOGEN |
| Selenium (GSH-Px) | Heparin | Up to 5 days | 10.50 7.35 (5+) | GSH_PX GSH_PX_4 |
| Selenium | 5g fresh tissue | Up to 7 days | 44.00 | SELEN_LVR |
| Selenium | Serum or heparin | Up to 7 days | 23.00 | SELEN_SER |
| Vitamin A | Serum | Up to 7 days | 29.20 | VIT_A |
| Vitamin B12 | Serum | Up to 4 days | 13.30 12.25 (5+) | VIT_B12 VIT_B12_4 |
| Vitamin B12 | 5g fresh tissue | Up to 7 days | 44.00 | COBALT_LVR |
| Vitamin E | Serum | Up to 7 days | 29.20 | VIT_E |
| Vitamin A & E | 5g fresh tissue | Up to 7 days | 60.30 | VIT_E_LVR |
| Zinc | Serum (no metal, rubber stopper or gel tubes) | Up to 3 days | 16.70 10.00 (5+) | ZINC ZINC_5 |
| Zinc Sulphate turbidity test | Serum | Up to 7 days | 11.00 5.70 (+%) | ZST ZST_4 |
| | | | | |

| Histopathology & cytology | Sample Requirements | Turnaround | Price (£) | Code |
|--------------------------------------|--|--------------|-----------|-----------|
| Histopathology | Up to 3 tissues in 10% buffered formalin | Up to 7 days | 82.00 | HE_LA |
| Histopathology additional tissue | Tissue in 10% buffered formalin | Up to 7 days | 17.80 | HE_LA_ADD |
| Histopathology on post-mortem tissue | Up to 3 tissues in 10% buffered formalin | Up to 7 days | 95.00 | HE_PM |
| Cytology single site | Up to 4 smears | 1-2 days | 52.50 | CYT_SMEAR |
| Cytology additional site | Smear | 1-2 days | 31.50 | CYT_ADD |
| Large animal vasectomy check | Tissue in 10% buffered formalin | Up to 7 days | 70.00 | VASECTOMY |

10



| Biochemistry profiles & haematology | Sample Requirements | Turnaround | Price (£) | Code |
|---|---|--------------|---------------------|----------------------|
| Large animal full profile Routine haematology, albumin, AST, bilirubin, calcium, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, phosphate, total protein, urea | Serum, fluoride, EDTA and freshly made blood smears | Up to 2 days | 55.70 | PROF 012 |
| Large animal full profile, biochemistry only | Serum and fluoride | Up to 2 days | 41.50 | PROF 036 |
| Large animal liver profile Albumin, AST, bilirubin, GGT, GLDH, globulin, total protein | Serum | Up to 2 days | 31.00 | PROF 025 |
| Ruminant metabolic profile Albumin, BHB, calcium, globulin, glucose, magnesium, NEFA, phosphate, total protein, urea | Serum and fluoride | Up to 2 days | 32.30 28.90 (5+) | PROF 009 PROF 037 |
| Tissue analysis Copper, cobalt and selenium | 5g fresh tissue | Up to 7 days | 66.15 | PROF 059 |
| Downer cow profile AST, calcium, CK, magnesium, phosphate, urea | Serum | Up to 2 days | 27.90 | PROF 054 |
| Bovine trace element profile Copper, selenium (GSH-Px) | Serum and heparin | Up to 5 days | 18.90 13.40 (5+) | PROF 008 PROF 039 |
| Ovine trace element profile Copper, selenium (GSH-Px), Vitamin B12 | Serum and heparin | Up to 5 days | 27.00 23.05 (5+) | PROF 049 PROF 050 |
| Periparturient recumbent ewe profile BHB, calcium, magnesium | Serum | Up to 2 days | 15.50 | PROF 047 |
| Pre lambing profile Albumin, BHB, urea | Serum | Up to 2 days | 15.50 8.40 (5+) | PROF 046 PROF 052 |
| Camelid profile Large animal full profile plus smear exam for parasites | Serum, fluoride, EDTA and freshly made blood smears | Up to 3 days | 63.80 | PROF 057 |
| Routine haematology | EDTA and freshly made blood smears | 1-2 days | 33.00 | PROF 001 |
| Haemoglobin or PCV | EDTA | 1-2 days | 15.00 | НВ/НСТ |
| Smear examination for haematological parasites | EDTA and freshly made blood smears | 1-2 days | 24.00 | SMEAR_ HAEM |
| | | | | |

