

“THE INTELLIGENT CHOICE FOR DISCOVERY”

ART PIPET TIPS

MBP •

SECTION

01

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WHY ART BRAND PIPET TIPS ARE THE RESEARCHER'S CHOICE

Researchers the world over have made ART brand pipet tips their first choice in contamination control for one reason – they are the only Aerosol Barrier Tip available that guarantee 100% protection against not only aerosol, but liquid contamination of your pipettor. It is the contamination of your instrument that is usually the cause of carryover contamination in PCR experiments. For more information on other sources of contamination please read “Control of Contamination Associated with PCR and Other Amplification Reactions” located on our website at www.mbpinc.com.

The reason behind the ART tips' incredible success is quite simple; ART tips contain a patented interactive barrier whose porous structure actually closes and seals when in contact with airborne aerosols or aqueous based solutions used in the modern life-sciences lab. There are some unique advantages to this technology when compared to the filters found in aerosol tips manufactured by other companies.

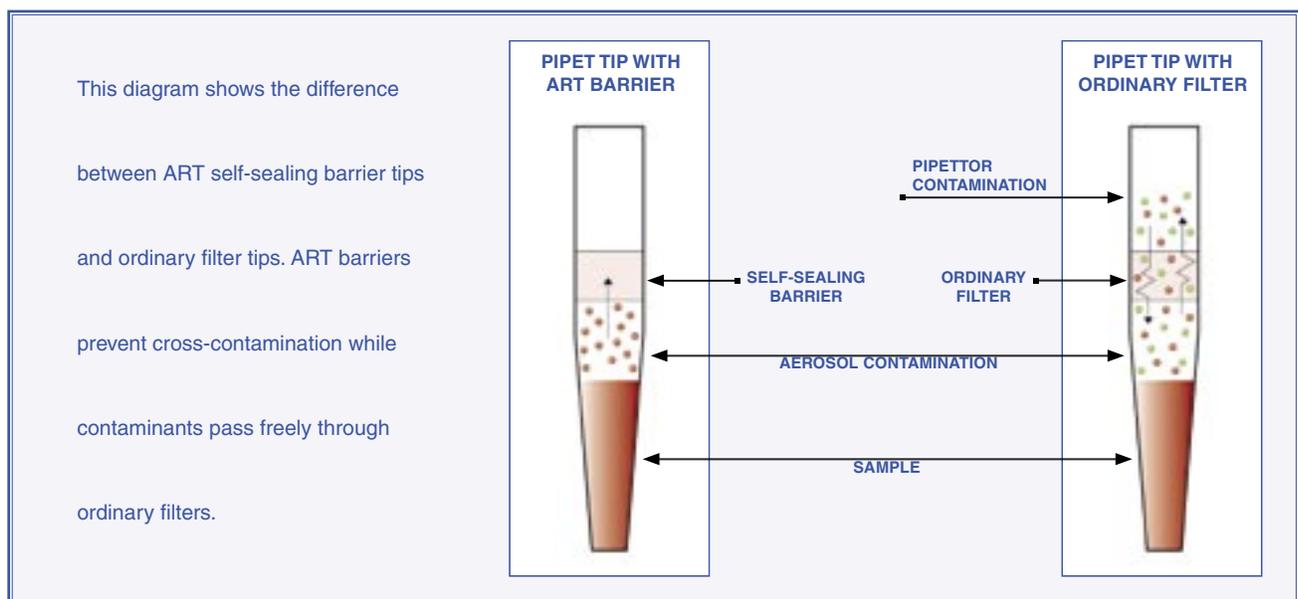
“...filters used in other tips have a porous structure that is much larger than that of the compounds from which you are trying to protect your instruments, labs, and samples.”

The first and most obvious is that the ART barrier is just that - a barrier - not a filter. In the 12 years we have been perfecting this technology we have been confronted again and again by this simple difference – the filters used in other tips have a porous structure that is much larger than that of the compounds from which you are trying to protect your instruments, labs, and samples. This has led many of our competitors to emulate the ART tip by using very dense “super filters” to make their products more effective – and this has worked to some degree, but with draw backs. When reducing the size of the pores in a filter tip below 20 microns, air displacement through the pipet tip is severely constricted. This leads to delayed draws, mis-pipetting, decreased accuracy and decreased precision due to natural variations in the filters.

However, the interactive nature of the ART Barrier allows us to create a porous structure of about 40 microns without fear of contamination since any pores that come into contact with aqueous based solutions will close, trapping potential contaminants within the porous structure. It is this wider pore specification that provides you with a clean, smooth aspiration, and an accurate, precise dispense time after time. There is a very simple way to demonstrate this within your own laboratory environment.

To see for yourself, place any other company's 20µl filter tip on a 200µl pipettor and deliberately draw 200µl of water against the filter (you can mix a little dye in to help you see). Did the water pass through the filter? If it did, so will aerosols. Now try the same test with an ART 20P. What are the results? If you need an ART 20P, visit our website at www.mbpinc.com; we will be happy to send you some. You may also view a video demonstration at www.mbpinc.com.

This is the reason that institutions around the globe have specified the ART tip in their protocols – ART tips work, every time, without fail. But, there is more. Blocking contamination from sample to pipettor is not enough; the tip cannot be a source of contamination either. It was Molecular BioProducts that pioneered the transformation of pipet tips from a low-end, contamination-ridden consumable to a clean, immaculately certified tool for use in the most sophisticated scientific applications the world has ever seen. Over the last 12 years this was accomplished by the development of now commonplace protocols such as independent laboratory certification for the absence of DNA, RNase, DNase, ATP, and pyrogen contamination, as well as, tests for the inhibition of PCR and validations of sterility levels. However, we did not stop there; our mission of continuous product improvement transcends these quality checks and encompasses every aspect of our operation.



