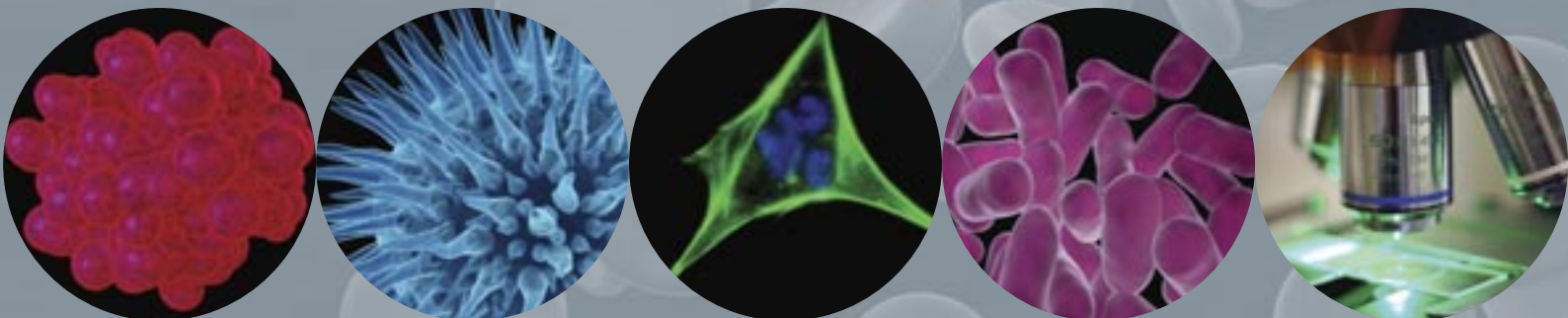
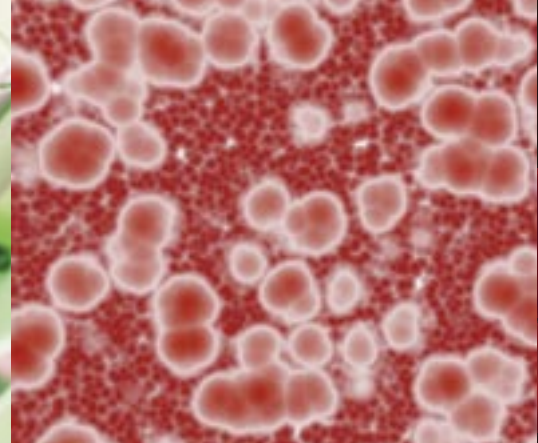
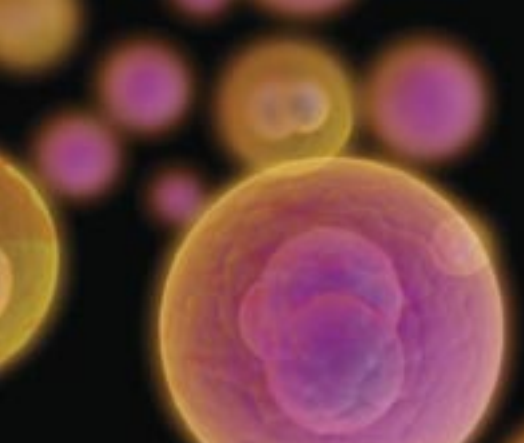


BIOLOGICAL PRODUCTS

**ANIMAL AND HUMAN CONTROL MATRICES
HUMAN DISEASE STATE MATERIAL
ANIMAL AND HUMAN TISSUES**

JANUARY 2013





Kirklees Bio offers one of the largest ranges of biological products in Europe. Privately owned, Kirklees Bio is a UK company retaining the traditional values of quality product and absolute customer care, providing a fast, friendly and efficient service with a focus on traceability.

This brochure outlines the most common types of human and animal material that we are able to offer. Please contact us should your requirement not be listed. Normal human material is collected in the USA from FDA registered facilities and EU origin material may also be available.

Kirklees Bio retains a comprehensive inventory of disease state human donor material and this may be supplied on request. All samples are collected under IRB approval with appropriate donor consents in place.

Animal material is collected in both the US and UK and harvested from animals in facilities under veterinary supervision from an extensive range of animal species and strains. Material is also available from a large range of agricultural species.

