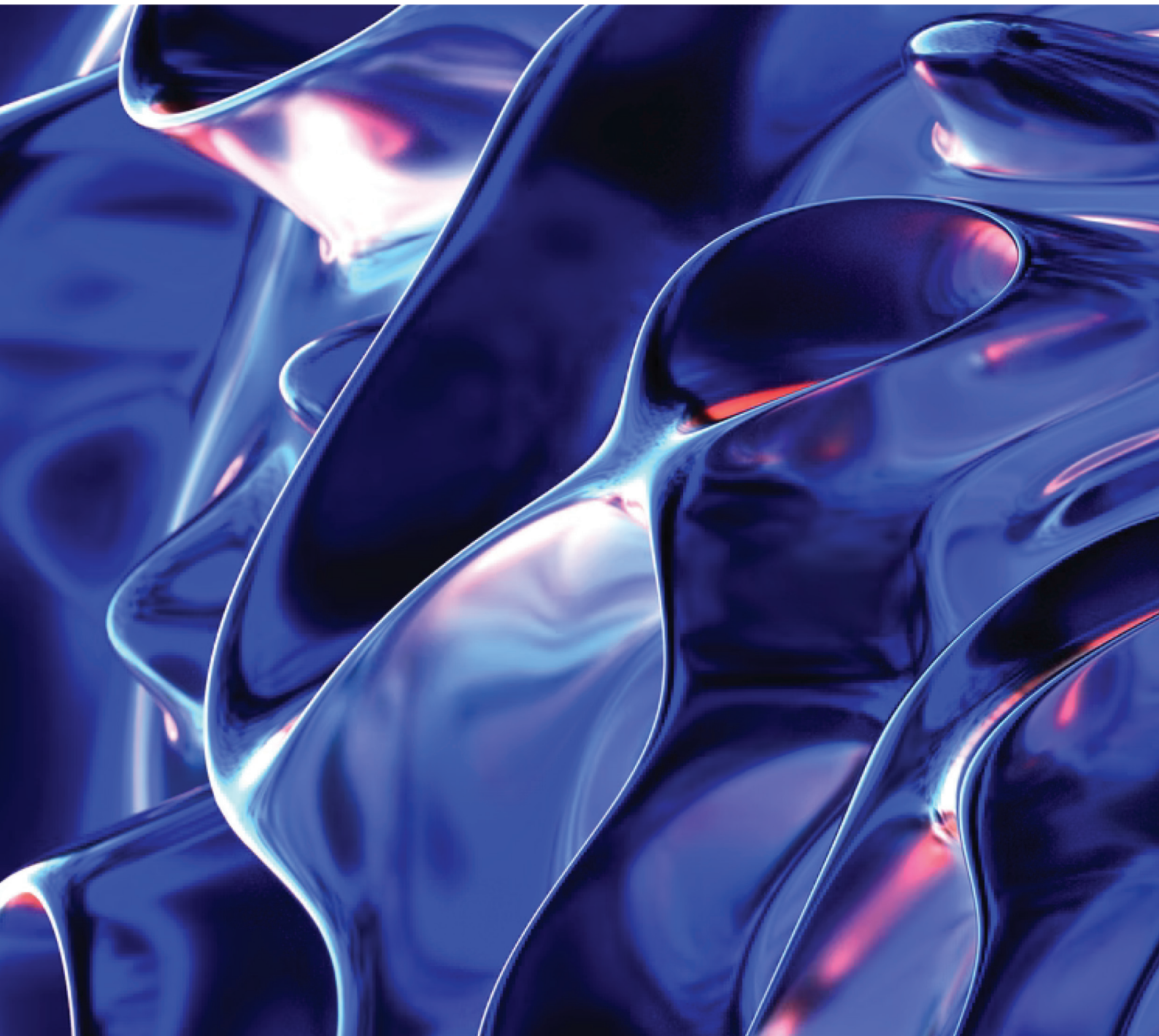


CAMBRIAN BIOWORKS

Product Catalogue 2022-2023

cambrianbioworks.com

Smart Tech for Diagnostics and Life Sciences





CAMBI
BIONE

Fierce Optimism

**A hearty letter to our customers,
partners, and community members**

“Good” may be good enough for some, but most of us want more than that. Something inside us makes us want to be better than good. We want to be part of a team whose members, even years later, will be remembered for what they accomplished.

We want to go for greatness!

At Cambrian Bioworks, our passion and mission is to enable greatness in people and organizations everywhere.

To that end, we have studied the topic of great performance at perhaps an unprecedented level.

NOTE FROM CEO

Thank you for your ongoing trust and support. If there is anything you believe we could be doing differently, please share your thoughts with us.

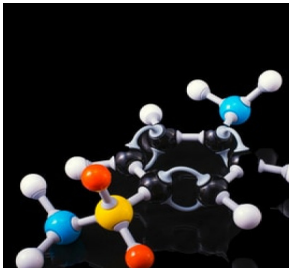
We wish you continued success in your research.

**Vaibhav Hegde,
CEO, Cambrian Bioworks, India**

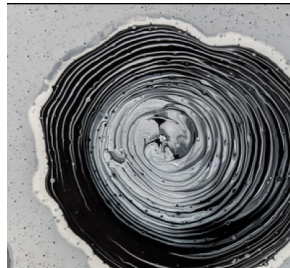
VISION AND VALUES

As an enterprise, our values guide our approach to everything we do. We trust in the infinite power of the life sciences to make the earth a better place.

At Cambrian we build smart, enabling technologies for scientists who build breakthroughs for medical diagnostics and bio research.



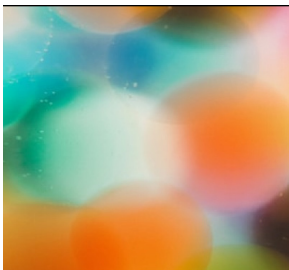
Build what matters



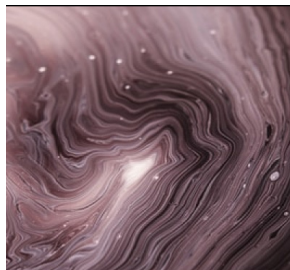
Play where impact & profitability converge



Be audacious in your plans & actions



Design for the world



Chose Empathy

Cutting Edge Facility

Our medical device manufacturing facility is built in compliance with the ISO 13485 standards with a separate clean room for chemistry, biology and plastics assembly and packing. With over 10,000 sqft of area our primary production operations

happen from our Peenya facility in Bangalore. Our RnD is housed in clean room laboratories with access to world class research equipment at Bangalore Bioinnovation Centre in Electronic city, Bangalore.



WE HAVE BUILT PRODUCTS TO SUPPORT OVER 40 MILLION TESTS ACROSS INDIA

Certified Quality

Cambrian Bioworks is an ISO13485 certified company that is building world class products in India.



13485:2016
Medical Device
Quality Management



Quality by design

We set ourselves high-quality standards that are new benchmarks in what 'Made in India' products can look like.

We believe that we play a central role in India's pursuit to build itself an import independent medical supply chain.



Applications

Our products are used across a wide variety of diagnostics and life sciences applications.

A few segments we prominently work with would be Molecular Diagnostics, Sequencing, Plant and agricultural research and Protein chemistry.



Molecular Diagnostics



Smart sample handling



High throughput Sample Preparation

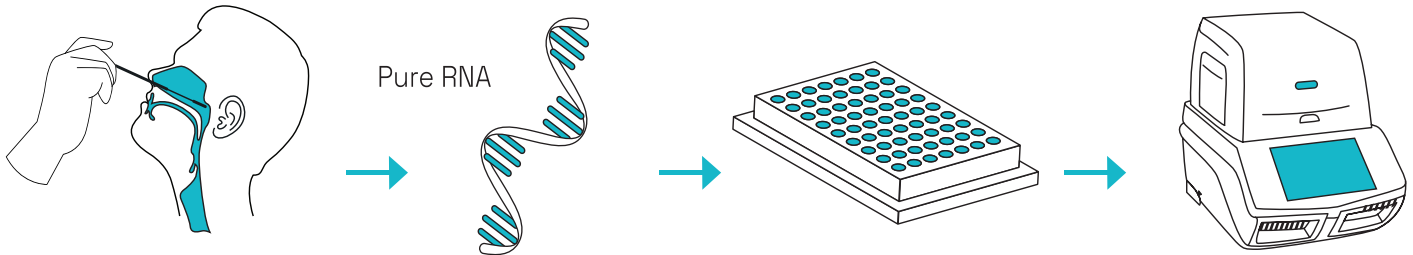


Protein Chemistry

OUR SUPPORT TO COVID19 RESEARCH

Cambrian supported all the endeavours of our customers who built different components of the testing workflow during the Covid-19 pandemic.