Our QC & QA staff monitors all avenues of production from the inspection of incoming resins to the molded product headed for assembly and packaging. Prior to certification, each lot of ART tips undergoes 13 inspection points on 25 parameters; only then is it released, packaged, and sent to our quarantined holding area where samples are taken for final certification at an independent testing laboratory using standard statistical procedures. Only at this point is an ART tip ready for shipping, and that is why we stand behind our product with a 100% money-back guarantee – you will be completely satisfied with these products.



PURE

“**Pure**” is our certification that the products you are using are subject to the industry’s highest standards of quality at every level of production. From raw materials to the finished product, all components of each manufacturing lot are fully traceable and produced in a controlled environment.

Molecular BioProducts guarantees all ART products meet the industry’s highest standards for molding precision, clarity, and are certified free of RNase, DNase, ATP, and Pyrogens by an independent laboratory.

And yet, there is more: One of the reasons that ART is the premier brand of pipet tips is that it undergoes constant updating and improvement in order to meet your changing needs. Unlike most companies who offer only six or seven different filter tips, MBP offers scientists over 37 different barrier tip styles in three different packaging configurations and two polymer styles. This means that we have a tip for any pipettor and application, whether you are working with radioactive compounds, viscous material, fragile cell lines, whole blood, viruses, or difficult proteins – we have your application covered.

In this catalog you will find many new product features that have recently been added to the line: our proprietary Low Retention Polymer which will increase your pipetting accuracy and reduce non-specific binding is now available in our most popular ART tips (see page 16). You will also find new Ergonomic Pipet Tips for your Rainin, Gilson and Thermo-Labsystem pipettors that will significantly reduce the chance of sustaining Cumulative Trauma Disorder while working in your lab (see page 12).

It is innovations such as these and our ongoing commitment to be the best in liquid handling that cause researchers the world over to choose ART tips above all others. But, don’t just take our word for it; try our product for FREE, or ask your colleagues - chances are they have been using ART tips for years. For validation samples, simply visit our website at www.mbpinc.com, and request any sample you require.

ART BARRIER

Place any other company's 20µl filter tip on a 200µl pipettor and deliberately draw 200µl of water against the filter (you can mix a little dye in to help you see). Did the water pass through the filter? If it did, so will aerosols.

▶▶ ART SELF-SEALING BARRIER TIPS BLOCK CONTAMINATION

WHILE...
ORDINARY FILTERS ALLOW CONTAMINATION TO PASS THROUGH

ART BARRIER

ORDINARY FILTERS

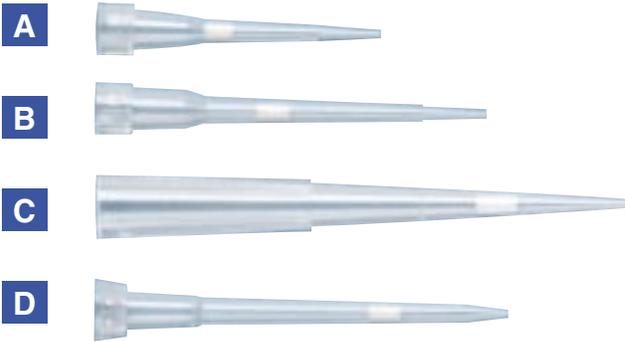


Packaging Options

- 1. Racked**
(96 tips per tray, 10 trays per pack)
- 2. Individually Wrapped**
(500 pre-sterilized, individually wrapped tips in a free-standing zip-locked bag)
- 3. Bulk**
(1000 loose tips in a free-standing zip-locked bag)



ART TIPS



MICRO TIPS

Many of our low-volume tips are available with our MicroPoint design. This design minimizes surface area around the tip's orifice, reducing surface tension and allowing the most accurate dispense possible - a must when dispensing less than 2µl.

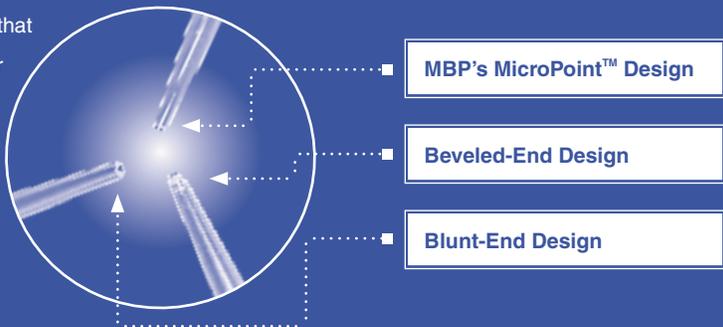
VOLUME 10µL STANDARD ART TIPS

	Catalog Number	Product	Description	Unit Packaging
A	2139	ART 10	10µl MicroPoint Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2139B	ART 10	10µl MicroPoint Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag
B	2140	ART 10 Reach	10µl Extended Length Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2140B	ART 10 Reach	10µl Extended Length Tip w/ART barrier MicroPoint Design	Bulk, non-sterile, 1000 tips/bag
	2140IW	ART 10 Reach	10µl Extended Length Tip w/ART barrier MicroPoint Design	Individually wrapped, pre-sterilized, 500 tips/pack
C	2139F	ART 10F	10µl MicroPoint Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
D	2149E	ART 20E	10µl Ultra-micro Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2149EB	ART 20E	10µl Ultra-micro Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag

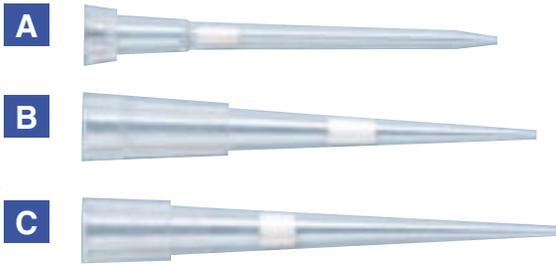
For pipettor tip fit information see appendix page 130

MICROPOINT

MBP's MicroPoint design means that the tip profile is nearly 50% smaller than standard blunt-end pipet tips and significantly more narrow than beveled-end tips. This increases precision, especially when working with low volume samples. The MicroPoint style tips are superior.



new
for
Multi-Channel



PATENTED TECHNOLOGY

ART tips use our patented self-sealing barrier that seals when exposed to aerosol and liquid contaminants, thus trapping them inside the barrier. This is the **ONLY** barrier tip on the market that gives you 100% protection against carryover contamination.