| Faecal | Sample Requirements | Turnaroun <u>d</u> | Price (£) | Code |
|--|----------------------|--------------------|---------------------|------------------------|
| Worm egg count & Coccidia Bovine, Ovine, Caprine | 5g faeces | 1 to 2 days | 16.70 14.45 (5+) | WORM_EGG WORM_4PLUS |
| Worm egg count & Coccidia Camelid | 5g faeces | Up to 5 days | 33.10 | WORM_CAM |
| Fluke Egg detection | 12g faeces | 1 to 2 days | 21.00 | FLUKE_EGG |
| Coccidia count | 5g faeces | 1 to 2 days | 13.40 | WORM_COCCI |
| Worm egg count, no Coccidia | 5g faeces | 1 to 2 days | 13.40 | WORM_ONLY |
| Pooling charge for up to 10 samples | 3g faeces per sample | n/a | 16.80 | CHRG_WORM |
| Worm egg count & Coccidia (add on to young ruminant profile) | 5g faeces | 1 to 2 days | 13.65 | WORM_ADD |
| Coccidial speciation - ovine | 5g faeces | Up to 7 days | 51.45 | COCCI_SPEC |
| Haemonchus stain | 5g faeces | Up to 7 days | 77.30 | HCHUS_DIFF |
| Lungworm larvae | 12g faeces | Up to 3 days | 21.80 | LUNG_LARV |
| Faecal Giardia (immunological) | 1g faeces | Up to 2 days | 24.15 | GIARDIA |
| Cryptosporidium | 1g faeces | 1 to 2 days | 24.50 | CRYPTO |
| Salmonella | 1g faeces | Up to 5 days | 25.45 | SALMONELLA |
| Rotavirus PAGE | 1g faeces | Up to 6 days | 27.00 | ROTA_PG |
| Coronavirus | 1g faeces | Up to 6 days | 16.30 | B_CVV |
| Rotavirus ELISA | 1g faeces | Up to 7 days | 16.30 | RVV |
| Pre-treatment composite faecal egg count as part of the Pathway testing in sheep | 15x3g faeces | 1 to 2 days | 36.75 | PATH_PRE |
| Post-treatment composite faecal egg count as part of the Pathway testing in sheep | 15x3g faeces | 1 to 2 days | 36.75 | PATH_POST |
| Kit supply and postage per sampling as part of the Pathway testing in sheep | | | 10.50 | PATH_SPKIT |
| Neonatal cattle enteritis profile (<5 days old) Bacteriology including Salmonella, Rotavirus, Coronavirus, Cryptosporidium, E.coli K99 | 5g faeces | Up to 7 days | 60.60 | PROF 030 |
| Neonatal small ruminant enteritis profile (<5 days old) Bacteriology including Salmonella, Rotavirus, Cryptosporidium | 5g faeces | Up to 7 days | 60.60 | PROF 060 |
| Young cattle enteritis profile (6-21 days old) Salmonella, Rotavirus, Coronavirus, Cryptosporidium | 5g faeces | Up to 7 days | 57.00 | PROF 029 |
| Young small ruminant enteritis profile (6-21 days old) Salmonella, Rotavirus, Coronavirus, Cryptosporidium | 5g faeces | Up to 7 days | 57.00 | PROF 061 |
| Growing cattle enteritis profile (>22 days old) Salmonella, worm egg count, coccidia count | 5g faeces | Up to 7 days | 32.55 | PROF 053 |
| Adult ruminant scour profile Johne's PCR, Fluke coproantigen ELISA, Salmonella | 10g faeces | Up to 7 days | 59.40 | PROF 056 |

| Endocrine | Sample Requirements | Turnaround | Price (£) | Code |
|--------------|---------------------|--------------|---------------------|-----------|
| T4 Bovine | Serum or heparin | Up to 4 days | 13.90 12.85 (5+) | T4_BOVINE |
| Progesterone | Serum | Up to 3 days | 38.85 | PROGESTER |

| Microbiology | Sample Requirements | Turnaround | Price (£) | Code |
|---|--|---|------------------------------|------------------------|
| Routine bacteriology (including culture & sensitivity) | Swab, tissue Milk | Up to 6 days | 41.50 26.90 (5+) 38.10 | BACTERIAL |
| Milk bacterial culture only | Milk (in sterile container) | Up to 7 days | 21.30 17.30 (5+) | BACT_MILK BACT_CULT |
| Bacterial culture and sensitivity (including Salmonella) | 1g faeces | Up to 7 days | 60.25 | BACT_FAEC |
| Routine anaerobic culture | Swabs or tissue | Up to 6 days | 66.20 | BACT_ANAER |
| E. coli K99 | 1g faeces | Up to 2 days | 28.80 | К99 |
| Yersinia culture | 1g faeces | Up to 7 days (28 days for negative) | 27.00 | YERSINIA |
| Clostridial toxins | 5ml small intestinal contents in sterile universal | Up to 8 days | 43.90 | CLOSTRID |

| Urinalysis and Dermatology | Sample Requirements | Turnaround | Price (£) | Code |
|--|---|--------------|-----------|------------|
| Urinalysis (USG, dipstick, microscopic deposit exam) | 10ml urine | Up to 7 days | 27.00 | PROF 020 |
| Full urinalysis (USG, dipstick, microscopic deposit exam, C&S) | 10ml urine | Up to 7 days | 81.50 | PROF 055 |
| Urine cytology by pathologist | 6ml urine | Up to 7 days | 53.00 | UR_CYT |
| Skin scraping for ectoparasites | Skin scraping | Up to 7 days | 23.10 | SKIN_SCRAP |
| Direct microscopic exam for bacteria and fungi | Skin/hair plucks (inc. roots and scabs) | Up to 2 days | 23.10 | MICRO_EXAM |
| Skin analysis panel | Skin/hair plucks (inc. roots and scabs) and skin scraping | Up to 7 days | 52.50 | PROF 045 |

Laboratory Supplies and Extras

We offer a range of consumables which can be ordered through the forms found on our website:

www.biobest.co.uk/biobest-submission-forms.

