

Immunoassay Optimization

Molecular Biology Kits & Reagents

Cell Culture Media

DNA and RNA Extraction & Isolation

DNA Polymerase

Transfection Reagents

Freezer Storage Systems

Protein Markers, Ladders & Dyes

Mobicols and Spin Columns

Antibodies

Western Blotting

Versatile Cloning Plasmids

DNA Methylation Kits

www.bocascientific.com (781)-686-1631 info@bocascientific.com















About Us

We Bring The World Of Biotechnology To You

Our goal is to offer excellent solutions to drive research and discoveries backed by superior customer support.

Boca Scientific Inc. offers innovative Biotechnology products from around the world to research labs in the United States and Canada. We are proud to offer a carefully curated selection of leading edge Cell Biology, Immunology, Molecular Biology, and Diagnostics products. Our product offering includes a unique selection of research and diagnostic reagents, kits, and supplies.

Table of Contents

IMMUNOASSAY OPTIMIZATION	5,6
DNA/RNA SAMPLING & ISOLATION	7,8
LABORATORY SUPPLIES	9, 10, 11,12
PCR & DNA POLYMERASE	13, 14, 15
MOLECULAR BIOLOGY	15,16
HOME CAGE ANALYZER	17
CELL CULTURE	18, 19, 20
DNA/RNA PURIFICATION & ANALYSIS	21, 22
TRANSFECTION	22
ANTIBODIES	23
PROTEIN MARKERS & DNA LOADING DYES	24
CELL BIOLOGY	25
CUSTOMER TESTIMONIALS	26



IMMUNOASSAY OPTIMIZATION



CANDOR Bioscience provides an outstanding line of high-quality reagents for immunoassays and ELISA development. These reagents greatly improve the accuracy and stability of the assay, allowing for reliable results, simplified assays, and reduced processing times.

<u>Optimizers</u>

Reduce Interference and Increase Reliability with Optimization Buffers and Diluents

LowCross-Buffer

- Assay diluent and Optimizer
- Reduces non-specific binding and interference

<u>Assay Defender</u>

- Reduces interference caused by high affinity antibodies
- Minimizes all types of interference unlike typical HAMA blockers

<u>LowCross HRP-Stab</u>

- Prevents non-specific binding, matrix effects, and cross-reactivities
- Stabilizes HRP-conjugates for several years





Additional offerings include: LowCross-Buffer MILD, LowCross-Buffer STRONG, Sample Buffer, Coating Buffer, Washing Buffer, & Stripping Buffer.

IMMUNOASSAY OPTIMIZATION

<u>Blockers</u>

Prevent Non-specific Binding and Cross-reactivities and Improve Assay Sensitivity

The Blocking Solution

- Based on highly purified casein
- Ideal for assays that require high reproducibility and low coefficients of variation

<u>PlateBlock</u>

- Reduces false positives for serological assays
- Prevents non-specific binding, crossreactivities, and lowers background

<u>SmartBlock</u>

- Based on chemically modified peptides
- Economical, reliable alternative to blockers containing BSA

<u>ReadyTector®</u> Ideal for western blotting

ReadyTector® includes everything you need for fast, all-in-one immunodetection. With one solution containing all components required, the entire process takes place in a single step, in addition to washing with the included wash buffer. www.bocascientific.com (781)-686-1631 info@bocascientific.com





Stabilizers

Preserve the Functionality of your Antibodies, Conjugates, and Antigens for Long-term Storage

<u>Antibody Stabilizer</u>

- Conserves structure of proteins and antibodies to prevent loss of function
- Avoids the need for freezing and thawing

<u>Liquid Plate Sealer</u>

- Coated molecules' shelf life is extended to 1-3 years
- Seals plates with uniform, soluble stabilizing layer without affecting the assay

HRP-Protector

- Provides critical stability for several years
- Can be used directly as an assay buffer for incubating HRP-conjugates

*Additional Blocker & Stabilizer offerings Available.

DNA/RNA SAMPLING & ISOLATION



<u>DNA/RNA Buccal</u> <u>Swabs</u>

- High yield buccal cell DNA/RNA collection
- Unique swab matrix and quick release surface maximizes efficiency
- Non-invasive alternative to blood collection
- For human and veterinary use
- Easy to handle and quick to use

<u>Stabilization</u> <u>Kits</u>

- Instant room temperature stabilization
- Easy to use in field and clinical settings
- Prevents crosscontamination risks
- Maintains DNA/RNA integrity for improved yields and purity



Isolation Kits

Designed for high purity DNA or RNA extraction from buccal swabs. These kits integrate various isolation methods, ensuring that you gain maximum yields. The extracted DNA or RNA is suitable for demanding downstream applications.