VOLUME 20µL TO 50µL STANDARD ART TIPS

A

B

new
Reload System

C

Catalog Number	Product	Description	Unit Packaging
2149	ART 20	20µl Pipet Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
2149P	ART 20P	20µl Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
2149P-50	ART 20P	20µl Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/Insert, 10 Inserts/pack
2149PB	ART 20P	20µl Pipet Tip w/ART barrier MicroPoint Design	Bulk, non-sterile, 1000 tips/bag
2149PIW	ART 20P	20µl Pipet Tip w/ART barrier MicroPoint Design	Individually wrapped, pre-sterilized, 500 tips/pack
2780	ART 50U	50µl Pipet Tip w/ART barrier SoftFit for Multi-Channel	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack

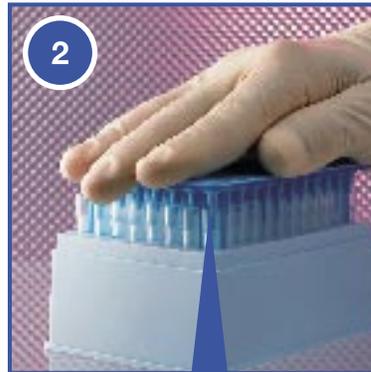
For pipettor tip fit information see appendix page 130

BREAKTHRU PACKAGING RELOAD SYSTEM

Pipet tip as it sits in transfer tray



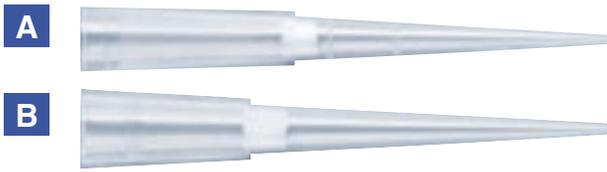
Pipet tip breaking through transfer tray



Pipet tip fully through transfer tray and loaded into empty rack



- Universal to all 8x12 pipet tip trays • Available with or without the ART® self-sealing barrier • No snaps, buttons or machines needed • Uses 85% less packaging and 53% less space • Recyclable packaging



VOLUME 100µL STANDARD ART TIPS

	Catalog Number	Product	Description	Unit Packaging
A	2065	ART 100	100µl Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2065B	ART 100	100µl Pipet Tip w/ART barrier MicroPoint Design	Bulk, non-sterile 1000 tips/bag
B	2065E	ART 100E	100µl Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2065EB	ART 100E	100µl Pipet Tip w/ART barrier MicroPoint Design	Bulk, non-sterile 1000 tips/bag

For pipettor tip fit information see appendix page 130



new
for
Multi-Channel

VOLUME 200µL STANDARD ART TIPS

	Catalog Number	Product	Description	Unit Packaging
C	2069	ART 200	200µl Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2069B	ART 200	200µl Pipet Tip w/ART barrier MicroPoint Design	Bulk, non-sterile, 1000 tips/bag
	2069IW	ART 200	200µl Pipet Tip w/ART barrier MicroPoint Design	Individually wrapped, pre-sterilized, 500 tips/pack
D	2770	ART 200U	200µl Pipet Tip w/ART barrier SoftFit for Multi-Channel	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack

For pipettor tip fit information see appendix page 130



VOLUME 300µL STANDARD ART TIPS

	Catalog Number	Product	Description	Unit Packaging
E	2070	ART 300	300µl Pipet Tip w/ART barrier MicroPoint design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2070B	ART 300	300µl Pipet Tip w/ART barrier MicroPoint design	Bulk, non-sterile, 1000 tips/bag

For pipettor tip fit information see appendix page 130





VOLUME 1000 μ L STANDARD ART TIPS

Catalog Number	Product	Description	Unit Packaging
A 2279	ART 1000	1000 μ l Pipet Tip w/ART barrier SoftFit Design	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack
2279B	ART 1000	1000 μ l Pipet Tip w/ART barrier SoftFit Design	Bulk, non-sterile, 1000 tips/bag
2279IW	ART 1000	1000 μ l Pipet Tip w/ART barrier SoftFit Design	Individually wrapped, pre-sterilized, 500 tips/pack
B 2079E	ART 1000E	1000 μ l Pipet Tip w/ART barrier	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack
2079EB	ART 1000E	1000 μ l Pipet Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag
2079EIW	ART 1000E	1000 μ l Pipet Tip w/ART barrier	Individually wrapped, pre-sterilized, 500 tips/pack
C 2079	ART 1000 REACH	1000 μ l Extended Length Pipet Tip w/ART barrier	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack

For pipettor tip fit information see appendix page 130



VOLUME 1250 μ L STANDARD ART TIPS

Catalog Number	Product	Description	Unit Packaging
D 2080	ART 1250	1250 μ l Extended Length Pipet Tip w/ART barrier SoftFit Design	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
2080B	ART 1250	1250 μ l Extended Length Pipet Tip w/ART barrier SoftFit Design	Bulk, non-sterile, 1000 tips/bag
E 2090	ART 1200	1200 μ l Pipet Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
2090B	ART 1200	1200 μ l Pipet Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag

For pipettor tip fit information see appendix 130



VOLUME 5000 μ L STANDARD ART TIPS

Catalog Number	Product	Description	Unit Packaging
F 2180B	ART 5000	5ml Pipet Tip w/ART barrier	Bulk, pre-sterilized, 250 tips/bag

For pipettor tip fit information see appendix 130

ERGONOMIC ART PIPET TIPS

A recent change in our industry is the heightened awareness that prolonged use of manual pipettors can cause several ergonomic stresses. This includes the development of Cumulative Trauma Disorders (CTD), or Work Related Upper Limb Disorders (WRULD), and other musculoskeletal disorders where strong force is required in the pipetting motion.