For further information please contact:

Email: info@kirkleesbio.com

Call: +44 (0)1484 365369

Website: www.kirkleesbio.com

Animal Material

Kirklees Bio animal-derived products are sourced from laboratory animals bred under controlled conditions. Collections are made from animals that have been fasted and which are drug naïve. This results in a high quality product with minimal batch variation and allows for complete traceability.

Serum: All serum, unless requested otherwise, is collected 'off clot' without additives or preservatives.

Complement Preserved Serum: Complement preserved serum and lyophilised complement products are also available.

Plasma and Whole Blood: This material is prepared with the anticoagulant of choice. Standard anticoagulants are:

- ACD
- CTAD
- Sodium Citrate
- Sodium Heparin
- Sodium EDTA
- Lithium Heparin
- Potassium EDTA (K2 or K3)
- Potassium Oxalate/Sodium Fluoride

PBMCs: PBMC extractions are available from a wide variety of animal species, prepared to individual protocols. These can be supplied fresh, as Buffy Coats or as frozen cell separations.

Processes and Presentations:

- Medium and Heavy Charcoal stripping
- Ultra filtration to specified molecular weight cut offs
- Custom aliquoting

Material Specification Options:

- Individual donor
- Pooled donors
- Single gender
- Pooled gender
- Specific strains
- Non filtered material
- Sterile filtered to 0.2 micron or 0.45 micron
- Fibrinogen free
- Ultra centrifugation

Tissues

These are collected to customer specification and may be supplied frozen or fresh.

Microsomes and S9 Fractions

Kirklees Bio offers a large range of pooled microsomes and S9 fractions from liver and other tissues from a variety of animal species and breeds. Animal liver cytosol is also available. Please contact us for further information.

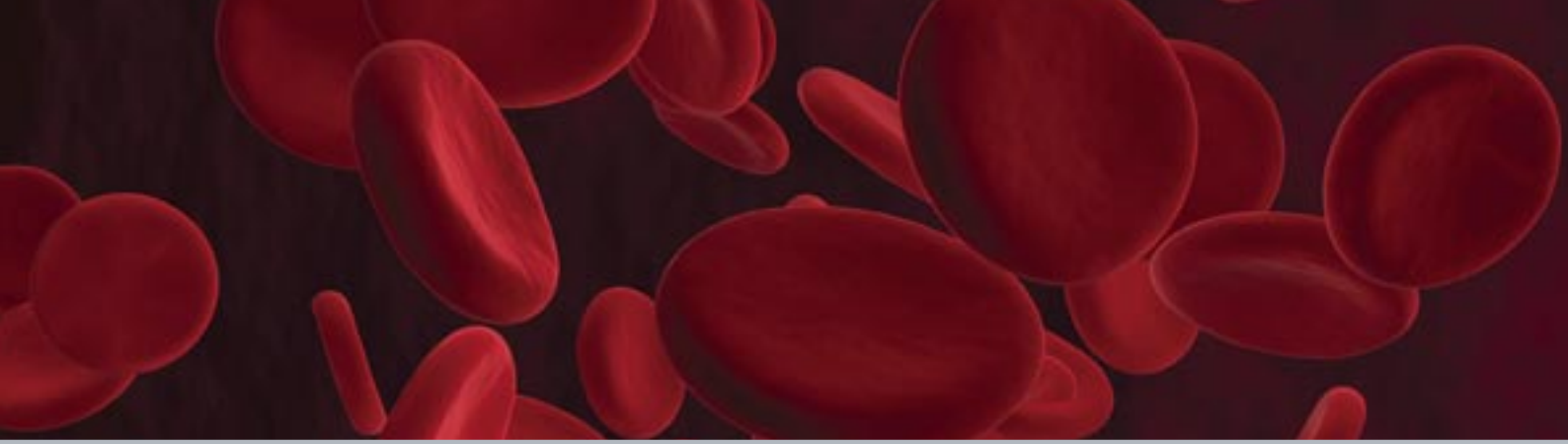
Homogenisation

Kirklees Bio are pleased to offer homogenised fresh tissues from a variety of animal sources. Our UK facility is now able to offer uniform dilutions of tissue suspensions that have been homogenised using Wheaton Potter-Elvehjem Tissue Grinders.