DNA/RNA SAMPLING & ISOLATION

<u>GeneFix DNA/RNA Saliva</u> Collectors

- Integrated buffer for instant stabilization
- Unique funnel design prevents spillages or buffer flow back
- DNA stabilized at room temperature for 5 years and viral RNA stabilized for 5 days
- Suitable for field, home and clinicbased sampling

*Assisted version available

<u>GeneFix Saliva Microbiome</u> <u>DNA Collectors</u>

- Ambient Storage no expensive storage or transport
- Instant Stabilization provides a snapshot of the saliva microbiome
- No trace DNA contamination Reliable results

GeneFix RNA Saliva Collectors

- Stabilizes RNA from the moment of collection for 2 weeks
- The device is fully specified for sample transport and storage

*Assisted version available.

www.bocascientific.com (781)-686-1631 info@bocascientific.com



<u>Saliva DNA/RNA Isolation</u> <u>Kits</u>

- <u>Xtreme RNA Isolation Kit</u>: spincolumn based RNA purification kit
- <u>GeneFix Saliva-Prep 2 DNA</u>
 <u>Isolation Kit</u>: precipitation based method to quickly and easily isolate DNA from samples
- <u>Salivalyse Direct-to-PCR Kit</u>: rapid Direct-to-PCR alternative to traditional, more time consuming DNA isolation
- <u>Xtreme DNA Isolation Kit:</u> silica membrane-based spin column DNA purification kit

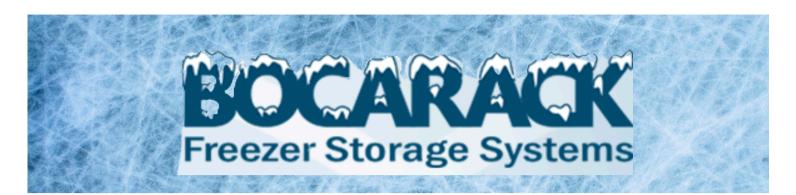
Isohelix SaliFix[™] Saliva Swab DNA Collection Kit

Designed for collecting and stabilizing saliva samples in various environments these are ideal for manual or automated processes!

<u>Swab-Catcher™ tube</u>

The unique design consists of a cap attached to a swab to relieve the tedious process of manually removing the swab.

www.bocascientific.com (781)-686-1631 info@bocascientific.com



Freezer/Refrigerator Storage Systems

A complete solution for storing biological samples in low temperature freezers. These sturdy stainless steel racks include sliding drawers fitted with plastic storage boxes designed for -80°C storage. Dedicated systems are available for 1.5ml-2.0ml microtubes, cryovials, and <u>15ml</u> and <u>50ml</u> conical centrifuge tubes.

Custom sizes are available upon request.



www.bocascientific.com (781)-686-1631 info@bocascientific.com

Mobicols & Lab Columns

Versatile Iml columns for separation, isolation, treatment, and purification. Functioning as both spin and affinity chromatography columns, Mobicols can be used to make your own spin/affinity columns with the matrix of your choice.

- <u>Mobicol "F" Column</u> Recommended for gravity flow; leakproof outlet plug
- <u>MobiSpin Column "F"</u> Recommended for spinning; leakproof outlet plug
- Mobicol "Classic" For gravity flow or spinning



Filters & Accessories

Upper and lower filters with pore sizes 10 µm, 35 µm or 90 µm are available for Mobicols.

Multiple accessories designed for use with mobicols in affinity chromatography are also available, including luer-adapters and stopcocks.

Imaging Tools

Selection of cell imaging dishes, chambers, plates, and imaging slides feature optimized surfaces for the best optical performance.



Electroporation Cuvettes

Designed to maximize molecular electroporation and electrofusion efficiencies for Bacteria, Yeast, Insect, Plant and Mammalian cells.

The cap design improves aseptic handling techniques and the positive seal reduces potential aerosol and contamination issues. The molding process ensures extremely fine tolerances so that the electrodes have a consistent gap and parallel configuration.



www.bocascientific.com (781)-686-1631 info@bocascientific.com

Automated Nucleic Acid Extraction System

Miracle-AutoXT provides quick, efficient nucleic acid extraction with up to 32 samples processed simultaneously. This system offers high yields and high purity DNA/RNA via bead-based extraction. Extraction is completed in as little as 20 minutes! We also offer kits optimized for use with this system.