Cambrian designed, built and manufactured all these products withholding the rigorous standards set by the ISO13485 Quality systems, right here, in Bangalore, India.



Sample Collected with a Swab

RNA is "extracted" from the swab received

Pure RNA loaded onto the PCR plate

Filled PCR plate is now run in a PCR machine

Sample Collection

Our Cambrian Nasal Swab was a national phenomenon, with over 10 million swabs manufactured in under 6 months, our swabs reached every corner of the country and few places beyond our borders. Apart from the VTM kit, we also manufacture Saliva collection kits.



Cambrian Nasal and Oral Swabs

PCR consumables

PCRnow Strips and Plates were extensively used by our customers in running RT-PCR tests during the pandemic. Manufactured in sterile and clean room injection molding facilities.

Our products were one of the only PCR consumables available in the market that reach their customers gamma sterilised. The plastic resin in Cambrian products are in compliance with US Pharmacopoeia Plastic Class VI.



RT-PCR kits

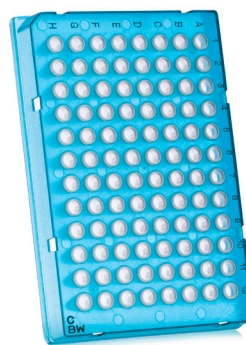
Cambrian's Truescreen SARS CoV 2 RTPCR test kit was built to target 3+1 genes in detecting the Covid19 virus. We were one of the very few companies in the country to attempt to deliver RT PCR kits in Prefilled-PCR strip tubes, eliminating the need for multiple pipetting steps and human

error that is usually involved in liquid handling during high throughput and stressed scenarios. We always keep the user experience at the heart of what we do at Cambrian.

Sequencing research

Nucleic acid (DNA and RNA) holds valuable biological information and extracting this valuable information plays a pivotal role in multiple areas of life science and healthcare. Cambrian Quickpure viral DNA/RNA kits are designed for the rapid and reliable isolation of viral RNA and viral DNA from whole blood, serum, plasma, saliva, and other bodily fluids.

The purified nucleic acids are ready for direct use in downstream applications, such as PCR and sequencing.



RNA extraction

During the pandemic, a large set of our high throughput testing customers were relying heavily on Automated RNA extraction platforms, which used pre-filled deepwell plates that contained the RNA extraction assays.

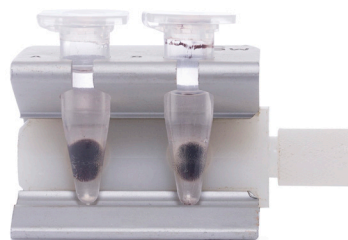
To support the increasing demands of our customers, we custom built a fully automated Deepwell plate filling unit in our manufacturing plant to support filling of over 2500 plate sets a day which roughly translates to over 2 lakh reactions a day

A variety of different RNA extraction protocols are now available using CamBeads Si. Our nano materials are compatible to work with Zybico, Kingfisher Duo, Flex and other popular automated pipetting systems.

Cambrian's popular CamSpin columns went into manufacturing of over 8 million Manual RNA extraction kits.



Spin Columns for RNA



Magnetic Beads

OUR TEAM



Vaibhav Hegde has a BS in Chemical Engineering from the Georgia Institute of Technology and an MS from the University of Pennsylvania. Vaibhav worked in the Process Development and Manufacturing department at AstraZeneca, developing upstream production processes for Antibodies and Vaccines.



Rohit Asil has a BE in Instrumentation Engineering from MIT, Manipal. He is a Co-founder at Fracktal Works, an Additive Manufacturing company based in Bangalore. Before Cambrian, Rohit helped build consumer products for large enterprises like Godrej consumer products limited and L'Oréal India.



Raghav Sridhar got his BE in Mechanical Engineering from NMIT, Bangalore. He is a Co-founder at Fracktal Works, an Additive Manufacturing and Prototyping Technology Company based in Bangalore.



Akshatha has a Bachelors in Architecture from Ramaiah University, Bangalore. She also runs a private practice in Bangalore developing projects in hospitality, commercial and residential spaces.



A ISO13485 certified manufacturing facility in Peenya



Our R&D labs are incubated at BBC at IBAB campus in Electronic city.

Millions of dollars worth scientific equipment and infrastructure at our disposal

Cambrian is a strong women led, women driven team.

Our manufacturing and R&D teams are comprised of more than 70% women.



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PCRnow

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A CamSpin Columns is being checked against dimensional quality standards at Cambrian clean room facility

QUICKPURE NUCLEIC ACID EXTRACTIONS

Nucleic acids, DNA and RNA hold valuable biological information. Nucleic Acid Amplification Tests (NAAT) are rapid, specific and more sensitive compared to culture-based tests and more specific than serology-based testing.

Nucleic Acid Testing (NATs) are employed in detection of various diseased conditions like cancer, SNP based genetic disorders, and various chromosomal aberrations based genetic disorders.

A successful nucleic acid extraction forms the crux of the NAT assay.

Our nucleic acid extraction kits utilise chaotropic salts for effective denaturation and deproteinization of interfering nuclear-protein complexes, inactivation of endogenous nuclease activity and enhancing binding of nucleic acid to the silica molecules for effective extraction of DNA to be used for various downstream applications.

Featured Products

Cambrian QuickPure Blood gDNA SC based extraction kit

Cambrian QuickPure gDNA extraction kit - CamBeads

Cambrian QuickPure Viral RNA Extraction-SC Manual

Cambrian QuickPure Viral RNA Extraction-ZB 32x

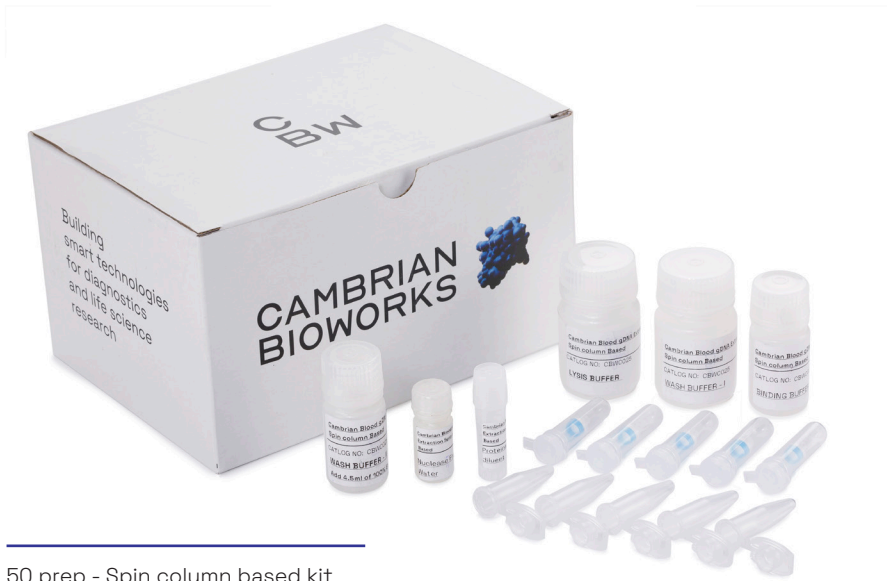
Cambrian QuickPure Viral RNA Extraction-ZB 96x

Cambrian QuickPure Blood and Tissue gDNA Extraction Kit

Cambrian gDNA Kit offers a versatile and cost-effective method for the isolation of DNA from whole blood samples and Blood drawn and stored in EDTA vacutainers.

This convenient spin-column format avoids use of toxic compounds such as phenol and chloroform and allows for multiple samples to be processed in parallel.

DNA purified using this kit is ready for most downstream applications such as PCR, sequencing, genotyping, southern blot analysis and restriction enzyme digestion.