This includes naso-pharyngeal swabs for respiratory PCR and ear tags for BVD antigen testing.

| Extras | Price (£) |
|--|-----------|
| Fee for posted copies of report | 2.50 |
| BVDFree antibody test upload | 0.50 |
| BVDFree antigen test upload | 0.25 |
| Incorrectly/dangerously packaged samples | 25.00 |

| | HiHealth Herdcare membership options | Price (£) |
|-------|---|-----------|
| | CHeCS herd health programmes for BVD, leptospirosis, IBR, Johne's, Neospora and bTB | |
| | First year membership | 52.50† |
|) | Full Membership Testing and accreditation for up to 5 diseases: BVD, IBR, Johne's disease, leptospirosis, neospora | 90.00† |
| | BVD accreditation only BVD testing and control | 37.00† |
|) | bTB accreditation (includes Entry Level) only | 44.00 |
|) | bTB accrediation (includes Entry Level) add on to BVD or full membership | 30.00 |
| | TB Entry Level only | 28.50 |
| | TB Entry Level add on to BVD only or full membership | 17.00 |
| | HiHealth Flockcare add on to any HiHealth Herdcare membership | 25.00 |
| 3 | Bulk milk monitoring programme (3 bulk milk samples per annum including testing, milk pots and veterinary reporting) BVD, IBR & leptospirosis CHeCS programme & Johne's, Neospora, liver fluke and Ostertagia | 147.00† |
| | Use of results from an external lab towards herd status BVD | 30.00 |
| | Use of results from an external lab towards herd status Johne's disease, IBR, Leptopirosis, Neospora | 52.00 |

†A £10 surcharge will be applied to all members who wish to receive results and invoices by mail instead of email.

| Disease Testing | Turnaround | Price (£) | Code |
|--|--------------|-----------|------------|
| CHeCS Testing | | | |
| Antibody assays (serum or individual milk) | | | |
| BVD ELISA | Up to 3 days | 4.10 | BVDS |
| Johne's ELISA | Up to 3 days | 4.85 | JOHNES |
| Leptospira hardjo ELISA | Up to 4 days | 5.85 | LEPTOS |
| IBR ELISA | Up to 3 days | 4.70 | IBRS |
| IBR gE marker ELISA | Up to 7 days | 8.30 | IBR_GE_SRM |
| Neospora caninum ELISA | Up to 7 days | 7.50 | NEO_ELISA |
| Virus detection | | | |
| BVD antigen ELISA (serum) | Up to 4 days | 6.80 | BVDV |
| PCR | | | |
| Johne's (individual faecal sample)* | Up to 7 days | 35.30 | JOHNES_PCR |
| Johne's (pooled faecal up to 5 samples)* | Up to 7 days | 45.00 | JOH_PCR_PF |
| BVD (pooled serum up to 10 samples)* | Up to 5 days | 38.60 | BVD_PCR003 |
| BVD (ear tissue tag and test)* | Up to 5 days | 6.50 | BVD_PCR004 |
| BVD (ear tissue test only)* | Up to 5 days | 5.00 | BVD_PCR004 |
| Pliers for BVD Ear tissue testing | n/a | 20.00 | |
| Individual animal sales certificate (Declaration required please contact office) | n/a | | |
| Members Non members | | 10.00 | |
| | 2/2 | 20.00 | |
| BVD Free antibody upload (per sample) | n/a | 0.50 | |
| BVD Free antigen test upload (per sample) | n/a | 0.25 | |





| 5 | HiHealth Flockcare membership options | Price (£) |
|---|---|-----------|
| | Annual membership | 37.00† |
| | HiHealth Flockcare & Herdcare full membership | 115.00† |
| | | |

[†]A £10 surcharge will be applied to all members who wish to receive results and invoices by mail instead of email.

| HHF Profiles and Disease Testing | Turnaround | Price (£) | Code |
|--|------------------|---------------------|----------------------|
| Pre-lambing nutritional profile (BHB, urea, albumin) | Same to next day | 15.00 8.00 (5+) | PROF 046 PROF 052 |
| Periparturient recumbent ewe profile (serum) BHB, Ca, Mg | Same to next day | 15.00 | PROF 047 |
| Trace element profile (samples from 6 animals - copper, cobalt, selenium) | Up to 5 days | 117.00 | PROF 062 |
| Trace element profile (plus fluke serology x 6) | Up to 5 days | 168.00 | PROF 063 |
| Trace element profile (plus fluke serology and pooled WEC) | Up to 5 days | 184.00 | PROF 064 |
| Trace element profile (samples from 6 animals – copper, cobalt, selenium (GSH-Px), (T4 for 4 samples)) | Up to 5 day | 163.00 | PROF 065 |
| Thin ewe package (MV, CLA ELISA x 12, Johne's PCR pooled faecal x 2) | Up to 15 days | 285.00 | PROF 066 |
| Pre-purchase/quarantined sheep package (Scab, MV & CLA ELISA, BDV PCR, Johne's PCR) | Up to 15 days | 89.50 | PROF 067 |
| MV/CAE | Up to 7 days | 9.40 | MV_CAE |
| | | 7.00 (50+) | MV_CAE_50 |
| CLA | Up to 15 days | 10.05 | CLA |
| | | 8.85 (50+) | CLA_50 |
| EAE (C. abortus) | Up to 10 days | 11.10 | EAE |
| Тохо | Up to 7 days | 11.50 | OV_TOXO |
| Johne's disease Ab ELISA | Up to 3 days | 4.85 | JOHNES |
| Johne's disease PCR (faeces)* | Up to 7 days | 35.30 | JOHNES_PCR |
| Pool of up to 5 samples | | 45.00 | JOH_PCR_PF |
| Border disease virus Ab ELISA | Up to 7 days | 10.75 9.50 (10+) | BDV |
| Border disease virus PCR* | Up to 10 days | 28.35 | BDV_PCR |
| Pool of up to 10 samples | | 38.60 | BDV_POOL |
| Individual as follow up for a positive pool | | 23.60 | BDV FLW |

Metabolic profile and trace element testing is also available. Please contact the cattle health team for further advice or information packs.