Avoiding CTD and WRULD is inexpensive and straightforward. Good laboratory practices combined with well-designed, modern pipettors and pipet tips can substantially reduce the strain involved in pipetting.

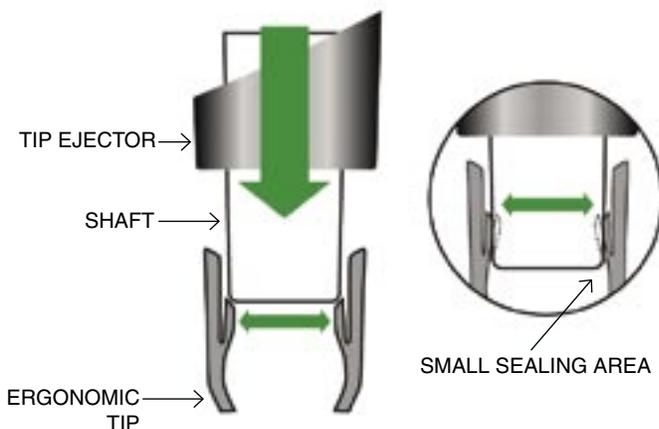
In this section you will find three new series of pipet tips for combating ergonomic injuries. We have recently introduced the SoftFit~L pipet tip for Rainin LTS pipetting systems. This is the only other tip available on the market for the Rainin Lite Touch Pipettors. As always, you will find that we have improved upon the original design, first by adding the ART barrier, and, secondly, by making this tip available in our proprietary Low Retention Polymer.

New to this section are products that you can truly become excited about. The following pages introduce our new line of ergo pipet tips. Molecular BioProducts has developed a unique bi-fabricated wall that allows you all the benefits of an ergonomic system without the need to purchase a set of expensive specialty pipettors.

Currently, these tips are available for the Gilson, Rainin LTS, Thermo Electron FinnPipet Digital, and FinnPipet Focus pipettors. You will be absolutely amazed by the performance of these pipet tips. Available with and without the ART Barrier and in our new Low Retention Polymer, visit our website to try these tips today.

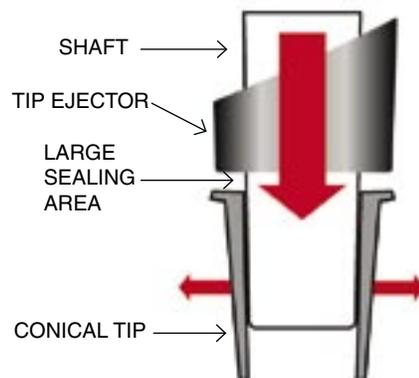
ART BRAND ERGONOMIC TIP

The unique bi-fabricated wall of the ART Brand Ergonomic Tip creates a strong, effective seal while requiring significantly lower tip insertion and tip ejection force.



STANDARD TIP

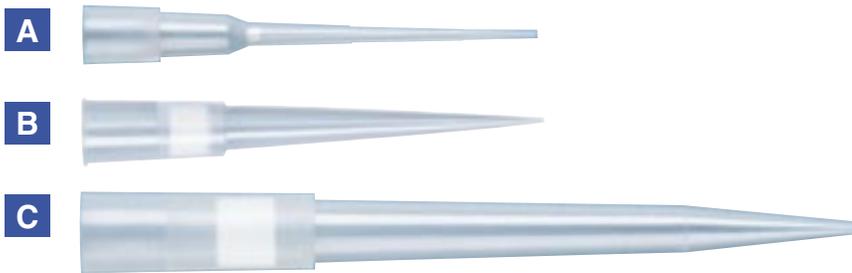
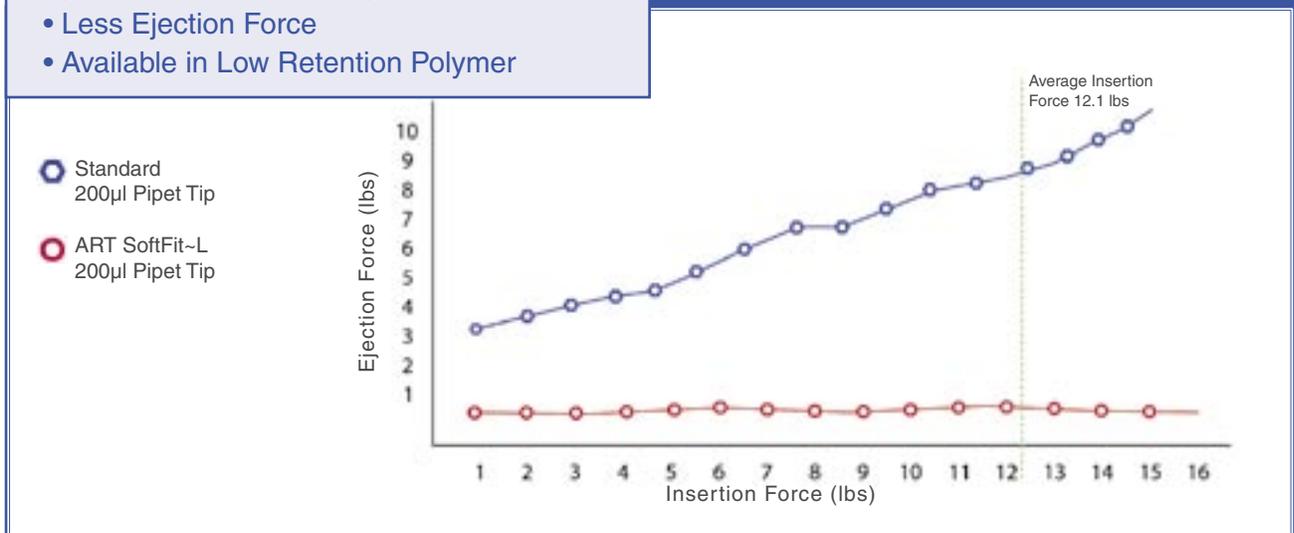
Due to the high surface area of the pipet shaft in contact with the pipet tip, the amount of force to seat standard tips on the pipettor is significantly higher than with our Ergonomic style tips. The ejection force required to remove standard tips from the pipettor shaft is significantly higher as well, due to the slamming effect while seating the tip. Since standard tips are generally slammed on with more force than required, the same force is required to remove them.