B-BOX Blue Light LED Epi-Illuminator

A long wavelength, blue light LED epi-illuminator that can greatly ease the routine chore of gel extraction, enabling easy visualization and gel cutting even in bright ambient light. Achieve improved cloning efficiency. B-Box offers greatly improved safety for users due to it's non-UV light source, non-carcinogenic DNA and protein dye, and low operating voltage. Amber filter goggles are included.



Tissue Culture Flasks

TC-treated Tissue Culture Flasks provide even and consistent cell growth for optimal proliferation of cells due to their distortion free, completely flat growth surfaces. Graduated with a frosted writing area and a wide, angled neck design for complete access when washing and retrieving cells.



www.bocascientific.com (781)-686-1631 info@bocascientific.com



Solution Reservoirs

Our multi-channel solution reservoirs are compatible with a wide-range of multi-channel pipettes. These reservoirs are designed to enable easy drip-free pour-off of unused reagents and solutions. This range of reservoirs also feature spouts in each corner. Lids are also available to mitigate the risk of debris or airborne contaminants!



Microtube Racks

These useful racks are designed to keep your 1.5mL to 2.0mL microtubes neatly and conveniently organized. They are compatible with conical and selfstanding microtubes and all wells have raised numbers for quick and easy identification. They are made of autoclavable polypropylene and can be ordered in a single color of your choice or rainbow packs.

Ice Racks

These Ice Racks feature a removable tube tray that allows the blue base to be filled with crushed ice or other temperature-controlling materials. Temperature-sensitive samples and assays in microtubes can be processed with an extra degree of temperature stability. These boxes are ideal for use with screw-cap or snap-cap microtubes from 0.5mL to 1.5/2.0ml.

Cryogenic Storage Boxes

These storage boxes are designed for ultra-low temperature storage. They hold 1.2ml to 2.0ml cryogenic storage vials. These are a great alternative to cardboard boxes and can be autoclaved! They are built to last and can withstand temperatures ranging from -196° to +121°C.







<u>PCR & DNA</u> POLYMERASE

DNA Polymerases

A wide range of high quality, common and modified DNA Polymerases for both Standard and Hot Start PCR.

A few of our high quality DNA Polymerases:

• <u>SD Polymerase</u>: novel, thermostable enzyme for PCR and isothermal amplification with strong strand displacement activity

• <u>SuperHot Taq Polymerase:</u> highly purified polymerase for all PCR applications

•<u>SuperTaq</u>: recombinant Taq polymerase offering high processivity and purity



<u>Reverse</u> <u>Transcription</u>

<u>**Tth Polymerase**</u> has intrinsic Reverse Transcription activity and no RNAse H activity, making it an excellent choice for RT-PCR.

Smart One RT-PCR Master

Mix offers a convenient, ready-to-use format for probe-based RT-qPCR applications.

<u>dNTPs</u>

Prepared with high purity to ensure accurate results in the most sensitive PCRbased assays. These dNTPs are provided ready-to-use, with their high purity confirmed by HPLC analysis.

Master Mixes

Ready-to-use and feature our high quality Bioron polymerases for PCR applications.



www.bocascientific.com (781)-686-1631 info@bocascientific.com



DNA & Other Enzymes

Used as substrates for restriction endonucleases.

Phage T7 DNA- is

isolated from an infected E. coli strain <u>Proteinase K</u>- broadspectrum protease for nucleic acid purification.

<u>AptaHotTaq</u>

HotStart DNA Polymerase which uses DNA-Aptamers instead of antibodies for PCR reactions at room temperature.

<u>SmartTaq</u>

Recombinant Taq Polymerase ideal for assays with high Multiplex grade or inhibitor residues.

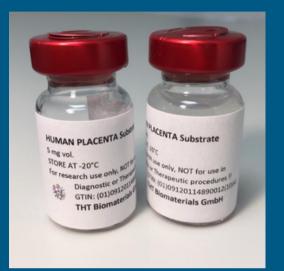
<u>PCR & DNA</u> POLYMERASE

www.bocascientific.com (781)-686-1631 info@bocascientific.com

Human Placenta Proteins

We offer Human Placenta Proteins, made in Germany, that are offered in both a substrate and Collagen format.

• <u>Human Placenta Substrate</u> is a highly purified bioactive ECM mixture. Ideal for the growth and cultivation of human cells.