*Please note these samples need to be prepared for testing in advance and as such must arrive at Biobest at least 1 day prior to the official test day.

hihealth herdcare

| | Disease | Testing requirement | Time interval between tests |
|---|-----------------|--|--|
| | BVD | Antibody check test on 5 animals from each management group of animals 9–18 months for antibody. Consult CHeCS rules for definition of separate groups. Or Test all calves born over a 12-month period for virus. In addition bulk milk antibody testing in dairy herds not vaccinating against BVD. | 12-month interval between antibody check tests. Calf virus testing ongoing throughout year. Quarterly bulk milk tests. If main bulk tank antibody positive test sample from 1st lactation heifers only – see CHeCS rules. |
| | IBR | Antibody test all animals 12 months and over plus all younger non-homebred animals. | 1-12 months |
| | Leptospirosis | Antibody test all animals in the herd 2 years and over plus animals between 1 and 2 years old that are to be kept for breeding. | 6-12 months |
| | Johne's disease | Antibody test all animals in the herd 2 years and over. | 12 months |
| P | Neospora | Antibody test all females in the herd 2 years and over plus females between 1 and 2 years old that are to be kept for breeding and any purchased females. | 12 months |





Bovine TB CHeCS herd accreditation is also availabl a TB score based on the last 10 years of TB test Tuberculosis (bTB) Herd Accreditation Programme incorporating rules for cattle health schemes, are av downloads/

An entry level CHeCS TB programme is also now

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Guidelines to achieving herd accreditation

| Accreditation requirement | Maintaining accreditation | |
|---|---|-----------------------|
| 2 clear tests, 1 on each of 2 subsequent calf crops. Or 2 clear calf crops. Every calf born must be tested. Negative herd or 1st lactation bulk tests. | Annual young stock check test Or Continuing negative virus screens of every calf born. In addition bulk milk testing can be used to monitor dairy herds (not compulsory). | |
| 2 clear tests | Antibody testing on a statistical sample of animals 12 months and older – see CHeCS rules for further details. Breeding bulls, and for IBR all non-homebred and marker vaccinated | 1200 |
| 2 clear tests | animals must additionally be tested. In dairy herds milking animals are not included in the sample but are monitored through quarterly bulk milk tests. | |
| • | cording to the percentage of reactors identified - see CHeCS rules for ts allow Risk Level 1 status. Biennial testing for herds that have been | and the second second |

A herd is assigned a Risk Level according to the percentage of reactors identified - see CHeCS rules for

further details. 3 clear annual tests allow Risk Level 1 status.

e through HiHealth Herdcare. A herd is given data supplied by APHA. The CHeCS Bovine details, and the CHeCS Technical Document ailable at <u>http://www.checs.co.uk/about-us/</u>

Risk Level 1 for over 2 years may be possible.

v available

Companion Animal Tests

| Feline Diagnostics | Sample Requirements | Testing Days | Turnaround | Price (£) | Code | | | |
|---|---|------------------------------|-----------------|-----------|-----------|--|--|--|
| Rabies | | | | | | | | |
| Rabies serology for UK vets* (see p25) | Minimum 2ml blood, 1ml serum | Mon, Wed, Fri | Up to 7 days | 80.00 | RABIES | | | |
| Rabies serology* (overseas and non-account customers) Incudes £5 admin fee | Minimum 2ml blood, 1ml serum | Mon, Wed, Fri | Up to 7 days | 85.00 | RABIES | | | |
| Computer rabies certificate (requested prior to testing) | | | 1-2 days | 15.50 | CGR_CERT | | | |
| Rabies certificate re-issue (authenticated copy, electronic certificate or replacement certificate) | | | 1-2 days | 31.00 | RAB_CERT | | | |
| Rabies express* (requires 24h advanced notice) | Minimum 2ml blood, 1ml serum | Mon, Tues, Wed, Fri | Up to 3 days | 650.00 | RABEX | | | |
| * Includes certificate and titre in | * Includes certificate and titre in IU/ml | | | | | | | |
| Serology | | | | | | | | |
| Feline coronavirus IFA | Serum | Mon, Wed, Fri | 1-2 days | 35.00 | FCOS | | | |
| AGP | Serum | As requested | Up to 7 days | 25.00 | AGP | | | |
| Short FIP profile: FCoV serology, AGP and albumin/globulin | Serum | As requested | Up to 7 days | 55.00 | FIP_PACK | | | |
| Full FIP profile (wet): FCoV serology, AGP, albumin/ globulin and cytology | Serum | As requested | Up to 7 days | 65.00 | PROF 043 | | | |
| Full FIP profile (dry): FCoV serology, AGP, albumin/ globulin and haematology | Serum | As requested | Up to 7 days | 65.00 | PROF 044 | | | |
| Feline immunodeficiency virus IFA | Serum | Mon, Wed, Fri | 1-2 days | 40.00 | FIVS | | | |
| <i>Toxoplasma gondii</i> IgG and IgM IFA | Serum | Weekdays | Up to 2 days | 43.50 | F_TOXO_GM | | | |
| Neospora IFA | Serum | Tues, Thurs | Up to 4 days | 43.50 | F_NEOS | | | |
| Panleukopaenia virus IIFT | Serum | Mon | Up to 7 days | 42.00 | FPS | | | |
| Calicivirus VNT | Serum | Fri | Up to 7 days | 63.00 | FCAV | | | |
| Herpesvirus VNT | Serum | Fri | Up to 7 days | 63.00 | FHVS | | | |
| Feline TB interferon gamma test (see p25) | 3ml heparinised blood | 1st and 3rd Thurs each month | Call for advice | 265.00 | FTBIG | | | |

