Eppendorf Purity Grades for Tips



Liquid Handling







Eppendorf epT.I.P.S.®, ep Dualfilter T.I.P.S.® and Combitips advanced® stand for highest quality and purity. The high precision and accuracy of pipette tips and Combitips® is guaranteed by precise molding. Each lot of pipette tips and Combitips is subject to gravimetric measurement during final testing. Low wetting ensures reliable volume readings and minimal adhesion. Pipette tips and Combitip cylinders are made of PP (polypropylene). A relatively inert plastic

characterized by low wettability as well as high dimensional and mechanical stability across a wide temperature range. For the Combitips advanced pistons PE (polyethylene) is used. This is due to the fact that ideal running properties between two parts can only be achieved by using two different types of plastic. Our tips are available in a variety of purity grades (see table beside). For further details please read page 492.



Pure quality: Tested lot by lot

With the strictest control criteria, internally and externally monitored, we guarantee the consistently high quality of our products – from lot to lot. Our consumables are available in a variety of purity qualities.

Eppendorf Quality™ as well as more advanced purity grades: "Sterile, Protein-free, PCR clean and Eppendorf Biopur®". In addition to our internal process controls, the sterile, Protein-free, PCR clean and Eppendorf Biopur purity grades are

	Certificate	of Purity	
	 Eppendorf 		
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tested by an external lab lot by lot. This allows us to ensure we consistently meet our customer's high demands when it comes to purity. As a special service, we make the inspection certificate for each delivered lot available online. (www.eppendorf.com/certificates).

Eppendorf purity grades for tips	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf sterile + PCR clean	Eppendorf Biopur®
Continuous quality control for the following relevant criteria:					
Function, tightness, precision	-	-	-	-	
Low wetting					
High chemical resistance					
High thermal resistance			-		
High resistance to centrifugation forces*1	•				•
High transparency					-
Precisely shaped					
Lot testing*2 (certified) for the following purity criteria:					
Pyrogen-free (endotoxin-free)					-
Sterile (Ph.Eur./USP)					
Human DNA-free					
DNA-free (Human- + bacteria DNA)					
ONase-free					
RNase-free					-
PCR-inhibitor-free					-
ATP-free					-
Eppendorf tips					
epT.I.P.S.® Standard + Box + Set					
epT.I.P.S.® Reloads					
epT.I.P.S.® Racks		■ *3			-
epT.I.P.S.® Singles					■ *3
ep Dualfilter T.I.P.S.®					
ep Dualfilter T.I.P.S.® SealMax					
ep Dualfilter T.I.P.S.® LoRetention					
Combitips advanced®		■ *3			■ *3
epT.I.P.S.® LoRetention	_		-		
epT.I.P.S.® Motion					
epT.I.P.S.® Motion filtertips					

Purity grades





> The ergonomically optimized cone geometry provides

> epT.I.P.S. pipette tips can be used universally, including

> Long, narrow tips reach the base of narrow and high

vessels without touching the top of the vessel edge

> Fine retracted or extended tips simplify work with

> Available in four purity grades: Eppendorf Quality,

> Color-coded trays make volume identification and

allocation of Eppendorf pipettes easier than ever

PCR clean, Eppendorf Biopur®, PCR clean/Sterile

the optimal pipette fit on the Eppendorf Pipette

pipette models from other manufacturers > Fine graduations make visual checks of the pipetting

Product features

volume even easier

(sterile and pyrogen-free)

small volumes

For epT.I.P.S. – the original Eppendorf "Totally Integrated Pipetting System" – the tips are optimally coordinated to Eppendorf pipettes and, of course, meet EN ISO 8655 requirements. This has resulted in minimal attachment and ejection forces with the highest level of tightness. epT.I.P.S. pipette tips can be used with pipettes from other manufacturers. Optimal wetting properties, high transparency and special, certified purity grades are the visible expression of our product and production philosophy.

Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants



- i For more information go to www.eppendorf.com/epTips
- ➤ Ordering information see page 50 onward.



epT.I.P.S.® Standard

- > Original, high-quality Eppendorf pipette tips packaged in
- > Available in sizes from 10 μL to 10 mL in Eppendorf Quality purity grade
- > epT.I.P.S. Standard pipette tips can be autoclaved at 121 °C



epT.I.P.S.® Box/epT.I.P.S.® Set

- > Contamination-free transfer of trays to stable working box
- > System optimized for use with multichannel pipettes
- > Color-coded trays for simple identification of tips and pipette
- > Tips can be attached to pipette from refill trays
- > Boxes and trays are autoclavable
- > epT.I.P.S. Box and epT.I.P.S. Set available in Eppendorf Quality



epT.I.P.S.® Reloads

- > All components are 100 % recyclable
- > Reduced waste as compared with disposable racks
- > The refill trays can be autoclaved, in packaging and without foil, for subsequent use
- > The refill system, depending on tips size, is packaged as either dual-sided or in stack form
- > Available in purity grades of Eppendorf Quality and PCR clean
- > Color-coded trays for simple volume and pipette identification



epT.I.P.S.® Racks

- > Hinged lid can be flipped open with one hand
- > Ideal for when absolute purity is needed. Each rack is individually sealed to guarantee purity extended footprint provides stability during tip attachment
- > Fully autoclavable
- > Each production lot inspected continuously by independent laboratory
- > Lot-specific certificates available for PCR Clean, Sterile and Biopur racks at www.eppendorf.com/certificates
- > Packed in racks with 96, 48 or 24 tips



epT.I.P.S.® Singles

- > Eppendorf Biopur pipette tip, individually wrapped
- > Guaranteed PCR clean, sterile, pyrogen-, ATP- and DNA-free
- > For use in medical, pharmaceutical and food industry, molecular biology and cell technology
- > Batch number and expiration date on each blister package
- > Each production lot inspected continuously by independent laboratory
- > Lot-specific certificates available at www.eppendorf.com/certificates

Special Tips



Eppendorf GELoader®

- > Special tip for gel electrophoresis, loading of polyacrylamide gels
- > Flexible long and narrow tips for handling of smallest volumes
- > GELoader tips are rack autoclavable
- > Highest precision and accuracy when used with Eppendorf 0.5 to 10 μL pipettes (gray control button)



Eppendorf Microloader[™]

- > Extremely long, fine and flexible tip for filling of microcapillaries for microinjection and where additional reach is needed
- > Microloader tips are rack autoclavable
- > Highest precision and accuracy when used with Eppendorf 0.5 to 10 μL pipettes (gray control button)



➤ Ordering information see page 50 onward.

epT.I.P.S.® Long



With the slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips, you always achieve best results when pipetting into Eppendorf 5-mL-tubes, conical tubes, cell culture flasks, deepwell plates and other deep vessels. Furthermore, the risk of touching the walls of these deep vessels is minimized and cross-contamination is virtually eliminated. Extra long epT.I.P.S. are available in the following volumes:

- $> 0.5-20 \,\mu$ L L, 46 mm: Ideal for pipetting from 0.2, 0.5, 1.5 and 2 mL tubes as well as plates
- > 50-1,250 µL L, 103 mm: Ideal for pipetting out of 1 mL deepwell plates
- > 0.2 5 mL L, 175 mm: Ideal for pipetting out of 25 cm³ cell culture flasks, volumetric flasks and 25 mL graduated cylinders
- > 0.5-10 mL L, 243 mm: Ideal for pipetting out of 75 cm² cell culture flasks, 1 L reagent bottles and Erlenmeyer flask or measuring cylinders

Available in our purity grades Eppendorf Quality™; PCR clean; PCR clean/Sterile (sterile and pyrogen-free); Eppendorf Biopur®.

Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants



Product features

- > Slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips eliminates the risk of touching the walls of deep vessels, thus cross-contamination is virtually eliminated
- > Always obtain best results when pipetting from and into Eppendorf 5-mL-tubes, conical tubes, cell culture flasks, deep wells and other deep vessels
- > Available in Eppendorf Quality, PCR clean, PCR clean/ Sterile (sterile and pyrogen-free), and Eppendorf Biopur purity grades



ep Dualfilter T.I.P.S.®

Liquid Handling



ep Dualfilter T.I.P.S. filter tips are the first filter tips with a two-phase filter for contamination protection. The two filter layers made of flexible, hydrophobic material, fit perfectly in the tip cone and retain practically 100 % of all aerosols*1 and biomolecules. This unique filtering effect is achieved using various, well-defined pore sizes. The layer facing the sample provides protection from drops, splashes and aerosols. The layer facing the pipette cone functions as a second barrier from contamination, and dependably binds biomolecules. A defined air passage rate quarantees full sample recovery and the customary quick pipetting.

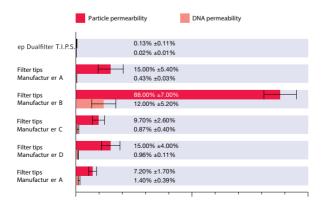
*1 An aerosol is a colloid of fine solid particles or liquid droplets, in air or another gas.

Product features

- > Two filter layers provide dual protection
- > Dual protection against aerosols*1 and biomolecules
- > Dual protection for pipette and sample
- > Free of PCR inhibitor additives
- > Available in Eppendorf PCR clean/Sterile (sterile and pyrogen-free)
- > Tested at the Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM) in Hannover, Germany
- > Continuous inspection of each production lot by an independent laboratory
- > Lot-specific certificates are available at: www.eppendorf.com/certificates
- > Certificate of filter efficiency acc. to EN 1822 available at: www.eppendorf.com/certificates

Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications involving the use of radioactive isotopes
- > All applications which use aerosol*1 binding liquids



- i For more information go to www.eppendorf.com/epTips
- ➤ Ordering information see page 50 onward.

ep Dualfilter T.I.P.S.® SealMax



Description

The new violet and white filter for the ep Dualfilter T.I.P.S.® SealMax filter tips combine a reliable contamination protection for your pipette from your sample liquid with virtually 100 % protection from aerosols*1 and biomolecules. This new Dualfilter closes immediately when it comes into contact with the overpipetted sample without inhibiting valuable material. Additionally drops and splashes are retained by the white layer, the violet layer forms the highly-effective barrier against sample liquid. Further information and certification on specific sample recovery features, PCR inhibition and aerosol protection are available on your local Eppendorf website.

*1 An aerosol is a colloid of fine solid particles or liquid droplets in air or another gas.

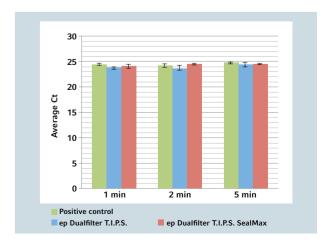
Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications involving the use of radioactive isotopes
- > All applications which use aerosol*1 binding liquids

Fig. 1: Average Ct values of test filter tips (5 replicates of each) and positive control (3 replicates). The error bar represents standard deviation. 1 min, 2 min and 5 min refers to the contact time of the sample water with the filter materials of the test filter tips by over-pipetting, while positive control did not involve any contact with the filter materials.