• <u>Human Placenta Collagen IV</u> is unique because it exists only in basement membranes. BSA free, Human Placenta Collagen IV is prepared from Human Placenta Tissue and shows the highest bioactivity with low DNA remnants. *This is also available in Human Collagen Placenta I.*

Cot I Human DNA

Cot I Human DNA is made in Germany and prepared from human male placenta DNA. This high quality DNA blocking reagent, decreases false positives in Microarrays, In situ hybridizations and Southern blots. This product is virus-free and phenol treated.

We offer both fluorometric and photometric versions.



<u>PCR & DNA</u> <u>POLYMERASE</u>

www.bocascientific.com (781)-686-1631 info@bocascientific.com

PCR PreMix Kits

High quality, readyto use kits with all components required for PCR in a dried pellet format in each tube.

RT-PCR Premix Kits

Provide fast, sensitive, reliable RT-PCR. The premix format greatly simplifies the task of RT-PCR.

Polymerases & Master Mixes

Improve sensitivity and efficiency in a range of PCR and amplification tasks.



<u>qPCR Solut</u>ions

Optimized ready-touse solution for realtime quantitative PCR assays, incorporating SYBR Green I dye.



MOLECULAR BIOLOGY

www.bocascientific.com (781)-686-1631 info@bocascientific.com



Magnetic Silica Beads, Separators & Kits

Our selection of magnetic silica beads provides a versatile tool for separation, concentration and purification of biomolecules from a variety of types of samples. As no columns or centrifugation steps are required, magnetic beads are ideal for high-throughput and automated applications.

A wide range of beads are available with different sizes and surface and binding properties.

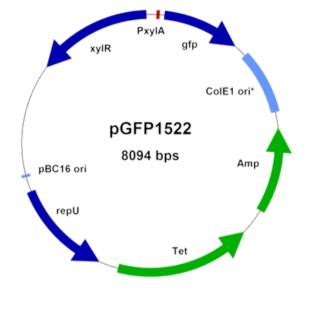


MOLECULAR BIOLOGY

www.bocascientific.com (781)-686-1631 info@bocascientific.com

Vector Systems

A selection of cutting edge vector systems ideal for recombinant protein expression. We offer a range of easy-tohandle tools for efficient gene expression in microorganisms such as B. megaterium, B. subtilis, L. lactis, E. coli, and yeast. This range includes vectors and host strains including ready-to-use protoplasts for Bacillus megaterium.



*Additional Vectors Available On Our Website

LPS Extraction Kit

This kit can extract LPS from even a small volume of bacterial cells and gives reproducibly high yields of LPS.

LPS Extraction Kit separates and purifies Lipopolysaccharides (LPS) present in the outer wall of gram-negative bacteria.

HOME CAGE ANALYZER

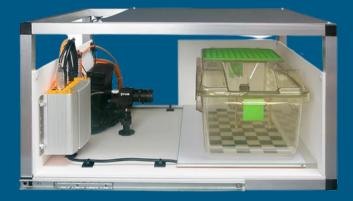


ActualHCA (Home Cage Analyzer)

24/7 Data Capture and Analysis of Complex Behaviors of Group Housed Rodents in their Real Home Cage!

ActualHCA provides automated analysis of discrete behaviors, body temperature, and locomotor activity, tagged to each individual animal within their normal social group. Isolation of individual animals is no longer needed to collect rich behavioral data.

The HCA technology is a modular, scalable, and universal solution which can be installed in all animal facilities. As an add-on to existing rodent home cage systems, the Home Cage Analyzer is compatible with a range of rat and mouse homecages and racking systems, including IVC systems.





ActualHCA Mouse Desktop

ActualHCA Rat Desktop

*Mouse Rack, IVC Rack, & Rat Rack Also Available.

CELL CULTURE



Cell Culture Technologies Media

Over 300 varieties of Custom Media are offered. Our custom media is free of proteins, peptides, complex additives, and animal-derived components.

Custom media is provided either ready-made aseptically filled in 500ml bottles or as liquid concentrate kits for reconstitution in tissue culture water prior to sterile filtration.

*We also offer a selection of standard media

Happy Cell ASM 3D Culture Medium

A unique cell culture reagent that permanently suspends cells without the restrictions of artificial matrices, allowing for more natural spheroid and organoid formation. Easy labeling, washing, and dosing of cells. Improves viability and reduces doubling time. Consistent animal-free formulation, free of growth factors and cytokines.