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| | | | | Market Market | Mar and a second |
|--|--|--------------|---------------|---------------|------------------|
| Feline Diagnostics | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
| Pathogen Detection | | | | | |
| FeLV antigen | Air-dried smear or EDTA blood | Tues | Up to 7 days | 38.00 | FELV |
| Respiratory virus isolation FHV/Calicivirus | Swab in transport medium | Mon, Fri | Up to 10 days | 30.00 | F_VIRUS_IS |
| Pox virus isolation | Swab in transport medium or from scab | Thurs | Up to 10 days | 30.00 | F_POX_VI |
| Triple respiratory profile - respiratory VI + FHV & Chlamydia PCR | 2 swabs in transport medium | | Up to 10 days | 70.00 | F_RESP |
| Chlamydia PCR | Ocular or nasal swab | Wed | Up to 7 days | 40.00 | PCRFC |
| Herpesvirus PCR | Ocular or nasal swab | Wed | Up to 7 days | 40.00 | PCRFH |
| Chlamydia & Herpesvirus PCR | Ocular or nasal swab | Wed | Up to 7 days | 60.00 | PCR_FH_FC |
| Panleukopenia PCR | Faeces or tissue | Wed | Up to 7 days | 55.00 | FPV_PCR |

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| Dogs | Sample Requiements | Testing Days | Turnaround | Price (£) | Code |
|--|---------------------------------|------------------------|--------------|-----------|----------|
| Rabies | | | | | |
| Rabies serology for UK vets* (see p25) | Minimum 2ml blood, 1ml serum | Mon, Wed, Fri | Up to 7 days | 80.00 | RABIES |
| Rabies serology* (overseas and non-account customers) Incudes £5 admin fee | Minimum 2ml blood, 1ml serum | Mon, Wed, Fri | Up to 7 days | 85.00 | RABIES |
| Computer rabies certificate (requested prior to testing) | | | 1-2 days | 15.50 | CGR_CERT |
| Rabies certificate re-issue (authenticated copy, electronic certificate or replacement certificate) | | | 1-2 days | 31.00 | RAB_CERT |
| Rabies express* (requires 24h advanced notice) | Minimum 2ml blood, 1ml serum | Mon, Tues, Wed, Fri | Up to 3 days | 650.00 | RABEX |

* Includes certificate and titre in IU/ml

Canine

| Serology | | | | | |
|---|--|------------------------------|-----------------|-----------------|------------|
| Pre-booster immunity check Titres to Distemper Virus, Adenovirus and Parvovirus | Serum or blood | | Up to 7 days | 65.00 | DAPS |
| Canine TB interferon gamma test (see p25) | 3ml heparinised blood | 1st and 3rd Thurs each month | Call for advice | 265.00 | FTBIG |
| Distemper virus VNT | Serum | Thurs | Up to 7 days | 27.00 | CDS |
| Adenovirus VNT | Serum | Thurs | Up to 7 days | 27.00 | CAS |
| Parvovirus HAI* | Serum | Mon | Up to 7 days | 27.00 | CPS |
| <i>Toxoplasma gondii</i> IgG & IgM IFA | Serum | Weekdays | Up to 2 days | 43.50 | C_TOXO_GM |
| Neospora caninum IFA | Serum | Tues, Thurs | Up to 4 days | 43.50 | CNEOS |
| Parainfluenza VNT | Serum | Thurs | Up to 10 days | 100.00 | CPIF |
| Herpesvirus VNT | Serum | Thurs | Up to 7 days | 100.00 | CHVS |
| Leptospirosis IFA (detects antibodies to all pathogenic serovars but not vaccination) | Serum | Tues, Fri | Up to 7 days | 76.00 | CLEPTO |
| CPSE - prostate hyperplasia (detects canine prostate specific arginine esterase) | Serum | Tues | Up to 7 days | 70.00 | CPSE |
| Pathogen Detection | | | | | |
| Virus Isolation (adenovirus/ herpesvirus/ parainfluenza) | Swab in transport medium | Thurs | Up to 14 days | 30.00 | C_VIRUS_IS |
| Leptospirosis PCR | Tissue, EDTA blood or urine Combined urine/blood | Mon | Up to 7 days | 80.00 120.00 | CLEPTO_PCR |
| Parvovirus PCR | Faeces or tissue | Wed | Up to 7 days | 55.00 | CPV_PCR |
| Distemper PCR* | CSF, EDTA blood, swab (not gel), tissue or urine | Fri | Up to 7 days | 80.00 | CDPCR |
| | | | | | |





| Horses | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
|---|---------------------|--------------------------|--------------|-----------|-----------|
| Equine viral arteritis titration | Serum | Mon, Fri | Up to 5 days | 45.00 | EVA_TITR |
| Equine infectious anaemia serology (Coggins test) | Serum | Tues, Wed, Thurs, Fri | Up to 3 days | 26.50 | EIA |
| Combined viral arteritis & infectious anaemia serology test | Serum | | Up to 5 days | 63.00 | EQU_2TEST |
| Rotavirus diagnostics (please phone for advice) | | | On demand | POA | |

| Birds | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
|--|---|-----------------|--------------|-----------|---------|
| Avian chlamydia PCR* | Faeces, cloacal swab or tissue | Tues, Thurs | Up to 4 days | 39.00 | PCRAC |
| Psittacine beak and feather disease PCR* | Feather, heparinised blood, tissue | Tues, Thurs | Up to 4 days | 39.00 | PCRPBFD |
| Polyomavirus PCR* | Feather, heparinised blood, faeces, cloacal swab or tissue | Tues, Thurs | Up to 4 days | 39.00 | PCRAP |
| Avian sexing PCR | Egg membranes, mouth swabs, feather, heparinised blood, tissue | Mon, Wed | Up to 6 days | 39.00 | PCRAS |

| Ticks | Sample Requirements | Testing Days | Turnaround | Price (£) | Code |
|-------------------|---------------------|-----------------|--------------|-----------|--------------|
| Lyme disease PCR* | Single tick | Thurs | Up to 7 days | 55.00 | LYME_ PCR |