Product features

- > Reliable protection from liquids, aerosols, and biomolecules
- > No PCR inhibiting additives
- > Protection of your pipette from aggressive liquids when over-aspiration occurs
- > Available in PCR clean / Sterile (sterile and pyrogen-free)
- > Continuous inspection of each production lot by an independent laboratory guarantees high purity and quality
- > Lot specific purity certificates available at: www.eppendorf.com/certificates
- > Certificate of filter efficiency acc. to EN 1822 available at: www.eppendorf.com/certificates



epT.I.P.S.® LoRetention



The "Pearl Effect" – a comparison of the amount of residual liquid when pipetting solutions that contain detergents: 1. Significant loss of sample using standard tips

2. Maximum recovery with epT.I.P.S. LoRetention

Product features

- > LoRetention polypropylene maximizes reproducibility when working with detergent-containing liquids, e.g. for sensitive PCR and qPCR applications
- > Ultrahydrophobic surface for minimal sample loss
- > Significantly reduced foam formation during pipetting
- > Extreme resistance to chemicals
- > Available in PCR clean and Eppendorf Quality
- > Also available as ep Dualfilter T.I.P.S. in PCR clean/Sterile (sterile and pyrogen-free)
- > No coating, free of additives and do not leach into the sample
- > Lot-specific certificates are available at: www.eppendorf.com/certificates

The ultrahydrophobic, extremely homogeneous surface of the epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention pipette tips is achieved through an innovative treatment at the molecular level – the Pearl Effect Technology. They are uncoated, free of additives and do not leach into the sample. Liquids containing detergents fully roll off, so that almost no liquid remains in the tip. In comparison, the adhering liquid film in standard tips leaves behind a significantly higher amount of sample material. These outstanding material properties guarantee maximum sample recovery, improved reproducibility and increased sensitivity.

Applications

- > Cell culture (media)
- > Genomics: PCR, RT-PCR, qPCR and all other types of PCR
- > Enzymatic reactions (restriction digestion, ligation)
- > Isolation and purification of nucleic acid
- > Gel electrophoresis (e.g., prefabricated DNA ladders) typical detergents: SDS, Triton®, X-100, Brij® 35, Tween® 20, CHAPS®
- > Proteomics (all types of protein examinations)
- > Protein isolation and purification

Maximum reproducibility with epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention

In particular with sensitive PCR and real-time PCR applications low-retention surfaces can increase reproducibility and notably reduce the loss of expensive reagents - depending on the reagent solution, this can be by up to 5 %!

Versatile application

epT.I.P.S. LoRetention pipette tips are ideally suited for all applications with samples that contain detergents:

- > PCR and real-time PCR preparation of enzyme solutions and master mixes
- > Isolation, purification and denaturation of proteins
- > Restriction digestions and ligations
- > Pipetting DNA ladders during gel electrophoresis

epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention perform considerably better in terms of precision and sample recovery than low retention tips from other manufacturers. In our Application Notes 218 and 192 you find detailed results on the comparison of residual liquid from epT.I.P.S. LoRetention with standard epT.I.P.S. pipette tips. Also shown are low retention tips of other manufacturers and the comparison of resistance of the low retention property when subjected to solvents or autoclaving. Both results showed best performance of epT.I.P.S. LoRetention with lowest residual liquid and smallest standard deviation.

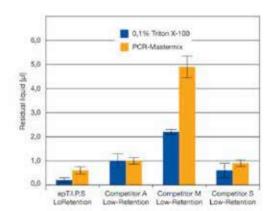


Fig. 1. Comparison of residual liquid from epT.I.P.S. LoRetention and low retention tips of other manufacturers. 200 µL tips were used to pipette a commercial PCR master mix

and the detergent 0.1 % Triton X-100. Once the liquid had been dispensed, the residual liquid in the tips was determined. The measurements were repeated several times and the standard deviation determined. epT.I.P.S. LoRetention resulted in the lowest residual liquid, as well as the smallest standard deviation.

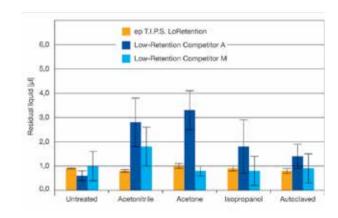


Fig. 2. Comparison of resistance of the low retention property when subjected to solvents or autoclaving. 200 μL epT.I.P.S.