50 prep - Spin column based kit



CamSpin Columns

CamSpin Column Technology

Features

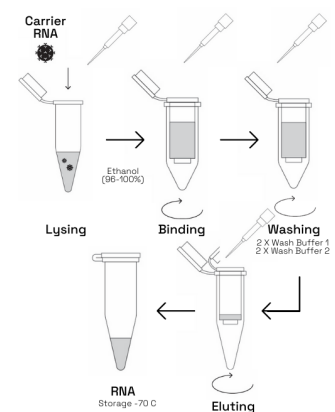
Rapid – DNA isolation in less than 20 minutes post-lysis

Versatile – Single kit for multiple sample types

Specialised buffer system, Optimised for higher yields

Safe – No phenol/chloroform

High-quality – DNA is suitable for a variety of downstream applications



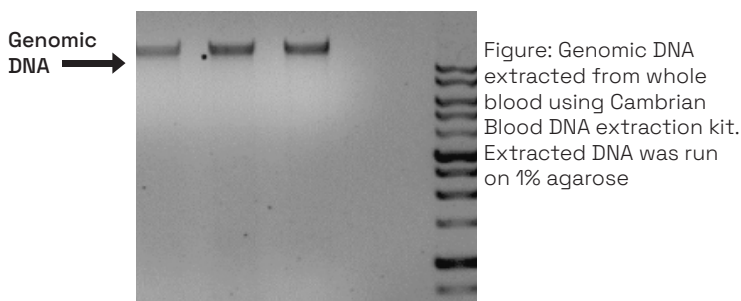
Extraction Protocol

FEATURES	Starting Amount	Sample Types	Elution Volume
SPECIFICATIONS	200 µL of whole blood	Blood drawn and stored in EDTA vacutainer	40 µL- 50 µL

Kit Contents

Contents	Storage
Lysis Buffer	Room temperature
Proteinase K (lyophilized)	-20 °C (upon reconstitution)
Proteinase K diluent	Room temperature
Carrier RNA	-20 °C (upon reconstitution)
Binding Buffer	Room temperature
Wash Buffer I	Room temperature
Wash Buffer II	Room temperature
Elution Buffer - Nuclease free water	Room temperature
CamSpin Columns	Room temperature

Technical References:



Ordering Information:

SKU	CBWC025
NAME	Cambrian Blood gDNA Extraction Kit Spin column based
PREPS	50 preps
PRICE	INR 6,600/-

Cambrian QuickPure Blood and Tissue gDNA Extraction Kit - CamBeads

Cambrian gDNA Kit offers a versatile and cost-effective method for the isolation of DNA from whole blood samples and blood drawn and stored in EDTA vacutainers.

This convenient magnetic bead based format enables both manual benchtop extractions and automated high throughput extractions as well.

Magnetic Stands for manual extractions

Pre-filled kits for automation platforms

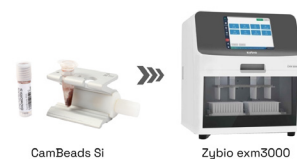
This is Cambeads Si

Si coated magnetic beads for NA extractions



C
BW

Compatibility



Features

Rapid – DNA isolation in less than 18 minutes post-lysis

Specialised buffer system, Optimised for higher yields

Safe – No phenol/chloroform

High-quality – DNA is suitable for a variety of downstream applications

No Centrifugation – This methods eliminates the use of centrifuge altogether, faster extractions with less touch points



FEATURES	Starting Amount	Sample Types	Elution Volume
SPECIFICATIONS	200 µL of whole blood	Blood drawn and stored in EDTA vacutainer	40 µL- 50 µL

Kit Contents

Contents	Storage
Lysis Buffer	Room temperature
Proteinase K (lyophilized)	-20 °C (upon reconstitution)
Proteinase K diluent	Room temperature
Carrier RNA	-20 °C (upon reconstitution)
Binding Buffer	Room temperature
Wash Buffer I	Room temperature
Wash Buffer II	Room temperature
Elution Buffer - Nuclease Free water	Room temperature
CamBeads Si	Room temperature

Technical References:

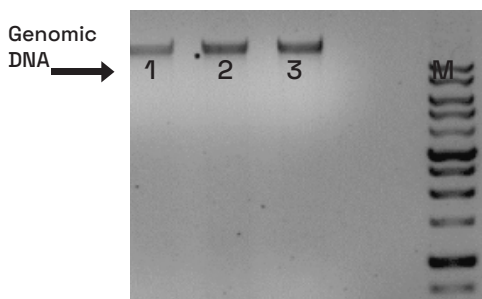


Figure: Genomic DNA extracted from whole blood using Cambrian Blood DNA extraction kit. Extracted DNA was run on 1% agarose



Scan this QR to watch instructions of use on Youtube <



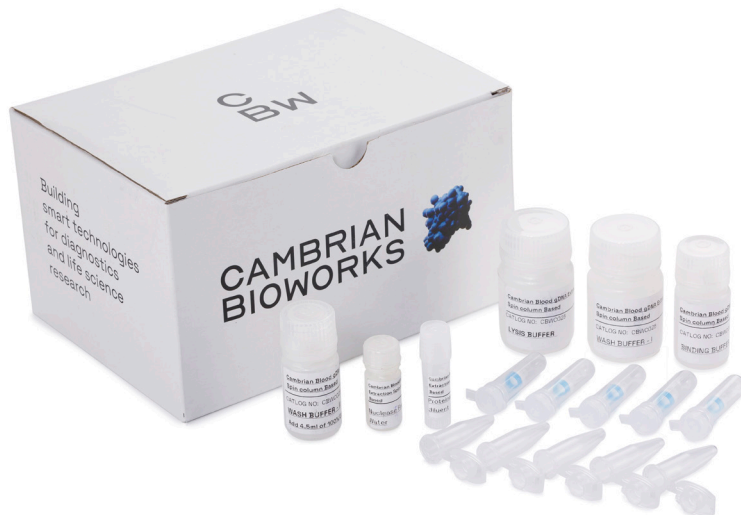
Ordering Information:

SKU	CBWC040	CBWC068	CBWC070
NAME	Cambrian Blood gDNA Extraction Kit CamBeads	Cambrian Blood gDNA Extraction Kit 96 format	Cambrian Blood gDNA Extraction Kit 16 format
PREPS	50 preps	96 preps	32 preps
PRICE	On Request	On Request	On Request

Cambrian QuickPure Plasmid Extraction

Cambrian Plasmid DNA Kit offers a versatile and cost-effective method for the isolation of pDNA with minimal co-purification of RNA from sample types like bacterial cell and others.

Plasmid DNA purified using this kit is ready for most downstream applications such as RT-PCR, sequencing, cloning and other culture related applications



Magnetic Bead based kit available



CamSpin Columns based kit

Features

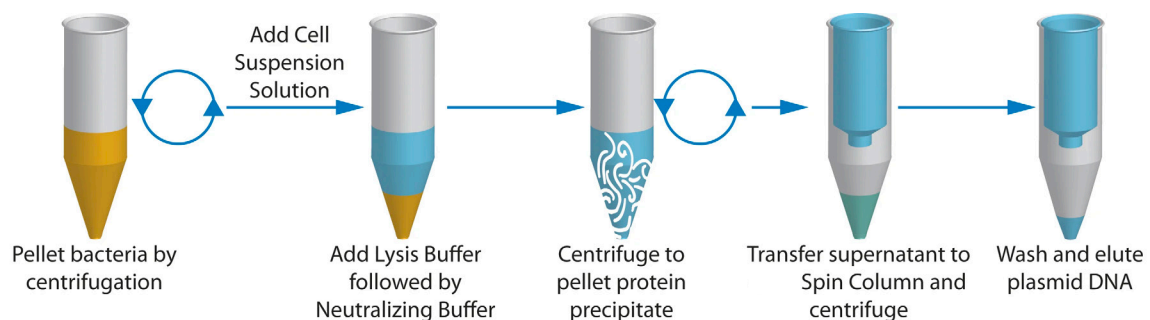
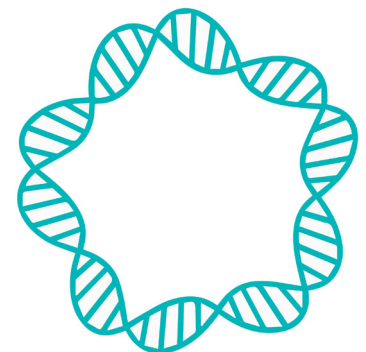
Versatile – Single kit for multiple sample types

Specialised buffer system

Optimised for higher yields

Safe – No phenol/chloroform

High-quality – Plasmid DNA is suitable for a variety of downstream applications



FEATURES	Starting Amount	Sample Types	Elution Volume
SPECIFICATIONS	200ul	Nasal and Oral swab samples	20 µL- 50 µL

Technical References:

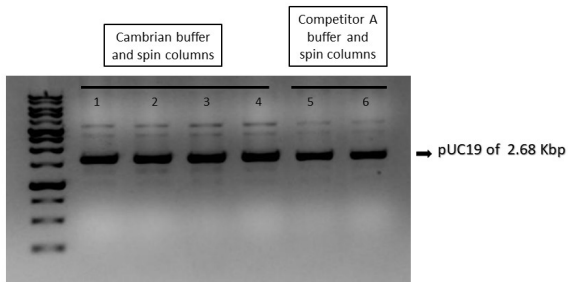


Figure: pUC19, a high copy plasmid of size 2.68 Kbp extracted from *E.coli* DH5a using Cambrian plasmid extraction buffer and spin columns (Lane 1-4) and Competitor A (Lane 5-6)

Buffer- column system	Concentration(ng/ul)	Yield (ug in 50 ul)	A260/A280	A260/A230	Average Yield in 50 ul of eluted product	Elution buffer type
Cambrian Buffer and spin columns	28.7	1.44	1.88	1.08	1.70	10 mM TrisCl (pH 8.5)
	36.5	1.83	1.92	1.09		
	33.6	1.68	1.95	1.03		
	37.4	1.87	1.9	1.05		
Competitor A buffer and spin columns	30.2	1.51	2.02	1.13	1.61	
	33.9	1.7	1.87	1.09		

Table showing the concentration(ng/ul), yield(ug), A260/280 and A260/230 of individual extractions. The average yield from Cambrian plasmid extraction system and using Competitor A has been shown.