*Please note these samples need to be prepared for testing in advance and as such must arrive at Biobest at least 1 day prior to the official test day.

| 1 + (6)(6 | Sume to next day | 5.15 |
|--|------------------|------|
| 5-9 tests | Same to next day | 6.00 |
| 10 or more tests (or in addition to any profile) | Same to next day | 4.95 |

| Biochemistry profiles | Sample Requirements | Turnaround | Price (£) | Code |
|--|---|-----------------------------------|-----------|-----------|
| Small animal full profile Routine haematology, albumin, ALT, AP, bilirubin, calcium, chloride, cholesterol, creatinine, globulin, glucose, phosphate, potassium, sodium, total protein, urea | Serum, fluoride, EDTA and freshly made blood smears | 1-2 days | 66.00 | PROF 006 |
| Small animal full profile, biochemistry only | Serum and fluoride | 1-2 days | 55.00 | PROF 035 |
| Small animal kidney profile Routine haematology, albumin, calcium, chloride, creatinine, globulin, phosphate, potassium, protein (total) and urea | Serum, EDTA and blood smear | 1-2 days | 42.50 | PROF 027 |
| Small animal liver profile Protein (total), albumin, globulin, ALT, AP, GGT, bilirubin, cholesterol | Serum | 1-2 days | 34.00 | PROF 026 |
| Bile acids stimulation panel Pre-prandial and post-prandial | Serum x2 | Up to 2 days | 33.00 | BILE_STIM |
| Canine or feline short malabsorption panel Folate and cobalamin | Serum | Up to 6 days | 52.00 | PROF 032 |
| Electrolyte panel Chloride, potassium, sodium, Na:K ratio | Serum | 1-2 days | 25.00 | PROF 051 |
| Short FIP profile FCoV serology, AGP and albumin/globulin | Serum | Up to 3 days | 55.00 | FIP_PACK |
| Full FIP profile (wet) FCoV serology, AGP, albumin/globulin and cytology | Serum | 1 day for fluid, 3 days completed | 65.00 | PROF 043 |
| Full FIP profile (dry) FCoV serology, AGP, albumin/globulin and haematology | Serum and EDTA | 1 day for fluid, 3 days completed | 65.00 | PROF 044 |

| Haematology | Sample Requirements | Turnaround | Price (£) | Code |
|---|------------------------------------|--------------|-----------|-------------|
| Routine haematology | EDTA and freshly made blood smears | 1-2 days | 33.00 | PROF 001 |
| Routine haematology including smear exam by a pathologist | EDTA and freshly made blood smears | 1-2 days | 56.50 | PROF 002 |
| Blood smear report | EDTA and freshly made blood smears | 1-2 days | 24.00 | SMEAR_RPT |
| Smear examination for haematological parasites | EDTA and freshly made blood smears | 1-2 days | 24.00 | SMEAR_ HAEM |
| Reticulocyte count | EDTA | 1-2 days | 20.00 | RETIC_CNT |
| Manual platelet count | EDTA | 1-2 days | 23.00 | PLATE_MAN |
| Fibrinogen | Citrate | Up to 2 days | 21.00 | FIBRINOGEN |



Stem Cell Therapy

| Stem cell | Price (£) |
|---|-----------|
| Equine bone marrow aspiration kit (including transport box) | 150.00 |
| Canine adipose tissue kit (including transport box) | 70.00 |
| Transport box only | 30.00 |
| Equine stem cell culture (up to 40 million cells from bone marrow aspirate) | 1200.00 |
| Canine/Feline stem cell culture (≤40 million cells from adipose tissue, includes cryopreservation) | 685.00 |
| Canine/Feline stem cell culture (≤80 million cells from adipose tissue, includes cryopreservation) | 840.00 |
| Canine/Feline stem cell culture (≤120 million cells from adipose tissue, includes cryopreservation) | 1000.00 |
| Cryopreservation of equine stem cells (up to 5 yrs) | 225.00 |
| Resuscitation of cryopreserved cells (10 million) | 235.00 |
| Turnaround times will vary based on your requirements, please call to discuss | |

Biobest is the original and most experienced provider of autologous stem cells in the UK. Our pioneering work started nearly 20 years ago in collaboration with the RVC and our cells have a proven track record in equine and canine regenerative therapies. There is a large and growing publication base demonstrating the efficacy of autologous stem cells in a range of common clinical problems. The advantages of the system we use include:

- Pure autologous cells resuspended in the patient's own plasma; no reported adverse reactions to cell implantation
- Fresh cells with proven viability for 48 hours from preparation
- Large numbers of cells which is associated with better and longer lasting clinical effects (5x the cells typically dispatched by other providers and off the shelf products)
- No toxic excipients that reduce cell viability

In dogs we typically find that a substantial clinical improvement is seen for at least 12 months following implantation. We store cells so that repeat treatments can be requested for 5 years from the date of first harvest. In horses we have seen return to successful competition following serious tendon injuries where our autologous stem cells were used in a controlled rehabilitation programme.

Our team of vets and cell scientists is available to discuss cases and possible applications. Please contact us if you would like to learn more or have a case in which you would like to try autologous stem cell therapy.