LoRetention and low retention tips of other manufacturers were autoclaved or treated with the solvent specified. An enzymatic buffer containing detergents was then pipetted and the residual moisture was determined. epT.I.P.S. LoRetention resulted in reproducible low levels of residual liquid with minimum standard deviation. Low retention tips from other manufacturers are less resistant to chemicals or autoclaving: this resulted in an increase in residual liquid and standard deviation.

- i For more information go to www.eppendorf.com/epTips
- ➤ Ordering information see page 50 onward.

Volume range/epT.I.P.S.® epT.I.P.S.® LoRetention (all tips shown are actual size)	Standard/Bulk Eppendorf Qual	eppendorf guaranteed quality	Reloads Eppendorf Quali	guaranteed quality	Reloads PCR clean	eppendorf PCR Clean certified purity grade
dark gray	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
0.1 – 10 μL S, 34 mm	022492004	\$70.60	022491504	\$86.70	022491709	\$100.00
			022493018 LoRetention	\$95.90	022493010 LoRetention	\$110.16
medium gray	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
).1 – 20 μL, 40 mm	022492012	\$70.60	022491512	\$86.70	022491717	\$100.00
light gray	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
).5 – 20 μL L, 46 mm	022492021	\$70.60	022491521	\$86.70	022491725	\$100.00
			022493020 LoRetention	\$95.90	022493012 LoRetention	\$110.16
yellow	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
2 – 200 μL, 53 mm	022492039	\$56.20	022491539	\$66.30	022491733	\$79.60
			022493022 LoRetention	\$76.50	022493014 LoRetention	\$89.80
orange	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
20 – 300 μL, 55 mm	022492047	\$56.20	022491547	\$66.30	022491741	\$81.60
	-					
blue	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
50 – 1,000 μL, 71 mm	022492055	\$61.40	022491555	\$74.46	022491750	\$86.70
			022493024 LoRetention	\$87.70	022493016 LoRetention	\$95.90
green	1,000 tips (2 bag	s x 500 tips)	960 tips (10 trays	s x 96 tips)	960 tips (10 tray	s x 96 tips)
50 – 1,250 μL, 76 mm	022492063	\$61.40	022491563	\$74.50	022491768	\$86.70

¹⁾ Eppendorf Quality, ²⁾ PCR Clear		

 $i \quad \text{For more information go to www.eppendorf.com/epTips} \\$















Liquid Handling



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Eppendorf Qualit	:утм	Eppendorf Qualit	ty™	Eppendorf Biopu	ır®	100/10	
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),				
	400.00	1 reusable box	Å.a=a				****
022491300	\$39.90	022491407	\$69.50			022491903 ¹ 022491806 ²	\$109.50 \$129.60
		0030072251 LoRetention	\$77.50			022471800	\$127.00
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),	100 tips, individu	ally packed	480 tips (5 racks	x 96 tips)
022491318	\$39.90	022491415	\$69.50	022491130	\$33.70	022491911 ¹ 022491814 ² 022492250 ³ 022491067 ^{4,5}	\$109.50 \$129.60 \$124.40 \$101.00
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),				
022491326	\$39.90	022491423	\$69.50			022491920¹	\$109.50
	•	0030072260 LoRetention	\$77.50			0224918222	\$129.60
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),	100 tips, individu	ally packed	480 tips (5 racks	x 96 tips)
022491334	\$39.90	022491431	\$57.30	022491148	\$27.50	022491938 ¹	\$85.00
		0030072278 LoRetention	\$64.30			022491831 ² 022492276 ³ 022491083 ^{4,5}	\$102.00 \$97.90 \$92.80
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),			480 tips (5 racks	x 96 tips)
022491342	\$39.90	022491440	\$57.30			022491946 ¹ 022491849 ² 022492284 ³ 022491091 ^{4,5}	\$87.20 \$102.00 \$97.90 \$94.90
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),	100 tips, individu	ally packed	480 tips (5 racks	x 96 tips)
022491351	\$39.90	022491458	\$57.30	022491156	\$28.50	022491954 ¹	\$92.30
	•	0030072286 LoRetention	\$69.40		,	022491857 ² 022492292 ³ 022491105 ^{4,5}	\$110.60 \$107.10 \$99.90
1 reusable box x 9	96 tips	480 tips (5 trays x	(96 tips),			480 tips (5 racks	x 96 tips)
022491369	\$39.90	022491466	\$60.30			022491962 ¹ 022491865 ² 022492306 ³ 022491113 ^{4,5}	\$92.30 \$113.60 \$107.10 \$99.90