Our standard homogenisation buffer is sterile saline containing gentamicin [0.8 µg/ml] and chloramphenicol [0.05mg/ml] however we are happy to prepare material to specific protocols. Protocols may be tailored to meet specific requirements for assay targets in various ways, including:

- Addition of Protease inhibitors for protein activity and characterisation assays
- Addition of surfacants/detergents for denatured protein use in immunoassays
- Addition of Chaotropes for RNA
- Addition of EDTA to prevent DNAase activity

Further testing available on request

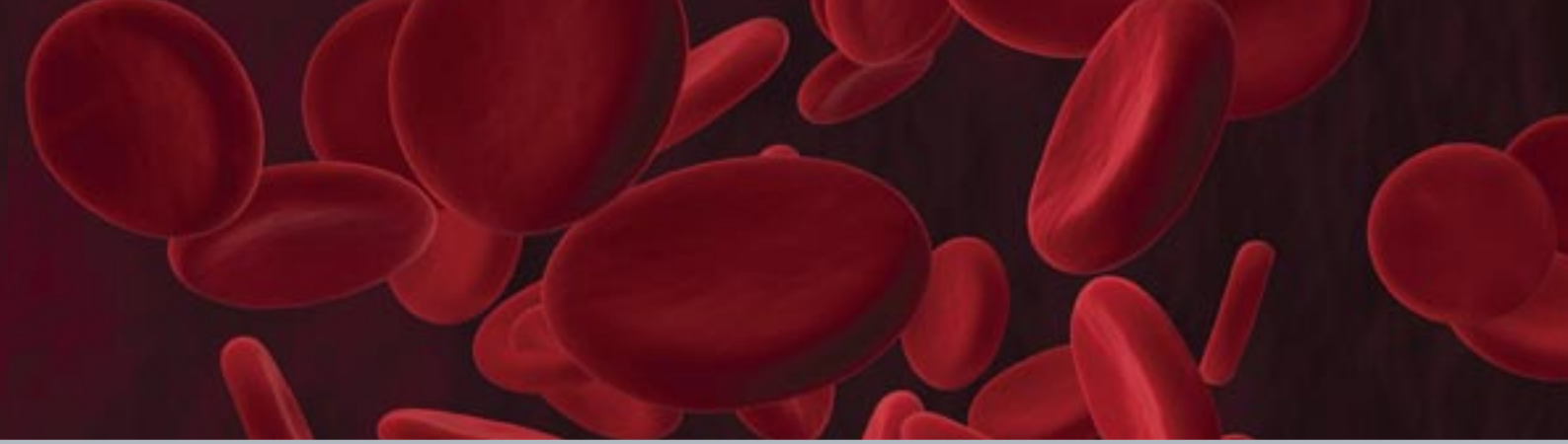


Animal Material

Product Code	Animal Species	Serum	Plasma	Whole Blood	Tissues	Microsomes	Homogenisation
133	Baboon	✓	✓	✓	✓		✓
114	Beagle	✓	✓	✓	✓	✓	✓
202	Bovine	✓	✓	✓	✓	✓	✓
138	Camel*	✓	✓	✓	✓		✓
120	Cat	✓	✓	✓	✓	✓	✓
606	Chicken	✓	✓	✓	✓	✓	✓
118	Cynomolgus Monkey	✓	✓	✓	✓	✓	✓
137	Deer*	✓	✓	✓	✓		✓
144	Dog	✓	✓	✓	✓		✓
117	Donkey	✓	✓	✓	✓		✓
919	Ferret	✓	✓	✓	✓		✓
125	Gerbil	✓	✓	✓	✓		✓
707	Goat	✓	✓	✓	✓	✓	✓
115	Guinea Pig	✓	✓	✓	✓	✓	✓
113	Hamster	✓	✓	✓	✓	✓	✓
121	Horse	✓	✓	✓	✓		✓
132	Kangaroo*	✓	✓	✓	✓		✓
136	Marmoset*	✓	✓	✓	✓		✓
444	Mini-pig	✓	✓	✓	✓	✓	✓
808	Mouse	✓	✓	✓	✓	✓	✓
404	Pig	✓	✓	✓	✓		✓
505	Rabbit	✓	✓	✓	✓	✓	✓
909	Rat	✓	✓	✓	✓	✓	✓
119	Rhesus Monkey	✓	✓	✓	✓		✓
303	Sheep	✓	✓	✓	✓		✓
130	Turkey	✓	✓	✓	✓		✓