Ordering Information:

SKU	CBWC032	CBWC032b
NAME	Cambrian Plasmid DNA Extraction kit - SC	Cambrian Plasmid DNA Extraction - Magnetic Beads
PREPS	50 preps	50 preps
PRICE	On Request	On Request

Cambrian QuickPure Viral RNA Extraction

High throughput total nucleic acid isolation from bodily fluids for ThermoFisher Kingfisher Flex Quickpure viral DNA/RNA 96 kit is designed for the rapid and reliable isolation of viral RNA and viral DNA from whole blood, serum, plasma, saliva, and other bodily fluids. The CamBead® magnetic bead technology enables purification of high quality nucleic acids

that are free of proteins, nucleases, and other impurities. In addition to being easily adapted to most automated systems, this procedure can also be scaled up or down depending on the amount of starting sample. The purified nucleic acids are ready for direct use in downstream applications, such as amplifications and others.



CamBeads Si - Trial Pack

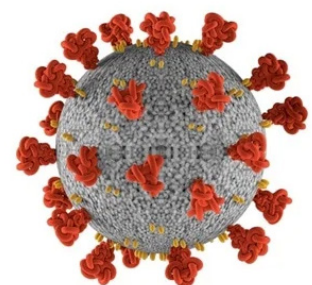
CamBeads Magnetic Technology

Features

Automation ready

Magnetic bead based

High-quality – DNA/RNA is suitable for a variety of downstream applications



Used in detection Covid19

FEATURES	Starting Amount	Sample Types	Elution Volume	Throughput
SPECIFICATIONS	50 µL - 200 µL	Serum, plasma, saliva and other body fluids	20 µL- 50 µL	8 - 96

Kit Contents

Contents	Quantity	Storage
Lysis Buffer Plate	38.48 ml	Room temperature
Proteinase K (lyophilized)	20 mg	-20 °C (upon reconstitution)
Proteinase K diluent	1.5 ml	Room temperature
Carrier RNA	1 mg	-20 °C (upon reconstitution)
Binding Buffer	48 ml	Room temperature
Wash Buffer II plate	48 ml	Room temperature
Elution Buffer Plate	6.72 ml	Room temperature
Nuclease free water	1.5 ml	Room temperature
Tip Comb	1 nos	Room temperature
Cambeads for RNA extraction	40.8 ml	Room temperature

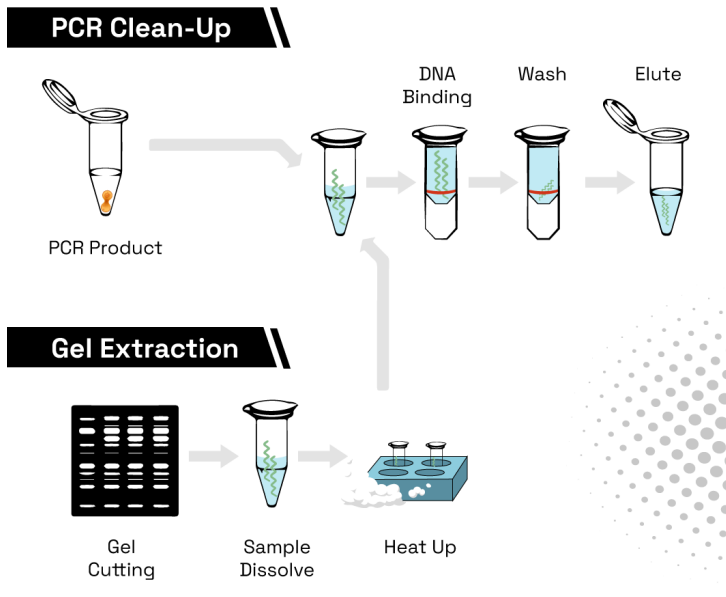
Ordering Information:

SKU	NAME	PREPS
CBWC035	Cambrian QuickPure Viral RNA Extraction-ZB 96x	1 x 96
CBWC049	Cambrian QuickPure Viral RNA Extraction-ZB 32x	1 x 96
CBWC036	GXMAG-PF96 for Genetix extractor	1 x 96

Price on request*

PCR Clean up and Gel Extraction Kits

Clean up kits are essential in molecular workflows in industries like Biopharma, diagnostics, Drug discovery and research. Ensuring clean DNA and RNA post amplifications requires washing away of the other enzymes and reagents that are involved in PCR. Size selection of specific DNA from a gel will require to clean the sample off the gel matrix.



Features

Versatile - multiple sample types

Specialised buffer system

Optimised for higher yields

Safe - No phenol/chloroform

High-quality - Plasmid DNA is suitable for a variety of downstream applications

Ordering Information:

SKU	NAME	PREPS	PRICE
CBWC032	Cambrian PCR clean up kit - Spin Columns	50 preps	INR 5,200/-
CBWC031	Cambrian Gel Extraction kit	50 preps	INR 7,750/-

Cambrian

CamSpin Columns



CamSpin Flex



CamSpin Shredder



CamSpin Pure

Features

Calibrated – Spin columns pre classified for specific extractions

Membrane Size is customised based on the application

Optimised for repeatable and high yields

Safe – No phenol/chloroform

High-quality – DNA and RNA suitable for a variety of downstream applications

Ordering Information:

SKU	NAME	PACKING	REMARKS
CBWC009	CamSpin Flex	500 nos	Purple O-Ring (Blood gDNA; Tissue gDNA; Plant easy and Difficult; Plant DNA)
CBWC010	CamSpin Pure	500 nos	Blue O-ring (Plasmid; PCR; Gel; Blood RNA)
CBWC011	CamSpin Shredder	500 nos	Clear O-Ring for plant applications

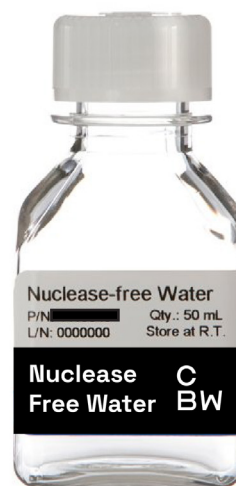
500nos per pack

Cambrian

Nuclease Free Water

Cambrian's Nuclease-Free Water is prepared in a proprietary manufacturing process, which yields DNase, RNase, and nuclease-free, deionized water without the use of chemical additives, such as diethylpyrocarbonate (DEPC).

Nuclease-Free Water is provided in nuclease-free containers with sterility certifications



Scan
to Visit
Webpage

Features

Versatile – Used across a big range of molecular applications

Specialised Manufacturing system ensures highest of purity

Optimised for PCR, qPCR and Sequencing sample preparation protocols

Safe – No phenol/chloroform

High-quality – DNase and RNase free H₂O that is built for sensitive molecular biology applications

Ordering Information:

SKU	NAME	VOLUME
CBWC069	Nuclease Free h ₂ O	50ml
CBWC069	Nuclease Free h ₂ O	500ml

Cambrian

Saliva Collection Kit

Saliva collection kits is used for sample collection of saliva for various downstream applications. Some of the popular applications being Gut-microbiome analysis using Next generation sequencing and Whole genome sequencing for advanced genomics and genetics studies.

Popular amongst whole genome sequencing use cases, saliva collection kits from Cambrian were also used in Covid19 detection assays built by large biotech enterprises.



Features

Versatile – Single kit for multiple sample types

Specialised buffer system

Optimised for higher yields

Safe – No phenol/chloroform

High-quality – DNA is suitable for a variety of downstream sequencing applications



Scan this QR to watch instructions of use on Youtube



Ordering Information:

SKU	NAME	PRICING
CBWA013	Saliva Stabilisation Kit with Buffer and 12ml Tube	INR 1899/-
CBWA012	Saliva Stabilisation Kit with Buffer and 4.5ml Tube	INR 1829/-

Cambrians saliva collection system is designed keeping NGS and Sanger sequencing use cases in mind.

To learn more about long term storage applications, please reach out to us



Scan to Visit Webpage

What is Liquid Biopsy?