BriClone Hybridoma Cloning Additive

Greatly improves the efficiency of hybridoma cell cloning in the post-fusion stages of hybridoma production without batch to batch variation.



CELL CULTURE

www.bocascientific.com (781)-686-1631 info@bocascientific.com

Mycoplasma Detection

Our e-Myco kits are PCRbased assays designed to detect Mycoplasma and determine the species.

With strong sensitivity, multiple internal controls, and high reproducibility, these kits provide reliable results.

GRiSP Culture Media & Additives

Our cell culture media from GRiSP Research Solutions includes standard media and Auto-Induction Media supplied as a dehydrated powder.

<u>Terrific Broth, Auto-</u> <u>Induction Medium</u> is Supplemented with glucose and alpha lactose for auto induction of protein expression.



Growth Supplements

Animal-free, serum-free high quality growth supplements and attachment factors for the scaleup of cellular agriculture.



- Proliferum LSR 10X
- rh-Victronectin

Vitroneci Non blant tare Foresearch use o Conc.: 260 µS Volume: 400 Protudise date 'l Universitation de l Notas Blotechita With Blotechita

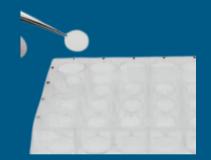
CELL CULTURE

Gelatex HaloSpun Scaffolds

Our range of pharma grade products for 3D cell culture and tissue engineering, aim to revolutionize nano-fiber technology and promote cell attachment, growth, and differentiation. Gelacell™ scaffolds are made using novel, patented HaloSpinning technology to closely mimic the natural extracellular matrix. These scaffolds offer the perfect combination of flexible hydrogels and hard, structured scaffolds.



Available As:



Well Plate with Scaffold



DNA/RNA PURIFICATION & ANALYSIS

www.bocascientific.com (781)-686-1631 info@bocascientific.com



DNA Methylation Kits

The EpiMelt DNA Methylation Testing Kits are based on MS-HRM technology and provide high accuracy and convenient tests for epigenetics research.

Assay and Controls are offered for a wide range of genes. <u>EpiMelt Assays</u> provide reliable detection of aberrant gene methylation using MS-HRM. <u>EpiMelt Controls</u> provide both nonmethylated controls and fully methylated controls.



<u>Aqua Reagents</u>

Aqueous solution-based reagents designed to preserve and extract DNA, RNA, and proteins from challenging specimens such as bacteria, plant, and animal tissues. As well as frozen whole blood, feces, and saliva.



Nucleic Acid Purification <u>Kits</u>

Purification kits based on the best available technologies, including enzymatic, spin column, and beads-based purification methods. These kits provide high yields of DNA/RNA with fast and efficient protocols.



DNA/RNA PURIFICATION & ANALYSIS

www.bocascientific.com (781)-686-1631 info@bocascientific.com

iGEN Prenatal & DNA/RNA Extraction Kits

Achieve high yield DNA/RNA extraction from a variety of types of samples. Specific kits are available for prenatal samples including amniotic fluid and chorionic villus.



TRANSFECTION

www.bocascientific.com (781)-686-1631 info@bocascientific.com



Magnetofection Transfection Reagents

Unique Oz Magnetofection transfection reagents available for DNA, siRNA and viral vectors including retroviruses and lentiviruses. These efficient transfection reagents are ideal for primary cells and hard to transfect cell lines. Highly efficient lipofection based transfection reagents are also available.



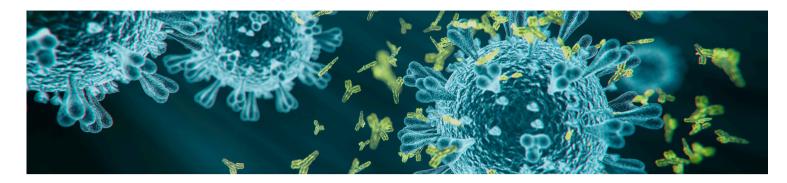
ScreenFect Transfection Reagents

ScreenFect transfection reagents efficiently transfect a variety of cells with minimal cytotoxicity. These reagents can be used for transfection of nucleic acid molecules (pDNA, siRNA, mRNA, miRNA) as well as co-transfection of combinations of these.



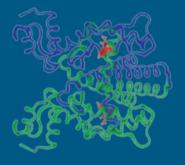
ANTIBODIES

www.bocascientific.com (781)-686-1631 info@bocascientific.com



Anti-Tet-Repressor Antibodies

Polyclonal and monoclonal antibodies targeting the Tet Repressor protein for study of the TetR system. These antibodies possess excellent binding properties and have been successfully tested for use in ELISA, Western blot and immunofluorescence assays.