*limited availability

Email: sales@kirkleesbio.com



Commonly available strains
Various
Various
Domestic Shorthair
Various
Short Tail
Mongrel
Various
American
Mongolian
Various
Hartley
Golden Syrian
Various
Please enquire
Gottingen, Yucatan, Sinclair, Hanford
CD-1, Swiss Webster, C57BL/6, BALB/c, NMR1, B6C3F1, ICR, FVB, DBA, Genetically Modified strains
Yorkshire
New Zealand White, Dutch Belted, Half Lop, Full Lop, Flemish Giant
Sprague Dawley, Hanover Wistar, Wistar, Long Evans, Fischer 344, Norway Brown, Zucker, Cotton, Lewis, Lister Hooded
Dorper/Katahdin
White Broad Breaster

Animal Tissues and Fluids

In addition to a large range of blood products Kirklees Bio can also supply tissues and bodily fluids. Presentations for whole tissues or sections include frozen, homogenised and formalin or paraffin fixed. Tissues may also be prepared to specific protocols and whole animal necropsy is also offered.

Baboon, Beagle, Bovine, Cat, Chicken, Cynomolgus Monkey, Dog (mongrel), Donkey, Ferret, Gerbil, Goat, Guinea Pig, Hamster, Horse, Marmoset, Mini-Pig, Mouse, Pig, Rabbit, Rat, Rhesus Monkey, Sheep

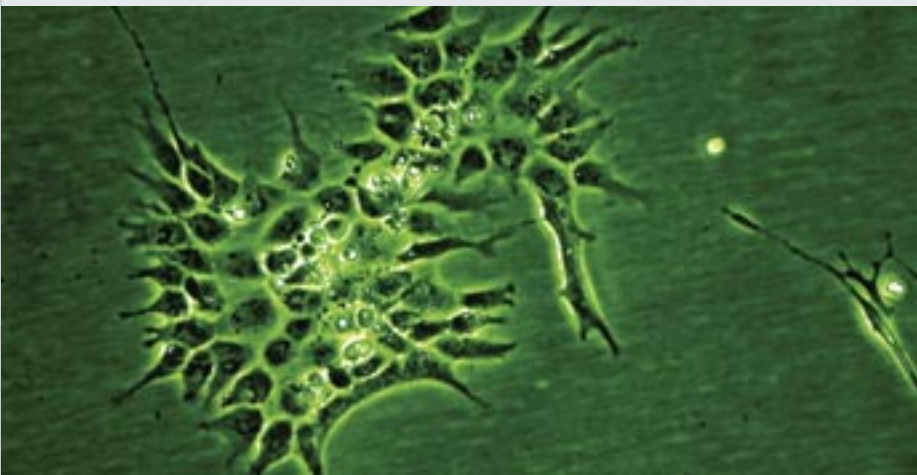
Most of these items are prepared to order so please contact us to enquire as to the time frame for delivery. Please contact our Customer Services Department to enquire about the availability of products that are not listed.

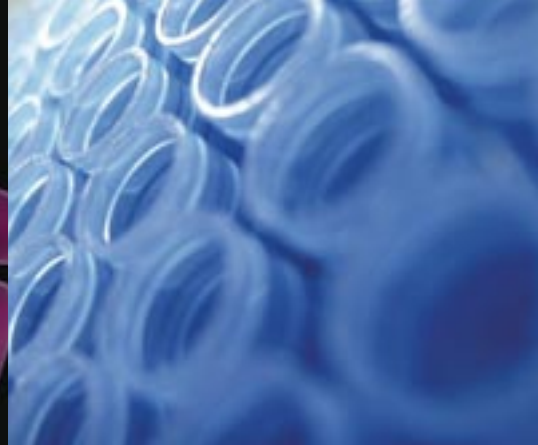
Tissues

Adrenal	Gall Bladder	Sciatic Nerve
Aorta	Ileum	Skeletal Muscle
Bladder	Inguinal Nodes	Skin
Brain	Duodenum	Small Intestine
Colon	Large Intestine	Spinal Cord
Duodenum	Liver	Spleen
Oesophagus	Lung	Stomach
Eye	Kidney	Testicle
Fat	Nasal Tissue	Thymus
Femur	Ovary	Tonsil
Foetus	Pancreas	Thyroid
Heart	Pituitary	Tail
Hypothalamus	Prostate	Uterus