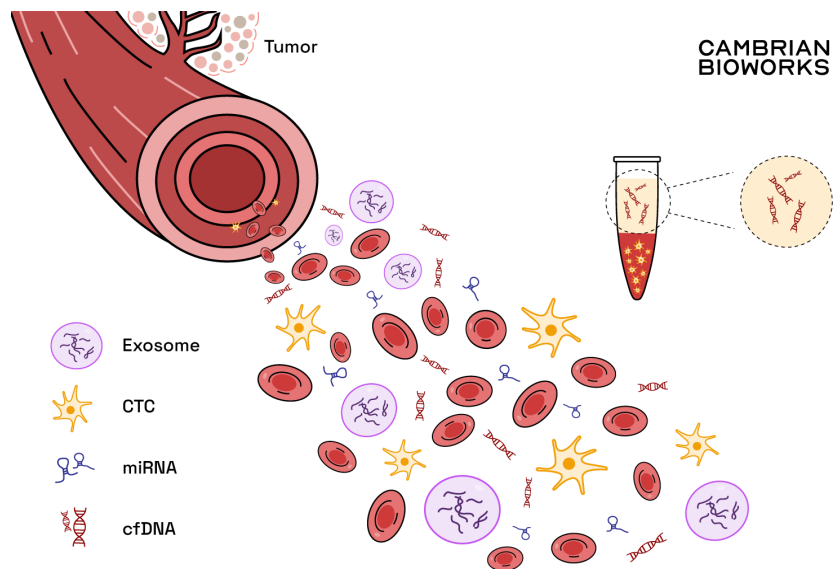
The first cancer test done by a cancer specialist is a tissue biopsy, where in tissue cells are collected for closer examination of a potential tumour. These cells are then studied under the microscope for presence of oncological cells, and more clues on the type of cells. But these biopsies are invasive, risky and expensive as they require an endoscope and an open surgery.

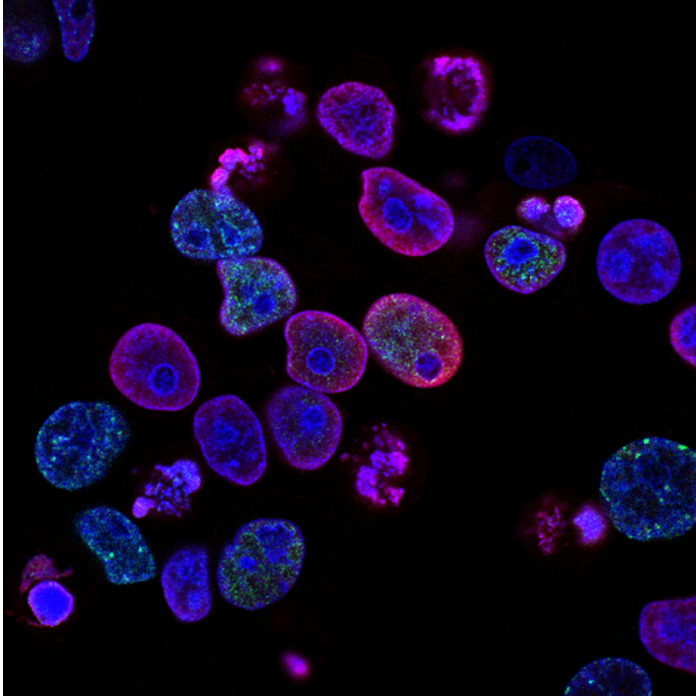
Researchers have come up with a new approach that could be a safer and revolutionary alternative to the conventional biopsies, called liquid biopsy. It is a technique that involves the detection and isolation of circulating tumour cells and DNA in cancer patients.

As a tumour grows bigger in size, its phagocytic capability to shed and eliminate circulating tumor cells, miRNA, exosomes and cell-free DNA into the bloodstream also escalates. This cell-free DNA that circulates in the bloodstream is used to analyze information about the tumor like size of the tumour (as the amount of cfDNA circulating in the blood is proportional to the tumour size and vascularity) and the location of the tumour. It is also used to detect biomarkers of cancer and other diseases.

Liquid biopsy is changing the way we look at cancer diagnostics as day by day, we are coming up with a plethora of applications to use liquid biopsy in, such as:

- Screening and presence of cancer
- Customising therapy for each patient
- Monitoring treatment response and drug resistance
- Detecting recurrence of disease





Human colorectal cancer cells treated with a topoisomerase inhibitor and an inhibitor of the protein kinase ATR (ataxia telangiectasia and Rad3 related), a drug combination under study as a cancer therapy. Cell nuclei are stained blue; the chromosomal protein histone gamma-H2AX marks DNA damage in red and foci of DNA replication in green. Created by Yves Pommier, Rozenn Josse, 2014



PCRnow

Cambrian PCR Plastics series

CAMBRIAN
BIOWORKS

PCRnow

Cambrian offers a complete range of PCR Strip Tubes & Caps specially designed for thermal cyclers and thin walled tubes for rapid heat transfer.

Our products are widely used in sequencing, disease testing, and genomics. Cambrian PCRnow Strip Tubes and Caps are designed for RT-PCR, LA-PCR, and other common molecular biology applications.

They allow you to perform quick and easy thermal cycling experiments, making them ideal for your PCR thermal cyclers.

Products offered include individual tubes and tube strips. Cambrian PCRnow™ Tube Strips with Attached Flat Caps are designed to reduce the risk of cross-contamination in PCR assays. Our Thin-Walled Reaction Tubes enable fast heat transfer for precise PCR.

Featured Products

PCRnow

PCRnow Low Profile 8-tube Strip with Flat Cap/ UC

PCRnow Low Profile Plate for Biorad cfx-96

PCRnow Adhesive Plate seals

PCRnow Strip Tubes

Low Profile Strip tubes

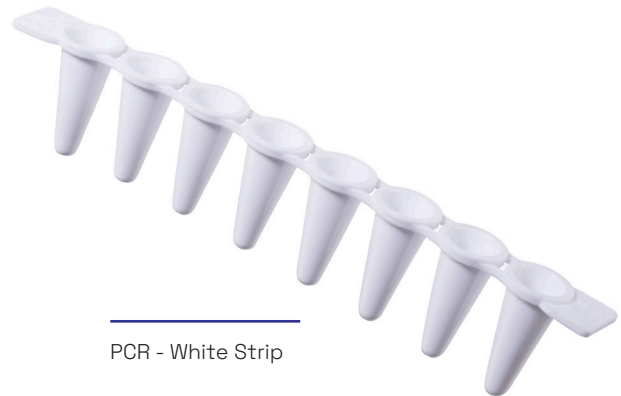
PCR tubes are small tubes designed for use in polymerase chain reaction (PCR). These tubes can be manufactured from a variety of materials, and are available in different capacities and RCF ratings.

Choose from autoclavable and/or RNase-, DNase- and DNA-free. 8-Tube Strips (Low Profile) for qPCR and RT-PCR are manufactured with US FDA 21 CFR compliant polypropylene.

Injection moulded parts are gamma sterilised and packed in resealable pouches. Strips are available in ultra clear and white variants. Available with Ultraclear or White flat cap strips or domed cap strips.



Ultra clear Strip with flat Cap



PCR - White Strip

Features

DNase /RNase free and pyrogen safe

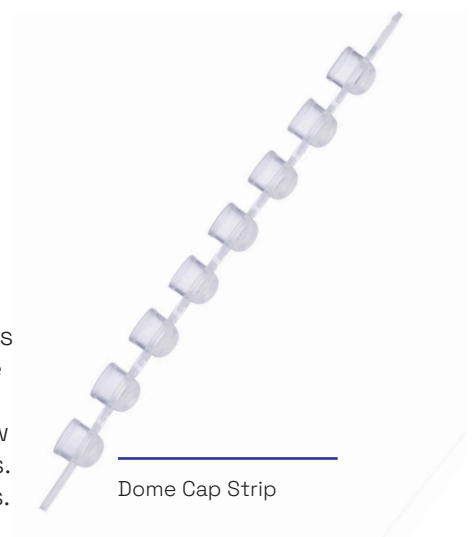
Endotoxic free

PCR Inhibitor free

Low cavity moulding

To manufacture PCR products with the highest uniformity possible, a low-cavity moulds must be used. This means only a few products are moulded during each cycle. Manufacturing using low cavity moulds is time consuming, and is therefore far more expensive compared to using high multi-cavity moulds from which 32, 64 or even 128 products are released in each cycle.

Competitor's products are often manufactured using high-multi-cavity moulds and therefore differ severely in tolerances and quality due to this production method. This can result in batches of products with extreme differences in wall-thickness, closure, orifice and fit, which will influence the reproducibility of your experiment. Manufacturing parameters of low cavity moulds are more controllable in comparison to high cavity moulds. Cambrian Bioworks' products are manufactured using low-cavity moulds.