Sending Samples







What to Avoid when Sending SamplesSending haemolysed bloodPre-pooling samples; samples should be sent individually for
pooling to be done at BiobestSending potentially hazardous samples without
contacting Biobest firstUsing a container if sample content has seeped onto its exteriorUsing gloves or any other non-leak proof containerUsing sellotape on sample tubesPackaging 2 samples in the same bag or containerLabelling only the outer packaging and not the sample itselfWriting multiple sample numbers on a single sample containerPlacing samples in non-sequential order in boxesUsing excessive sellotape on outer packaging





Test Specific Sample Guidelines

biobest

Rabies testing

Sample types:

- Whole blood
- Serum
- Please send minimum 2ml blood or 1ml serum
- Clearly label the sample with the animal's name AND microchip number
- Ensure the sample is sealed securely and wrapped in cotton or paper towel
- Enclose the sample in a small rigid container i.e. small clean Tupperware
- Ensure the enclosed submisson form has been signed by your vet and the details match those on the sample exactly
- Check www.biobest.co.uk/rabies-testing for mailing details

Respiratory PCR testing

*Includes BoHV-1 (causative agent of IBR), PI3, RSV, Bovine coronavirus, Mycoplasma bovis, Histophilus somni, Pasteurella multocida, Mannheimia haemolytica

Sample types:

- Plain dry nasopharyngeal swabs (gel/agar swabs cannot be tested)
- Tissue (not fixed)
- BAL fluid (>5ml)
- Up to 5 samples of the same type can be pooled

- Samples should be received at the lab within 24 hours of collection; chilled transport preferred

- If samples are collected on a Friday they should be frozen at the practice over the weekend and sent to us on Monday with freezer packs to ensure they remain frozen. Do not send samples over the weekend as they will not be able to be stored correctly once they arrive

- Due to the multiple PCRs required, there is a test limit of a maximum 10 samples at a time therefore advance notice of multiple samples being sent will help us provide the best possible service

Feline TB interferon gamma testing

Samples type:

- Whole blood
- Blood must be Heparinised (minimum 3ml)
- Samples must not have been chilled at any point

- Samples must have been taken from the animal <48 hours before test is scheduled

Please ensure all samples arrive the day before the test is scheduled to be set up to allow booking in and processing of samples prior to testing.



1. Routine Diagnostic Testing Services

We shall conduct diagnostic testing services ("Routine Diagnostic Testing Services") as follows:

a. We will test a sample following its receipt as per any report or specification provided by us and in accordance with the test schedule and turnaround times publicised in our current marketing materials or on our website (www.biobest.co.uk). The testing schedule is subject to change by us without prior notification. We will use reasonable endeavours to ensure that tests are completed as per this schedule; however we make no guarantees of test times, unless specifically agreed to by us in writing. In this respect time shall not be of the essence. Upon request urgent tests may at our discretion be conducted outside the normal test schedule. In such circumstances additional charges may be applicable, and these shall be notified to you in advance of setting up the test.

b. If a sample is received in a condition such that it is considered to be broken or otherwise unsuitable for testing, we will inform you immediately and request submission of a repeat sample. There will be no additional charge in such circumstances. However, we reserve the right to charge for the original and re-test where the unsuitable condition of the sample does not become apparent until during or after test completion.

c. If we receive a request for test cancellation before we have set up the test, we will provide a full refund. If we receive a request for test cancellation after we have set up the test, we reserve the right to charge an amount to reflect our costs incurred up to the standard test price.

d. If we receive a request from you to add a test to a sample already received, we will conduct this additional test providing there is sufficient material. The additional charge will be as per the standard test price.

e. The diagnostic test service includes as standard faxed, e-mailed or posted reports, and where specifically requested telephoned results; interpretation of results by a veterinary surgeon; advice on sampling and submission; and supply of sampling kits where appropriate. We retain

ownership of and retain all copyright and other intellectual property rights in all reports, written advice and other materials prepared by us.

2. Contract Research, Project Studies, Supply of Goods

We shall conduct contract research, project studies, supply of Goods and any other service or product that we supply which is not classified as a Routine Diagnostic Testing Service (together, "the Services"), as per the scope of work and terms and conditions specified and previously agreed to by us in writing in any tender request, proposal documentation and agreed contract. In the absence of any such agreed contract, these Conditions will apply. Unless otherwise agreed in writing payment terms for such research or study work will be 40% of contract value on signature of the contract by us, 30% on completion of testing and 30% on delivery of final report.

3. Samples and Results

a. Unless otherwise agreed with us in writing, all samples received by us for Routine Diagnostic Testing Services shall become our property upon delivery of the sample to us or collection of the sample by us and, on the completion of Routine Diagnostic Testing Services, may be retained and used for research and development and other purposes. Any data or other results (and all intellectual property and other rights in them) arising from such use shall belong to us and you shall not have any rights in any of them.

b. Unless otherwise agreed with us in writing, all data, results, reports and advice produced by us as a result of our carrying out the Routine Diagnostic Testing Services shall be our property and may be used for such purpose(s) as we decide from time to time.

c. If you provide any data or information with, or relating to, the samples, we may use such data and information for our own purposes and may provide it to third parties in an anonymised manner. All personal data is held in full compliance with the General Data Protection Regulations (GDPR) and will only be passed to third parties where it is a legal requirement for us to do so or where we have your informed consent.

4. Prices and Payment

a. Prices are publicised on our website and in our current marketing materials. We reserve the right to change prices.

b. All prices for eligible transactions are subject to VAT at the current rate.

c. For non-account holders and new customers we require payment upon submission of the sample before an order will be accepted. We accept payment in pounds Sterling in the form of a cheque, bankers draft, by an electronic transfer of funds to a bank account of our choosing (with you being responsible for any costs associated with such transfer) or by debit or credit card.

d. For repeat customers and account holders we will invoice on a monthly basis. You shall pay the full amount of any invoice within 30 days from date of invoice. We will exercise our statutory right to charge interest and compensation for debt recovery costs under late payment legislation if we are not paid according to agreed credit terms.

e. We will request two trade and one banker's reference in order to set up a new account.