Fluids

Amniotic Fluid	Faeces	Semen
Aqueous Humor	Intestinal Fluid	Synovial Fluid
Bile	Milk	Urine
Bronchial Lavage	Peritoneal Fluid	Vitreous Humor
Cerebral Spinal Fluid	Saliva	





Human Material

Normal human material is collected from stringently screened donors at FDA registered donor centres. The donors must test negative for RPR, HIV 1, HIV 2, Hepatitis B Surface Antigen, HCV and HIV 1-Ag using approved FDA methodology. The donors must have normal ALT levels. Qualifying donors are also subject to a physical examination and verbal screening.

Serum: All serum, unless requested otherwise, is collected 'off clot' without additives or preservatives

Complement Preserved serum: Complement preserved serum and lyophilised complement products are also available

Plasma and Whole Blood: This material is prepared with the anticoagulant of choice. Standard anticoagulants are:

- ACD
- Sodium Citrate
- Sodium EDTA
- Potassium EDTA (K2 or K3)
- Potassium Oxalate/Sodium Fluoride
- CTAD
- Sodium Heparin
- Lithium Heparin

Processes and Presentations

- Medium and Heavy Charcoal stripping
- Ultra filtration to specified molecular weight cut offs
- Custom aliquoting
- Non filtered material and Sterile filtered to 0.2 micron or 0.45 micron
- Fibrinogen free
- Ultra centrifugation

Material Specification Options:

- Individual donors
- Single gender
- Specific demographic groups
- Age, race and gender specifications
- Specific dietary requirements
- Pooled donors
- Pooled gender

Cell Isolations

Kirklees Bio offers customised cell isolations from both normal and disease state donors.

- Flexible customised service
- Normal donors
- Disease state donors from clinical sites including the following disease states: Leukaemias, Lymphomas, Multiple Myeloma, Solid Tumours, Metastatic Tumours, Pulmonary Disease, Diabetes, Rheumatological Disease, Auto-Immune Disease, Cardiovascular Disease, Neurological Disease, Viral and Bacterial infections, Dermatological, Gastroenterological and Ocular diseases.
- PBMC extractions (See back page)
- Cell isolations of a large number of cell types including: T Cells, B Cells, Monocytes, NK Cells, Basophils, Eosinophils, Neutrophils, Granulocytes, Dendritic cells, Lymphoid cells, Myeloid cells

Rare Human Plasma

Rare human plasma is collected from stringently screened donors at FDA registered donor centres. The donors must have normal ALT levels. Qualifying donors are selected after receiving a complete physical examination and passing all the required viral marker tests using approved FDA methodology.

These plasmas may be provided either as a whole unit or in small volumes (minimum 10ml).

Product Description

Hepatitis
Hepatitis A Antibody IgG, IgM
Hepatitis B Core Antibody IgG, IgM
Hepatitis B Surface Antigen
Anti-HBe
Anti-HBs
HBeAg

Factor Deficient

Factor VIII Deficient Plasma
Factor IX Deficient Plasma
Factor X Deficient Plasma
Factor XI Deficient Plasma
Factor XII Deficient Plasma

Torch Profile

Cytomegalovirus Antibody IgG, IgM (CMV)
Herpes I Antibody IgG, IgM
Herpes II Antibody IgG, IgM
Rubella Antibody IgG
Rubella Antibody IgM
Toxoplasmosis IgM

Human Immunodeficiency Virus (HIV)

Anti-HIV 1
Anti-HIV 2
Anti-HTLV 1
Sero Converter Panels for HIV 1

Other Plasma

Anti-Streptolysin-O Antibody (ASO)
C-Reactive Protein Antigen (CRP)
Epstein-Barr Antibody
Mononucleosis Antibody
Rheumatoid Arthritis Antibody (RA)
RPR Positive Antibody

Clinical Samples and Disease State Material

Kirklees Bio can provide material, including human tissues, from donors with specific disease states or conditions. A specimen bank is maintained with the more frequently collected samples allowing for quick delivery. More esoteric material is collected to order. Shipments of human tissues are made direct from the collection centres in the USA.