ART PIPET TIPS FOR LTS PIPETTORS

- Reduce Strains and Injury
- Secure and Consistent Seals
- Less Ejection Force
- Available in Low Retention Polymer

COMPARISON OF STANDARD PIPET TIP VERSUS ART SOFTFIT~L



VOLUME 20µL TO 1000µL ERGONOMIC ART PIPET TIPS FOR RAININ LTS

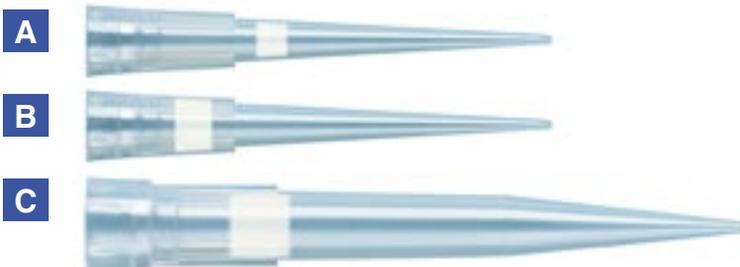
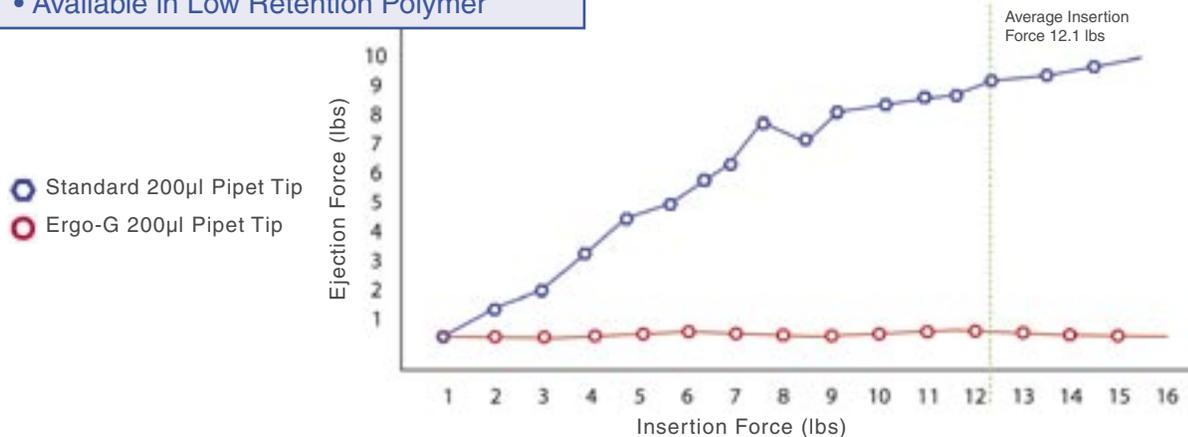
	Catalog Number	Product	Description	Unit Packaging
A	2749	ART 20L	20µl Ergonomic Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2749-05	ART 20L	20µl Ergonomic Low Retention Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B	2769	ART 200L	200µl Ergonomic Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2769-05	ART 200L	200µl Ergonomic Low Retention Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
C	2779	ART 1000L	1ml Ergonomic Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
	2779-05	ART 1000L	1ml Ergonomic Low Retention Pipet Tip w/ART barrier for Rainin LTS	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack

For pipettor tip fit information see appendix page 130

ERGONOMIC ART PIPET TIPS FOR GILSON PIPETMAN

- Reduce Strains and Injury
- Secure and Consistent Seals
- Less Ejection Force
- Available in Low Retention Polymer

COMPARISON OF STANDARD PIPET TIP VERSUS ART ERGO-G



VOLUME 100µL TO 1000µL ERGONOMIC ART PIPET TIPS FOR GILSON PIPETMAN

Catalog Number	Product	Description	Unit Packaging
A 2320	ART 100 ERGO-G	100µl Ergonomic Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
2320-05	ART 100 ERGO-G	100µl Ergonomic Low Retention Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B 2330	ART 200 ERGO-G	200µl Ergonomic Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
2330-05	ART 200 ERGO-G	200µl Ergonomic Low Retention Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
C 2340	ART 1000 ERGO-G	1000µl Ergonomic Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack
2340-05	ART 1000 ERGO-G	1000µl Ergonomic Low Retention Pipet Tip w/ART barrier for Gilson Pipetman	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack

For pipettor tip fit information see appendix page 130

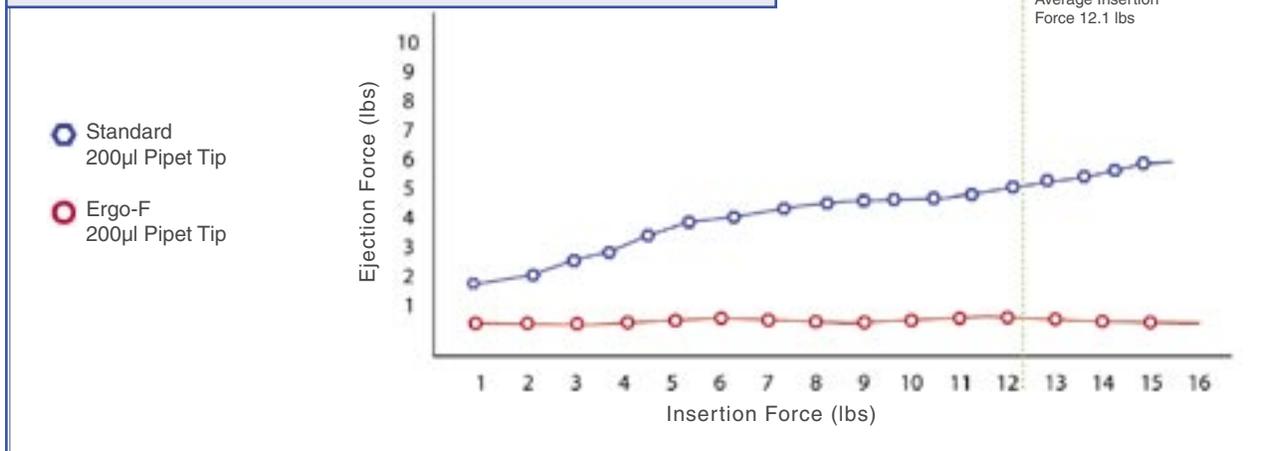


ART TIPS

ART PIPET TIPS FOR FINNPIPETTE PIPETTORS

- Reduce Strains and Injury
- Secure and Consistent Seals
- Less Ejection Force
- Available in Low Retention Polymer

COMPARISON OF STANDARD PIPET TIP VERSUS ART ERGO-F



new
for
FinnPipette

VOLUME 20µL TO 1000µL ERGONOMIC ART PIPET TIPS FOR LABSYSTEMS FINNPIPETTE

	Catalog Number	Product	Description	Unit Packaging
A	2350	ART 20 ERGO-F	20µl Ergonomic Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2350-05	ART 20 ERGO-F	20µl Ergonomic Low Retention Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B	2360	ART 100 ERGO-F	100µl Ergonomic Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2360-05	ART 100 ERGO-F	100µl Ergonomic Low Retention Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
C	2370	ART 200 ERGO-F	200µl Ergonomic Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2370-05	ART 200 ERGO-F	200µl Ergonomic Low Retention Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
D	2380	ART 1000 ERGO-F	1000µl Ergonomic Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack
	2380-05	ART 1000 ERGO-F	1000µl Ergonomic Low Retention Pipet Tip w/ART barrier for FinnPipette Focus and Digital pipettors	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack

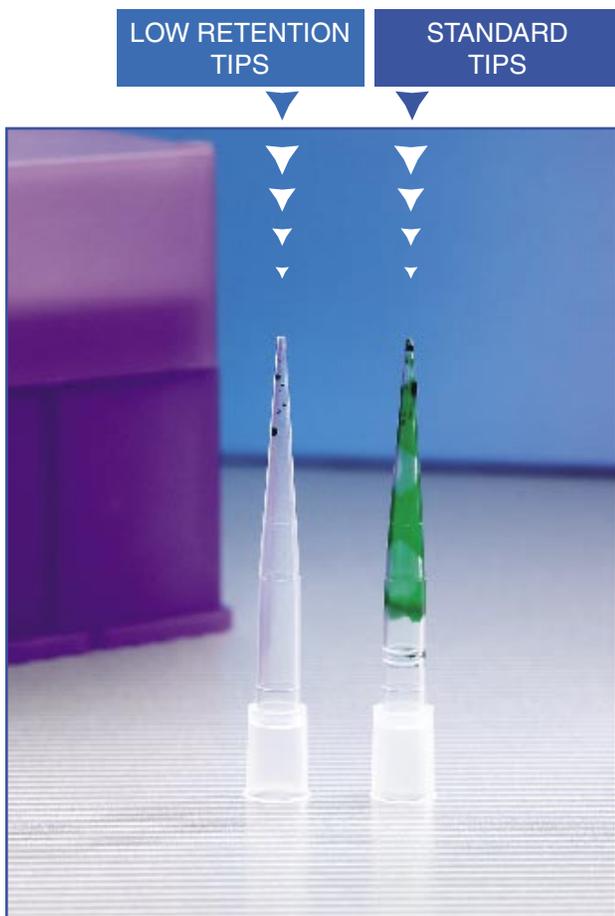
For pipettor tip fit information see appendix page 130

ART LOW RETENTION

Low Retention pipet tips are specifically designed for applications requiring high accuracy and reproducibility. The delivery of highly viscous liquids is problematic because significant amounts of residual liquid typically remain in the pipet tip after the operation is completed. This systematic loss of sample contributes greatly to the variability in complex reactions such as PCR, RT PCR, and DNA sequencing.

Low Retention pipet tips reduce sample retention by three to five times when compared to an ordinary pipet tip. This new polymer technology makes the inner surface of the pipet tip more hydrophobic resulting in a significant reduction in sample loss due to adhesion. The result is less liquid retention and improved liquid handling. Visit our website at www.mbpinc.com to get your free sample today!

- Improves Sample Accuracy • Increased Reliability • Saves Expensive Reagents • Precise Sample Delivery
- Certified RNase, DNase, ATP, Endotoxin, and Pyrogen Free • MicroPoint & SoftFit Design • 100% Inert



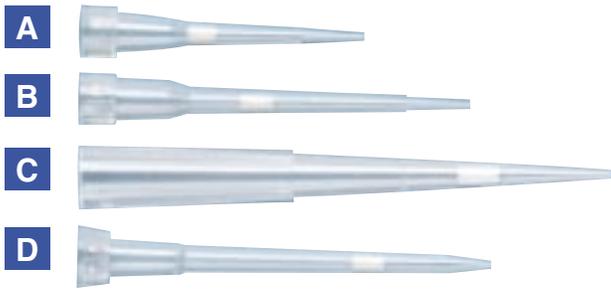
◀ 200µl of green food dye was aspirated then dispensed using a tip featuring the proprietary Low Retention technology, as well as using a standard pipet tip. Notice the tip on the left has virtually no sample left behind, while the standard tip on the right has a considerable amount of your precious sample retained.