5.Delivery

a. If any Goods are to be delivered by us as part of this Contract then such Goods shall be delivered to a delivery address agreed to by the parties during our normal business hours. If any Goods are to be delivered outside the United Kingdom, such delivery shall be Exworks Incoterms 2000. b. We shall make reasonable endeavours to deliver any Goods within timescales notified to you. If no dates are specified, delivery shall be within a reasonable time, however time shall not be of the essence.

c. The Goods shall remain our property and title in the Goods shall not pass to you until all sums due by you to us have been paid.

- d. Until the transfer of title in terms of Condition 5c above: (i) you shall store the Goods in a manner which distinguishes them from any other goods and which indicates that the Goods are owned by us:
 - (ii) the Goods shall be kept at your premises and you shall take good care of the Goods and use and maintain them in accordance with good industry practice;
 - (iii) you shall be responsible for loss of, or damage to the Goods; and
 - (iv) you shall not permit any form of security or charge to be created over the Goods.

e. Until the property in the Goods passes to you in accordance with the provisions of Condition 5c above, you shall keep the Goods insured to their full replacement value with full comprehensive insurance to be approved by us and with our interest noted on the policy. Evidence of such insurance shall be made available to us at any time on request.

6. Warranty of Performance

a. We shall exercise all reasonable skill, care and professional due diligence in the performance of the Services, however we do not guarantee or warrant that any particular result is correct or otherwise.

b. All conditions, representations and warranties relating to the Goods and/or the Services and their use and receipt and all remedies otherwise available to you are excluded to the fullest extent permitted by law



7. Limitation of Liability

a. Under no circumstances shall our liability for any loss or damage suffered by you or any other person as a result of our performance or nonperformance of our obligations under this Contract be greater than £10,000 or the total sums received by us under the provisions of the Contract, whichever is the greater. You shall indemnify us in respect of any loss sustained and any expenses incurred by us arising directly out of or in connection with your breach of this Contract.

b. We shall not be liable in any circumstances for any indirect or consequential loss or loss of anticipated profits, loss of anticipated savings or any other economic loss of yours.

c. Notwithstanding the provisions of Condition 7a and 7b above, neither party excludes or limits liability to the other party for death or personal injury arising from the breach of duty of such party.

d. Our liability to you under this Contract is excluded to the fullest extent permitted by law.

e. Should any limitation or provision contained in this Condition be held to be invalid under any applicable statute or rule of law it shall to that extent be deemed omitted but if either party thereby becomes liable for loss or damage which would otherwise have been excluded such liability shall be subject to the other limitations and provisions set out herein.

8. Force Majeure

a. Any delay or failure by either party in performance hereunder, other than your obligation to pay us any monies due to us, shall be excused if and to the extent that such delay or failure is caused by occurrences beyond such party's reasonable control including but not limited to, acts of God, decrees or restraints of government, strikes, war, fire, riot, sabotage, terrorism and any other cause or causes whether similar or dissimilar to those already specified which cannot reasonably be controlled by either party. Such performance shall be so excused for the period during which such inability of the party to perform is so caused but for no longer period and shall be remedied as far as possible with all reasonable despatch. Any time period for performance shall be extended by a period equal in duration to any period during which such performance is excused by this Condition.

b. If any of the events detailed in Condition 8a above prevents either party from performing all of its obligations under the Contract for a period in excess of one month, the party affected by such non-performance may terminate the Contract.

9. Termination

a. We may terminate this Contract by providing written notice to that effect to you.

b. In addition to, but without prejudice to our other rights and remedies under and in terms of this Contract, we may terminate this Contract forthwith if:-

(i) you fail to pay any part of the price payable to us by the date specified in Condition 4 above;

(ii) you become insolvent or enter into any arrangement with your creditors;

(iii) a petition is presented, or a resolution proposed, for the winding-up of your business;

- (iv) any procedure is commenced with a view to the appointment of an administrator, receiver or administrative receiver in relation to you or any other party gives notice of its intention to appoint an administrator to you;
- (v) you are unable to pay your debts as they fall due;
- (vi) you cease trading or threaten to cease trading; or

(vii) any equivalent event as outlined in Conditions 9b(i) – 9b(vi) occurs in any jurisdiction other than Scotland.

c. In the event of termination of this Contract you shall pay to us all amounts which remain outstanding for Services performed or Goods delivered by us under this Contract within 10 Business Days of this Contract terminating.

10. Assignation

We shall be entitled to assign, transfer or sub-contract any of our rights or obligations under this Contract. You shall not assign, transfer or sub-contract any of your rights or obligations under this Contract or purport to do so unless you have obtained our prior written consent.

11. Dispute Resolution

Should any dispute arise between us and you, the parties will attempt to resolve the dispute in good faith. If the parties are unable to resolve any such dispute between them, either party may request that the parties seek to resolve the dispute through mediation using the services of the Centre for Dispute Resolution to facilitate the mediation process but this shall not prejudice a party's right to raise court or other proceedings.

12. Entire Agreement

This Contract and any other document referred to herein as being applicable contains the entire agreement of the parties with respect to the subject matter of this Contract and supersedes all prior agreements and arrangements whether written or oral between the parties with respect to the subject matter of this Contract. Nothing in this Condition 12 shall have effect to exclude the liability of either party for fraud or fraudulent misrepresentation.

13. Severability

If any provision of this Contract is held by the appropriate court or other competent authority to be void or unenforceable in whole or in part this Contract shall continue to be valid as to the other provisions of it and the remainder of the affected provision.

14. Governing Law

This Contract shall be governed by and construed in accordance with the law of Scotland and the parties hereby submit to the non-exclusive jurisdiction of the Scottish courts.



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