Samples are collected by the following methods:

- Pre-existing, remnant diagnostic specimens that are de-linked from their original source
- Prospective samples collected under approved IRB protocols

Samples may be collected as frozen tissues, organs, sections; as serum, plasma, whole blood or other bodily fluids such as CSF, synovial fluid, etc.

When collecting material prospectively, multiple time-point collections or matched sets of multiple tubes may be available.

Disease state panels from multiple donors in custom aliquot sizes are available and are shipped in cryo-boxes.

A detailed certificate of analysis accompanies each sample supplying the age and gender of each donor. Further additional clinical information, including medication, may be requested at the time of order.

Our extensive network of medical offices, reference laboratories and collection facilities allow us to meet all of your requirements.

Clinically Collected Disease State Material currently available includes:

Acute Myeloid Leukaemia	Chronic Obstructive Pulmonary Disease	Leishmania	Scleroderma
Age Related Macular Degeneration (AMD)	Congestive Heart Failure	Lupus	Sepsis
ANA	DNA (Double Strand)	Lyme Disease	Sjorgren's Syndrome
Anti-DNA Positive	Dengue	Multiple Sclerosis	SLE
Allergy Specific or Groups	Dialysis serum	OB serum (different)	Stroke
Alzheimer's Disease	Down's Syndrome	Osteoarthritis	Smith
Ankylosing Spondylitis	Drug positive (cocaine, heroine etc)	Parkinson's Disease	Syphilis
Asthma	Elevated Alkaline Phosphatase	Psoriasis	Toxoplasmosis
Cancer (all types)	Elevated Cholesterol	Psoriatic Arthritis	Transplant donors
Cardiac Disease	Elevated Triglycerides	Rheumatoid Arthritis	Type I and Type II Diabetes
Chagas	Gout	RNP	Ulcerative Colitis
Chlamydia	Inflammatory Bowel Disease	RPR	Viral Positive samples (HIV, HCV, HBV, EBV, CMV etc)
Crohn's Disease		SSA	
		SSB	

Human tissues and fluids (normal or disease state donors) include:

Aqueous Humor	Buccal Swab	Liposuction Remnant	Saliva	Synovial Fluid
Amniotic Fluid	Colon Tissue	Liver	Sebum	Thymic Tissue
Bile	Cancer Tissues	Liver Homogenate	Semen	Urine
Biopsy Tissue	Cerebral Spinal Fluid	Lung Tissue	Sinus Mucosa Tissue	Uterine Tissue
Bladder Tissue	Ear Wax	Lymph Node	Skin (dermatomed, full thickness or stratum corneum collected from abdomen, breast, back and scalp)	Vitreous Humor
Blisters Fluid	Fat	Muscle Tissue	Small Bowel	
Bone Marrow	Faeces	Nails	Spleen	
Bone	Gall Bladder	Nasal Tissue	Subcutaneous Tissue	
Brain	Gastric Fluid	Pancreas	Sural Nerve Tissue	
Brain (Homogenate)	Gastrointestinal Fluid	Parathyroid		
Breast Milk	Heart Tissue	Peritoneal Fluid		
Bronchial Lavage	Kidney	Placenta		
Buccal Mucosa Tissue	Large Bowel	Prostate Tissue		

For other tissues not listed above, please enquire

PBMC Extraction

Peripheral Blood Mononuclear Cells (PBMCs) are available from both human and animal collections. PBMCs are isolated from whole blood samples using different density gradient centrifugation procedures. Anticoagulated whole blood is layered over the separating medium. After centrifugation, the following layers are visually observed, running from top to bottom; plasma, mononuclear cells and platelets, separating medium, granulocytes and erythrocytes.

PBMCs are available in Sodium Citrate or Sodium Heparin. For a quotation and further details please contact Customer Services on 01484 365369

Shipping

Material not held in stock will be collected and prepared to your specific requirements quickly and efficiently. The time frame of delivery can vary with availability and the complexity of the protocol. Seralab uses high quality packaging and market leading logistics partners to ensure your products reach you on time and in prime condition. We also have a wealth of expertise in managing all types of essential customs and health documentation worldwide.

Our Customer Services can provide professional advice on both your products and how we get them to you safely and on time.