Dome Cap Strip

Uniform Raw material blends

Cambrian uses Polypropelene that is of the highest medical grade possible. Additionally apart from running the operation in a clean room manufacturing facility, Cambrian Bioworks also sterilises all PCR plastics. Materials and blends are customised and standardised to comply with the end -use application, in this case rapid heat cycles and thin walled parts, by in-house specialists.



PP Granules at Cambrian Plant

Ordering Information:

SKU	DESCRIPTION	PACK SIZE	PRICE/PACK
CBWC001	0.1ml qPCR Low Profile with Dome Caps clear Tubes	125 Strips per pack	INR 3375
CBWC002	Low Profile 8-tube Strip with Flat Cap/ UC- 0.1ml Optical Flat caps Ultra Clear Tubes	125 Strips per pack	INR 3125
CBWC003	Low Profile 8-tube Strip with Dome Cap/ White Tubes	125 Strips per pack	INR 4375
CBWC004	0.1ml qPCR Low Profile with Flat Cap White Tubes 8 Strip Tubes	125 Strips per pack	INR 4125
CBWC072	0.2ml qPCR Regular Profile Strip with attached cap	125 Strips per pack	INR 4125



Tube angled and optimised for best fit

Usually the heating blocks of different brands of PCR thermocyclers vary in exact angle of the wall which aligns with the PCR strips tube wall. Cambrian designed the PCR strips to coincide with a wide range of thermocyclers in the market. Ask for compatibility index to check the exact consumable - machine fit.

PCRnow

PCR Plates for all platforms



Features

DNase /RNase free and pyrogen safe

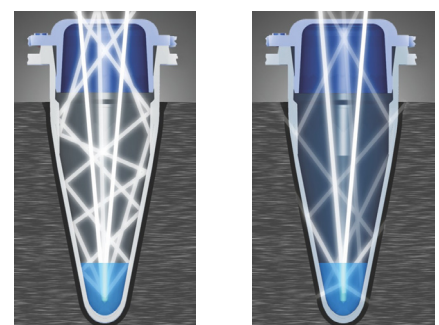
Endotoxic free

PCR Inhibitor free

Optical Reading through Caps

In case of sensor reading from the top, White products are superior for enhancing signal to noise ratios. White products greatly enhance signal/noise ratios up to 90% compared to transparent ones. Possible block pollution of dyes, differences in coatings, and inconsistent coatings can influence PCR signals. White well products will eliminate these interferences when compared to natural transparent products.

Ask for Cambrians white well product line in both Strips and Plates in case of optical reading through caps or seals.



White wells

Clear Wells

Wall Uniformity

All PCR plastics manufactured by Cambrian are built with uniform and thin wall thicknesses to enable high heat transfers at the bottom of the tubes and lowest evaporation at the top of the tube where the cap sits. This ensures minimal to no evaporation and repeatable PCR results across a range of applications.



Compatible Optical Seals

Cambrians also manufactures highly compatible optical PCR Plate seals that go with all the PCR plate line up of products. Also comes in an extremely ergonomic wall-mount pack that sits on your wall and saves precious desk space and allows you to access one seal at a time with minimal contamination of the other seals in the pack.



Ordering Information:

SKU	DESCRIPTION	PACK SIZE	PRICE/PACK
CBWC010	Low Profile PCR Plate- Fully-Skirted Clear tubes	25 nos per Pack	INR 4250*
CBWC009	Low Profile PCR Plate-Fully-skirted/ White	25 nos per Pack	INR 5875*
CBWC020	Low Profile PCR Plate-Fully-Skirted/ Clear with Optical Seal	25 nos per Pack	INR 5500*
CBWC022	Low Profile PCR Plate-Fully-Skirted/ White with Optical Seal	25 nos per Pack	INR 7125*
CBWC045	Unskirted Regular Profile PCR Plate	25 nos per Pack	INR 6125*

PCR Plasticware Compatibility Charts

Cambrian PCR Plate Compatibility Matrix	Full skirted 0.1ml PCR Plate	Unskirted 0.2ml PCR Plate	Raised deck 0.2ml	0.1ml Lightcycler style
Catalog Numbers	CBWC010	CBWC069	CBWC014	CBWC068
Bio-Rad				
iCycler iQ		y		
i05		y		
MyiQ		y		
Chromo4		y		
Opticon I & II				
CFX96	y			
	y			
Applied Biosystems (Life Technology)				
7000			y	
7300			y	
7500			y	
7900HT Standard (0.2 ml)			y	
ViiA7 (0.2 ml)			y	
QuantStudio (0.2 ml)			y	
QuantStudio 3/5 (0.2 ml)			y	
5700/7700			y	
310/3100/3130 (xL)(0.2 ml Standard 96 Well)			y	
Roche				
LighrCycler 480 & 480II				y
LighrCycler 96				y
Stratagene/Eppendorf/Biometra				
Mx4000/3000P/3005P			y	
AriaMx		y		
MasterCycle ep Realplex			y	
Topical Thermocycler			y	

Plate Seals



Features

DNase /RNase free and pyrogen safe

Wall Mount pack

Swipe right for a great PCR experience ;)

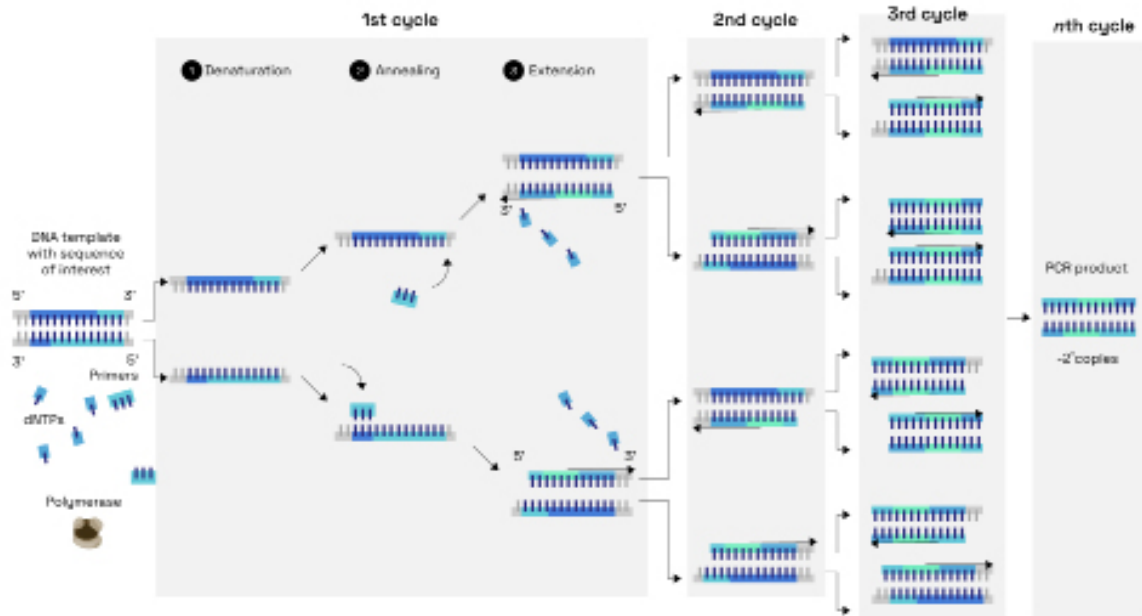
Usage:

- Sufficient Pressure must be applied to activate silicone adhesive
- Multiple swipes of sealing comb in both directions is highly recommended
- A 10 minute or greater wait period before thermal cycling increases the film-plate bond.

The silicone adhesive is non-tacky until pressure is applied to the sealing surface which then creates a secure bond around the wells and perimeter of the plate. Also ideal for dry samples (e.g. soil, seeds, insects, etc.) because the non-activated adhesive above the wells remains non-tacky. A roller or sealing paddle is highly recommended for use with this product to ensure consistent and adequate pressure is applied during the sealing process.

Ordering Information:

SKU	CBWC015	CBWC034
TRADE NAME	Adhesive Plate seals	Hotfix Heat Seal
DESCRIPTION	Optical Adhesive seals for PCR and qPCR applications	Seals built for heat sealing of 96 well deep well plates
PACKING	100 seals a pack	100 seals a pack
PRICE	On Request	On Request



What goes on inside a PCR Tube?

Denaturation-To amplify a segment of DNA using PCR, the sample is first heated so the DNA denatures, or separates into two pieces of single-stranded DNA.

Annealing and Extension - Next, an enzyme called "Taq polymerase" synthesizes - builds - two new strands of DNA, using the original strands as templates. This process results in the duplication of the original DNA, with each of the new molecules containing one old and one new strand of DNA.

Cycle repeats - Then each of these strands can be used to create two new copies, and so on, and so on. The cycle of denaturing and synthesizing new DNA is repeated as many as 30 or 40 times, leading to more than one billion exact copies of the original DNA segment. The entire cycling process of PCR is automated and can be completed in just a few hours.