Phagemid Display System Antibodies

Anti-SPINKI (hPSTI) is an antibody to human pancreatic trypsin inhibitor domain (hPSTI).

Monoclonal mouse **anti P III (g3p)** is an antibody to phage M13 coat protein pIII (g3p) monoclonal mouse IgG (Clone 10C3), Protein G purified.



*Small Molecule Antibodies and Tag/Control Antibodies also available.

Agrisera Antibodies

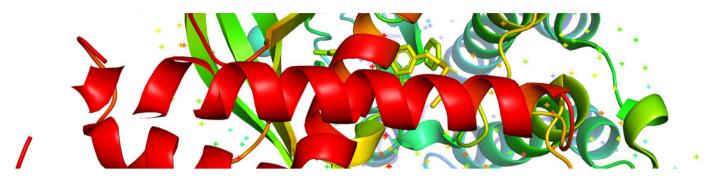
Agrisera provides off-the-shelf antibodies for plant and algal research, with reactivity to thousands of species. All antibodies have been validated in at least two independent laboratories and this product line has been cited in thousands of publications.

The Agrisera product line offerings include Plant & Algal, Human & Animal, Secondary, TAG, and Bacterial & Fungal antibodies.



PROTEIN MARKERS & DNA LOADING DYES

www.bocascientific.com (781)-686-1631 info@bocascientific.com



Protein Markers and Ladders

Our protein markers contain ready-to-use, stabilized combinations of pre-stained proteins with a broad range of molecular weights. With sharp bands and easy visualization, these high quality protein markers are suitable for just about all protein applications. PM1500 Exce/Band Store at :20°C Lot No. PM1500 156459: Exp. 2017/04

<u>DNA Loading Dyes</u> <u>and Stains</u>

DNA loading and staining dyes are user-friendly, consistent and can be safely illuminated by LED blue light instead of damaging UV light, resulting in high levels of detection sensitivity.

<u>RedSafe Nucleic Acid</u> <u>Staining Solution</u>

RedSafe is a safer alternative to EtBr (ethidium bromide) for nucleic acid staining with equal sensitivity. This nontoxic, non-mutagenic, non-carcinogenic solution is used for detecting doublestranded DNA and single-stranded RNA.



RedStar[™] DNA/RNA Loading Dyes and DNA Ladders

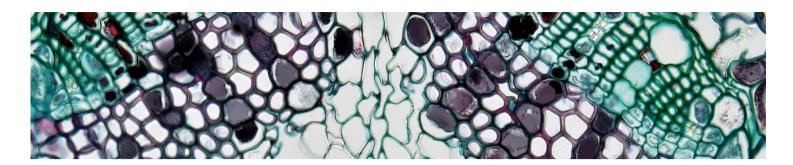
Safer alternative to EtBr for nucleic acid staining with equal sensitivity. This non-toxic, non-mutagenic, noncarcinogenic solution is used for detecting double-stranded DNA and single-stranded RNA.

We also offer a line of <u>GRS DNA</u> <u>Ladders</u>!



CELL BIOLOGY

www.bocascientific.com (781)-686-1631 info@bocascientific.com



<u>AquaBluer Fluorescent Redox</u> <u>Indicator</u>

Redox indicator for cell viability and cytotoxicity assays.



<u>MoBiTec Enzymes</u> High quality enzymes with high specificity and stability. Recombinant enzymes also available.

Infectious Serology Kits

Our selection of infectious disease kits include LIA and ELISA kits for a range of pathogens. These kits are primarily used with human serum or plasma and include highly specific recombinant antigens.

Types of Assay Kits Available:

- <u>Borrelia</u>
- <u>EBV</u>
- <u>HHV-6</u>
- Polyomavirus JC & BK
- <u>VZV</u>





See what our customers are saying...

I can't remember when I have dealt with a company with such great customer service. You know how to make a customer feel valued something that is becoming rare in today's world. - S.G.

We had such a positive experience ordering with you for our study - K.B.

20

You went above and beyond. I am very appreciative and very impressed with your diligence and efforts to be of service. Outstanding! - R.H.

This is one of the fastest quoteto-order-to-shipping services that I have got! - K.M.



Contact Us

781-686-1631

info@bocascientific.com

www.bocascientific.com

980 Washington St #220, Dedham, MA 02026