Table 1-1: Summary of HAV probe results*
(Below CPM is counts associated with tip after washing)

	Diluted HAV probe	Diluted HAV probe
	Low Retention	Standard
Mean CPM	1451.3	3611.0
SD CPM	684.8	2336.4
% Total added	4.4	11.0

Stock HAV probe is @ 6.04E9 CPM/50µl

In Table 1-1 the Low Retention tips result in a much lower sample retention. They also demonstrated much more consistent retention leading to greater accuracy and precision. For more information, see technical report #221.



VOLUME 10 μ L LOW RETENTION ART TIPS-STANDARD FITS

Catalog Number	Product	Description	Unit Packaging
A 2139-05	ART 10 Low Retention	10 μ l Micro Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B 2140-05	ART 10 REACH Low Retention	10 μ l Extended Length Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
C 2139F-05	ART 10F Low Retention	10 μ l MicroPoint Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
D 2149E-05	ART 20E Low Retention	10 μ l Ultra-micro Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack

For pipettor tip fit information see appendix page 130



VOLUME 20 μ L TO 1000 μ L LOW RETENTION ART TIPS-STANDARD FITS

Catalog Number	Product	Description	Unit Packaging
E 2149P-05	ART 20P Low Retention	20 μ l Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
F 2065E-05	ART 100E Low Retention	100 μ l Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
G 2069-05	ART 200 Low Retention	200 μ l Pipet Tip w/ART barrier MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
H 2279-05	ART 1000 Low Retention	1000 μ l Pipet Tip w/ART barrier SoftFit Design	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack

For pipettor tip fit information see appendix page 130



ART TIPS

GEL LOADING - SPECIALTY TIPS

Loading acrylamide or even agarose gels with standard pipet tips is an often time-consuming and frustrating process. Molecular BioProducts is one of only two tip companies in the world with the technology to produce tips specifically for this application. You will find our standard, round gel loading tips for agarose gels both here and in our HydroLogix tip section, as well as very specialized Ultra Round and Ultra Flat gel tips for your polyacrylamide gels. Available in six styles and three ODs, we have all your gel loading needs covered. Ask for your FREE sample today!



SPECIALTY ART TIPS FOR GEL LOADING VOLUME 20 μ L TO 100 μ L

	Catalog Number	Product	Description	Unit Packaging
A	2155P	ART Gel 20P	20 μ l Pipet Tip w/ART barrier Gel loading	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B	2155	ART Gel 100	100 μ l Pipet Tip w/ART barrier Gel loading	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack

For pipettor tip fit information see appendix page 130

ART BARRIER

Preserving the integrity of your PCR conditions and samples is essential, so it is important to select an aerosol-blocking tip based on its ability to perform as indicated. ART is the only interactive, self-sealing pipet tip available on the market today. It is the only tip that can provide you with 100% guaranteed protection against carryover and cross contamination. With regard to volume delivery, sample retention, sample retrievability, and carryover contamination protection, ART tips have been scientifically proven to provide accurate and consistent performance.

PRE-WET THE PIPET TIP

Aspirate and dispense an amount of the sample liquid at least three times before aspirating a sample for delivery.

Evaporation within the tip can cause a significant loss of sample before delivery. Pre-wetting increases the humidity within the tip thus reducing both the amount of, and variation in, sample evaporation. Using the same tip (without pre-wetting) to deliver multiple samples results in lower volume for the first few samples.



WIDE BORE - SPECIALTY TIPS

Our Wide Bore tips are perfect for working with genomic DNA, fragile cell lines and other viscous materials. With a distal end orifice nearly 70 percent larger than that of standard pipet tips they provide you the flexibility required for handling difficult-to-pipet samples. Available in 3 styles - try them today!



VOLUME 200µL TO 1000µL SPECIALTY ART TIPS, WIDE BORE GENOMIC

	Catalog Number	Product	Description	Unit Packaging
A	2069G	ART 200G	200µl Pipet Tip, Large Orifice w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
B	2160G	ART XLG	200µl Extended Length Pipet Tip, Large Orifice w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
	2160GIW	ART XLG	200µl Extended Length Pipet Tip, Large Orifice w/ART barrier	Individually wrapped, pre-sterilized, 500 tips/pack
C	2079G	ART 1000G	1000µl Pipet Tip, Large Orifice w/ART barrier	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack
	2079GB	ART 1000G	1000µl Pipet Tip, Large Orifice w/ART barrier	Bulk, non-sterile, 1000 tips/bag
	2079GIW	ART 1000G	1000µl Pipet Tip, Large Orifice w/ART barrier	Individually wrapped, pre-sterilized, 500 tips/pack

For pipettor tip fit information see appendix page 130

SELECTION

Whatever your application, whatever your packaging requirements, with over 90 different ART tips in this catalog, you can conduct your experiments with the confidence of knowing the world's best barrier tips are protecting you and your samples, and they are all here in this catalog.

- Sterile Racks • Reload Systems • Bulk • Individually Wrapped • Low Retention
- Ergonomic Systems



REACH - SPECIALTY TIPS

MBP's unique family of REACH pipet tips provide an extra level of contamination control. By significantly extending the length of the pipet tip, you may "reach" to the bottom of 0.5ml, 1.5ml, 2ml, 15ml, 50ml, and many other styles of culture tubes without fear of your pipettor coming in contact with the inside of your sample vessel. In conjunction with MBP's patented ART filter, you are assured of the best possible protection against carryover contamination. MBP's one-of-a kind REACH pipet tips add a layer of security in protecting both sample and pipettor by preventing the pipettor's shaft from touching the inside of the sample vessel, thus virtually eliminating the chance of carryover contamination, and the need to clean or replace pipettors.