It is directed by a machine called a thermocycler (RT-PCR machine), which is programmed to alter the temperature of the reaction every few minutes to allow DNA denaturing and synthesis. A real time PCR machine watches for the optical signals (fluorescence) through every cycle and reports the results accordingly. Once amplified, the DNA produced by PCR can be used in many different laboratory procedures. For example, most mapping techniques in the Human Genome Project (HGP) relied on PCR.

PCR is also valuable in a number of laboratory and clinical techniques, including DNA fingerprinting, detection of bacteria or viruses (particularly AIDS), and diagnosis of genetic disorders.



Shot: Safe material handling practices at Cambrian warehouse ensuring maximum cleanliness across all stages of product handling

CAMBRIAN ESSENTIAL PLASTICS

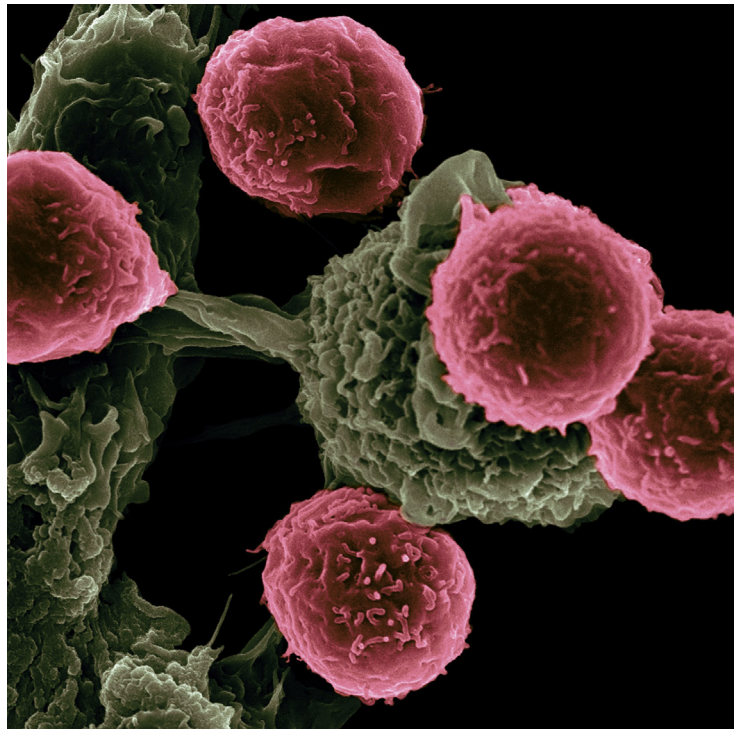
Plastics that are needed for everyday applications empowering extremely sensitive workflows in Immunology, Histopathology and Biopharmaceutical applications.

Featured Products

Cambrian Media Storage PETG Square Bottle

Cambrian RIA Vials for Radioimmunology

Cambrian Barrier Tips



Vaccine-Based Immunotherapy from Novel Nanoparticle Systems. Researchers at the Texas Center for Cancer Nanomedicine (TCCN) are creating particle-based vaccines for cancer therapy. The particles carry molecules that stimulate immune cells and cancer antigens (proteins) that direct the immune response. This scanning electron microscope image shows dendritic cells, pseudo-colored in green, interacting with T cells, pseudo-colored in pink. The dendritic cells internalize the particles, process the antigens, and present peptides to T cells to direct immune responses.

RIA Vials



Features

DNase /RNase free and pyrogen safe

Endotoxic free

PCR Inhibitor free

PETG Bottle - Square



Features

DNase /RNase free and pyrogen safe

Endotoxic free

PCR Inhibitor free

Ordering Information:

SKU	CBWBP101	CBWBP Series
TRADE NAME	Cambrian RIA vials	PETG Media Bottles
DESCRIPTION	Radioimmunology Vials	Sensitive Media Storage
VOLUME	12 x 75 mm	Wide volume range
STERILE	Gamma	Gamma
MATERIAL	Poly styrene	PETG

Essential Plastics



Reagent Bottles

Transparent

Cat no.	CBWP120	CBWP121	CBWP122	CBWP123	CBWP124	CBWP125
Volume	8ml	15ml	60ml	125ml	500ml	1000ml
Format	Square	Square	Square	Square	Square	Square
Material	PP	PP	PP	PP	PP	PP
Sterile	Gamma	Gamma	Gamma	Gamma	Gamma	Gamma
Quantity per pack	100	100	100	50	25	25
Price/Each Pack	On Request	On Request	On Request	On Request	On Request	On Request



Reagent Bottles

Amber

Cat no.	CBWP126	CBWP127	CBWP128	CBWP129	CBWP130	CBWP131
Volume	8ml	15ml	60ml	125ml	500ml	1000ml
Format	Square	Square	Square	Square	Square	Square
Material	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE
Sterile	Gamma	Gamma	Gamma	Gamma	Gamma	Gamma
Quantity per pack	100	100	100	50	25	25
Price/Each Pack	On Request	On Request	On Request	On Request	On Request	On Request



RIA Vial

Cat no.	CBWP101
Bottom Design	round
Format	12x75mm
Material	PS
Volume	5ml
Sterile	Gamma
Quantity per pack	500
Price/Each Pack	On Request



96 Well Plates 2.2ml

Cat no.	CBWP103	CBWP105	CBWP102	CBWP104
Format	V Bottom	V Bottom	U Bottom	U Bottom
Colour	Clear	Clear	Clear	Clear
Total Volume	2.2ml	2.2ml	2.2ml	2.2ml
Sterile	Gamma		Gamma	
Quantity per pack	20	20	20	20
Price/Each Pack	On Request	On Request	On Request	On Request



Tip Combs

Cat no.	CBWP106	CBWP107	CBWP108
Well Profile	96 well	8 Well	8 Well
Format	All	Himedia Variant	Others
Sterile	Gamma	Gamma	Gamma
Quantity per pack	10 combs	120 combs	120 combs
Price/Each Pack	On Request	On Request	On Request



Low Retention Barrier Pipette Tips

Cat no.	CBWP110	CBWP111	CBWP112	CBWP113
Volume	10ul	20ul	200ul	1000ul
Format	Filter	Filter	Filter	Filter
Material	Polypropelene	Polypropelene	Polypropelene	Polypropelene
Sterile	Gamma	Gamma	Gamma	Gamma
Quantity per pack	10 racks/96 tips per rack	10 racks/96 tips per rack	10 racks/96 tips per rack	10 racks/96 tips per rack
Price/Each Pack	On Request	On Request	On Request	On Request



PETG Sterile Bottles

Cat no.	CBWP114	CBWP115	CBWP116	CBWP117	CBWP118	CBWP119
Volume	30ml	50ml	125ml	250ml	500ml	1000ml
Format	Square	Square	Square	Square	Square	Square
Material	PETG	PETG	PETG	PETG	PETG	PETG
Sterile	Gamma	Gamma	Gamma	Gamma	Gamma	Gamma
Quantity per pack	100	100	100	50	25	25
Price/Each Pack	On Request	On Request	On Request	On Request	On Request	On Request



Quality by design - multiple documented quality checks all the way from material to manufacturing and till final packaging resulting in strong Certificates of Analysis

NANOMATERIALS

From Si coated nano materials to Gold nanoparticles for IVD and Immuno-diagnostic use cases, we build custom Nanomaterials with range of cores, coatings and functionalisations to choose from Applications extend from molecular biology to drug delivery and immunotherapy.

Featured Products

CamBeads Si - 7.5g/l - 250ml [■](#)

CamBeads Si - 20g/l - 250ml [■](#)

Magnetic Stand 8 stations [■](#)

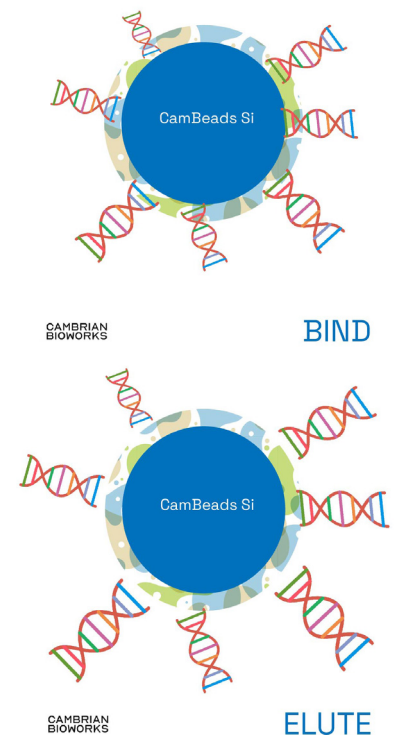
Magnetic Stand 2 stations [■](#)

Nanomaterials

Cambeads Si 7.5g/l - 250 ml + 20g/l - 250ml

CamBeads Si are non-porous Silica coated superparamagnetic particles designed for nucleic acid isolation in Diagnostics and R & D applications. Nucleic acid sequences (DNA and RNA) hold valuable biological information.