480 tips (5 racks x 96 tips)

240 tips (5 racks x 48 tips)

\$56.60

\$50.00

\$56.40

\$99.90

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0224919711

022491873²

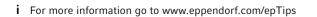
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Liquid Handling Liquid Handling

Volume range/epT.I.P.S.® epT.I.P.S.® LoRetention (all tips shown are actual size)	Standard/Bulk Eppendorf Qualit	cppendorf guaranteed quality	Reloads Eppendorf Qu	guaranteed quality ality TM	Reloads PCR clean	cppendorf PCR Clean certified purity grade
dark green	1,000 tips (2 bags		960 tips (10 tra		960 tips (10 tr	ays x 96 tips)
50 – 1,250 μL L, 103 mm	022494018	\$62.40	022494004	\$77.50	022494006	\$89.80
red	500 tips (5 bags x	100 tips)	480 tips (10 tra	ays x 48 tips)	480 tips (10 tr	rays x 48 tips)
0.25 – 2.5 mL, 115 mm	022492071	\$70.60	022491571	\$74.50	022491776	\$86.70
violet	500 tips (5 bags x	100 tips)				
0.1 – 5 mL, 120 mm	022492080	\$98.20				
violet	300 tips (3 bags x	100 tips)				
0.2 – 5 mL L, 175 mm	0030000650	Inquire				
turquoise	200 tips (2 bags x	100 tips)		The second second		
0.5 – 10 mL, 165 mm	022492098	\$54.20		4	=	
turquoise	200 tips (2 bags x	100 tips)				
0.5 – 10 mL L, 243 mm	022492101	\$61.40				

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(Image reduced size)



Eppendorf Quality™

240 tips (5 trays x 48 tips),

\$69.60

1 reusable box

\$39.90 022491474

Eppendorf Biopur®

Eppendorf Quality™

022494016

022491377

1 reusable box x 96 tips

1 reusable box x 48 tips

\$39.90

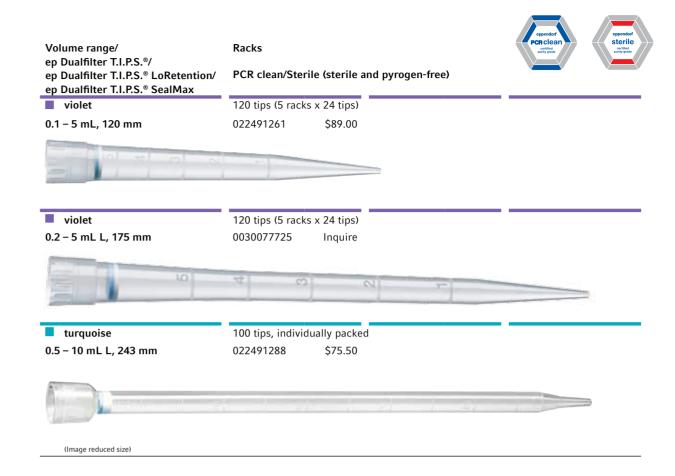
¹⁾ Eppendorf Quality. ²⁾ PCR Clean Quality. ³⁾ Sterile Quality. ⁴⁾ Biopur Quality. ⁵⁾ 480 tips (5 racks x 96 tips).