- Available in four sizes.
- Extended tip length prevents contamination by keeping the pipettor shaft from entering the sample vessel.
- SoftFit design reduces hand fatigue and fits easily on most pipettors.
- Patented ART barrier will not allow aerosols or liquids to pass.
- 100% Protection against carryover contamination.
- MicroPoint design reduces surface area, which decreases sample retention.

ART 10 REACH™

The extended length of the ART 10 REACH prevents contamination of your samples, tubes and pipettors.



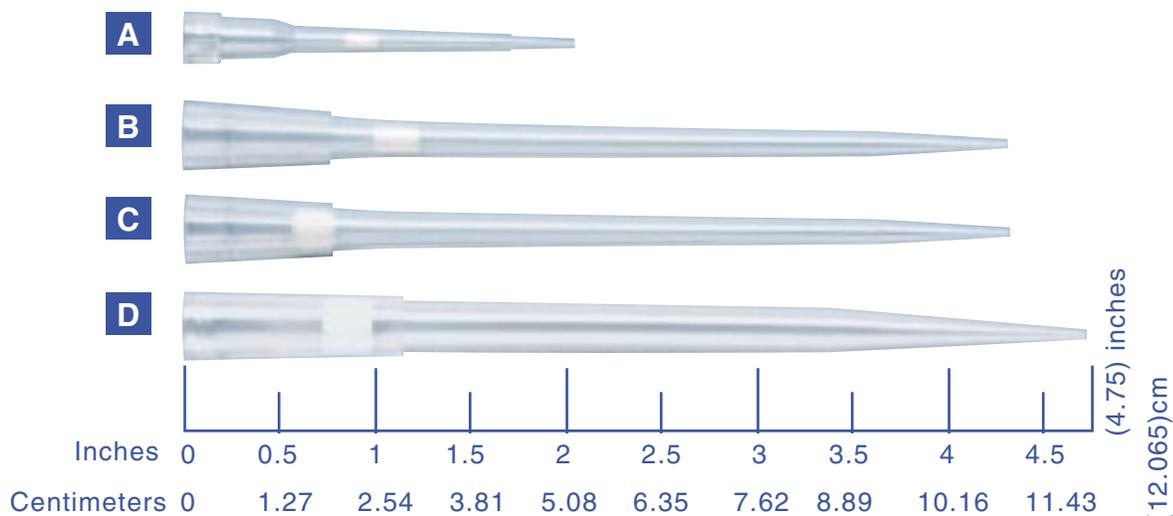
Standard 10µl Micro-tip

Ordinary tips can increase the risk of cross-contamination by letting your pipettors touch the walls of sample tubes and other vessels.



BEWARE

Do not trust your research to filter tips that utilize ordinary filter materials; the average size of a typical segment of DNA used in PCR is .0034 microns while the average pore size of ordinary filter tips range from 20 to 40 microns!



VOLUME 10 μ L TO 1000 μ L REACH TIPS

	Catalog Number	Product	Description	Unit Packaging
A	2140	ART 10 REACH	10 μ l Extended Length Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 10 trays/pack
	2140B	ART 10 REACH	10 μ l Extended Length Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag
	2140IW	ART 10 REACH	10 μ l Extended Length Tip w/ART barrier	Individually wrapped, pre-sterilized, 500 tips/pack
B	2159P	ART XLP	180 μ l Extended Length Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
	2159PB	ART XLP	180 μ l Extended Length Tip w/ART barrier	Bulk, non-sterile, 1000 tips/bag
C	2160P	ART XLP 200	200 μ l Extended Length Tip w/ART barrier	Racked, pre-sterilized, 96 tips/tray, 8 trays/pack
D	2079	ART 1000 REACH	1000 μ l Extended Length Tip w/ART barrier	Racked, pre-sterilized, 100 tips/tray, 8 trays/pack

For pipettor tip fit information see appendix page 130



SOLVENTSAFE™ CARBON FILTERED PIPET TIPS FOR ACIDS, BASES AND AGGRESSIVE ORGANIC SOLVENTS.

TIPS FOR COMBINATORIAL CHEMISTRY

Need to handle the pipetting rigors of Combinatorial Chemistry? Are strong acids, bases and aggressive organic solvents causing pipetting failures and critical inaccuracies? These cost you time, product loss, precious funds for lengthy pipettor repairs and calibration. Well, stop “borrowing” your bench mate’s newly repaired and calibrated pipettor because Molecular BioProducts has developed the only solution for your demanding solvent needs. Manufactured by the leader in contamination control, MBP is proud to offer SolventSafe tips. SolventSafe offers a new formula of the Patented ART (aerosol resistant tip) Filter Tip. Our revolutionary use of the ART filter with Folded Activated Carbon offers both pipettor and sample protection against destructive carryover aerosols and vapors from volatile organic solvents, all without compromising pipetting accuracy and precision.



SolventSafe’s proprietary blend of Folded Activated Carbon with a 40-micron polyethylene filter was put through two experiments to demonstrate the effective protection of this revolutionary filter material.

See “experiment results and Measurement of Gas Phase Volatile Organics by GCMS after passage through standard and SOLVENT SAFE carbon filter pipet tips” on our website at www.mbpinc.com



VOLUME 20 μ L TO 1000 μ L SOLVENTSAFE PIPET TIPS

Catalog Number	Product	Description	Unit Packaging
A 5449P	ART SolventSafe 20P	20 μ l Pipet Tip w/Carbon Filter MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 4 trays/pack
B 5469	ART SolventSafe 200	200 μ l Pipet Tip w/Carbon Filter MicroPoint Design	Racked, pre-sterilized, 96 tips/tray, 4 trays/pack
C 5479E	ART SolventSafe 1000E	1000 μ l Pipet Tip w/Carbon Filter MicroPoint Design	Racked, pre-sterilized, 100 tips/tray, 4 trays/pack

For pipettor tip fit information see appendix page 130