CamBeads Si is suitable for efficient extraction of DNA and RNA. These microspheres are suspended in a de-ionised water and have been characterised for size uniformity and mono-dispersion.



Key Features:

Large surface area

Robust platform for isolation of nucleic acids

Flexibility of use

Characteristics of the product:

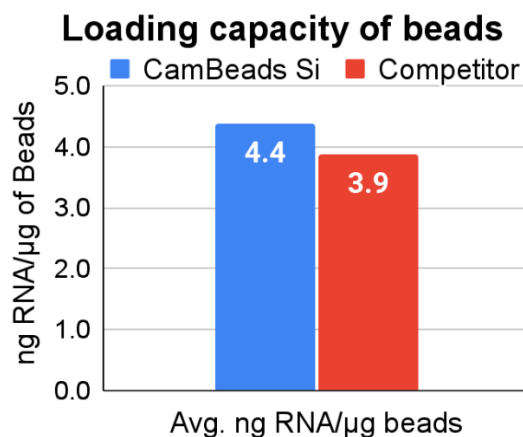
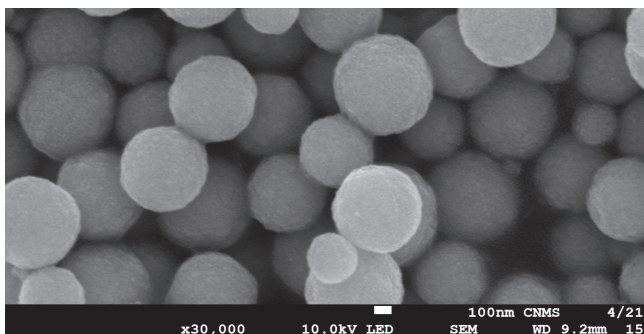
Composition: SiO₂, nonporous, paramagnetic

Surface Groups: SiOH (non-functionalized)

Distribution: Uniform distribution in DI water

Technical Information:

A known concentration RNA was added to the same quantity (both volume and bead concentration) of CamBeads Si manufactured by CambrianBioworks and an internationally renowned competitor product. The quantity of RNA added was in large excess so as to saturate the surface of beads with RNA. Elution was performed for such RNA saturated beads and the quantity of RNA extracted per μg of bead was calculated and compared as shown in figure. Loading capacity of magnetic beads (CamBeads Si and Competitor) measured by saturating the bead suspensions with excess RNA, followed by elution. The RNA quantification was performed using traditional UV-vis spectroscopy.



Suggested usage:

In a typical RNA extraction protocol involving 200 μl sample volume (say VTM), recommended bead volume would be between 20 and 30 μl (20 g/l). This recommended volume of beads is based on internal studies as well as feedback from existing customers. The optimal volume may vary depending on the specific sample type or composition of transport medium. Therefore, for best results it is ideal to perform evaluation studies starting with the above recommended volume to identify the optimal bead quantity required to achieve satisfactory performance.

Ordering Information:

SKU	TRADE NAME	PACKING	PRICING
CBWD001	CamBeads Si	10ml and 125ml	On Request
CBWD008	CamBeads Plus	125ml and 500ml	On Request

Nanomaterials

Cambrian Magstation for 8 and 2 formats

Magnetic stands for high throughput manual extractions of complex nucleic acids like cfDNA, RNA, gDNA and plasmid DNA.

Available in 8 and 2 station versions.

Used in all manual based extractions processes and compatible with a wide range of eppendorf tubes.

- Aluminium construction for handsfree usage.
- Slide through magnet rack built keeping ergonomics in mind



Key Features:

Aluminium construction

Slide through high power neodymium magnets

Looks great! ;)

Characteristics of the product:

Number of reactions: 2/8/16 formats available

Surface coating: Powder coated aluminium

Weight: 600gm for 8 station format



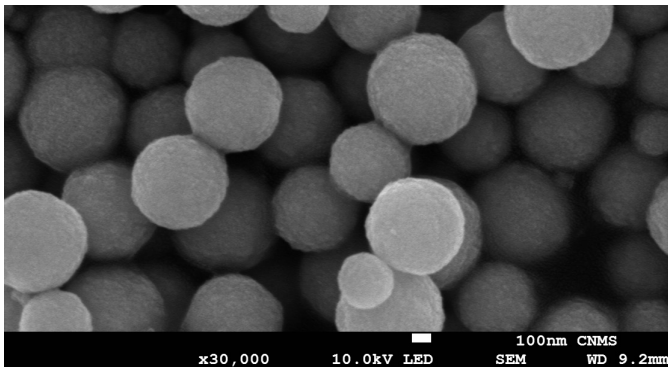
Scan this QR to watch magnetic response on Instagram Reel

Ordering Information:

SKU	TRADE NAME	PACKING	PRICING
CBWD003	Cambrian Magstation 2	3 units/pack	On Request
CBWD002	Cambrian Magstation 8	1 unit/pack	On Request

What is a magnetic bead?

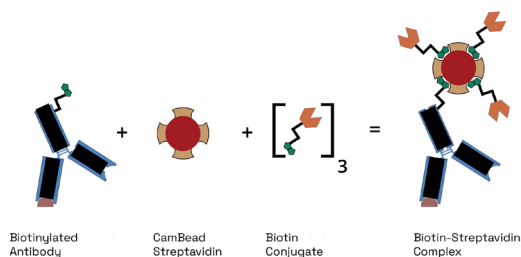
Magnetic beads are super-paramagnetic nanoparticles that range from 50nm-1 micron in diameter. Mostly spherical in the context of biochemical applications. These beads are built using proprietary techniques to achieve a specific end application.

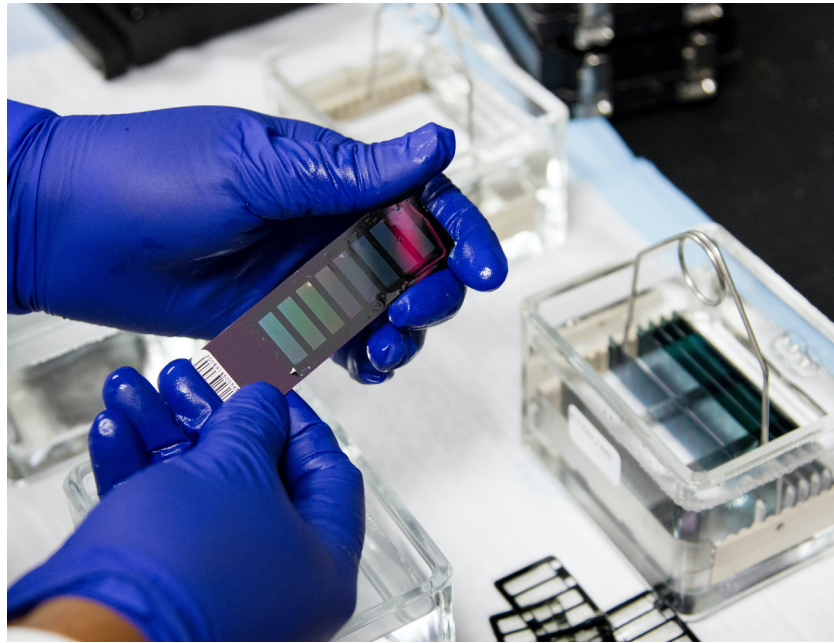


What is Surface chemistry ?

These magnetic beads can be coated with a range of surface chemistries that enable them to be used across a wider range of applications.

Coating magnetic beads with Silica will enable them to latch onto RNA and DNA in the presence of high concentrations of salt. In a more complex scenario, functionalising larger beads PS beads with Streptavidin -Biotin chemistry can enable advanced protein isolation applications.





DNA Genotyping and Sequencing. A technician at the Cancer Genomics Research Laboratory, part of the National Cancer Institute's Division of Cancer Epidemiology and Genetics (DCEG), washes arrays used in genome-wide association studies (GWAS). These studies search the genome for small variations, called single nucleotide polymorphisms or SNPs, that occur more frequently in people with a particular disease than in people without the disease.

Have some questions?

India Queries:

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International Queries:

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asilrohit@cambrianbioworks.com



Vasudev G
Business Head - Partnerships

“I have already spoken to Vasu”, is what a new sales rep hears every time he/she tries to dial up a new customer.

Vasu takes care of our enterprise business partnerships, if you are a reseller looking to partner with us or a large consumer looking to get into an OEM relationship with us, Vasu is your go to person.