PIPETTE TIPS

Liquid Handling

ep Dualfilter T.I.P.S.®/ ep Dualfilter T.I.P.S.® LoRetention/					bound Augus	certified purity grade
ep Dualfilter T.I.P.S.® SealMax	PCR clean/Ste	rile (sterile a	nd pyrogen-free	2)		
dark gray	960 tips (10 ra	cks x 96 tips)				
0.1 – 10 μL S, 34 mm	022491202	\$161.50	022493000 LoRetention	\$177.50	0030077806 SealMax	\$169.70
medium gray	960 tips (10 ra	cks x 96 tips)				
0.1 – 10 μL M, 40 mm	022491211	\$161.50				
light gray	960 tips (10 ra					
0.5 – 20 μL L, 46 mm	022491229	\$161.50	022493002 LoRetention	\$177.50	0030077814 SealMax	\$169.70
yellow	960 tips (10 ra	cks x 96 tips)				
2 – 20 μL, 53 mm	022491270	\$161.50				
yellow	960 tips (10 ra	cks x 96 tips)				
2 – 100 μL, 53 mm	022491237	\$156.30	022493006 LoRetention	\$165.90	0030077822 SealMax	\$164.60
yellow	960 tips (10 ra	cks x 96 tips)				
2 – 200 μL, 55 mm	022491296	\$156.30			0030077830 SealMax	\$164.60
orange	960 tips (10 ra	cks x 96 tins)				
20 – 300 μL, 55 mm	022491245	\$156.30	022493004 LoRetention	\$177.50	0030077849 SealMax	\$164.60
blue	960 tips (10 ra	cks x 96 tips)				
50 – 1,000 μL, 76 mm	022491253	\$161.50	022493008 LoRetention	\$177.50	0030077857 SealMax	\$169.70
dark green	480 tips (5 rac					
50 – 1,250 μL L, 103 mm	022494002	\$84.90				

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Special Tips



Volume range/ pipette tip			
light gray	Eppendorf GELoader®		
0.5 – 20 μL, 62 mm	192 tips (2 racks x 96 tips)		
	022351656	\$137.80	
light gray	Microloader™		

- light gray	Microlodaci		
0.5 – 20 μL, 100 mm	192 pcs. (2 racks x 96 pcs.)		
	930001007	\$169.00	
100			
light gray	Mastertip® (positive dis	splacement tip)	
20 μL, 52 mm	480 tips (5 racks x 96 tips)		
	022354159	\$272.00	

Eppendorf Research® plus	0.1 – 10 μL S, dark gray	0.1 – 10 μL M, medium gray	0.1 – 20 μL medium gray	0.5 – 20 μL L, light gray	2 – 20 μL yellow	2 – 100 μL yellow	2 – 200 μL yellow	20 – 300 μl orange
	_	_				_	•	_
epT.I.P.S.® Standard								
epT.I.P.S.® LoRetention volume pipettes				•				-
ep Dualfilter T.I.P.S.®								
ep Dualfilter T.I.P.S.® LoRetention				•		•		•
ep Dualfilter T.I.P.S.® SealMax			•			•	•	•
Fixed volume pipettes								
10 μL								
20 μL								
10 μL								
20 μL								
25 μL/50 μL/100 μL								
200 μL								
200/ 250/ 500/ 1,000 μL								
Adjustable volume pipettes								
0.1 – 2.5 μL								
0.5 – 10 μL								
2 – 20 μL	•	*						
2 – 20 μL								•
10 – 100 μL					*			
20 – 200 μL					*	*		
30 – 300 μL					*	*	*	
100 – 1,000 μL								
0.5 – 5 mL								
1 – 10 mL								

epT.I.P.S.® Compatibility chart for Eppendorf Xplorer®/Xplorer® plus

Eppendorf Xplorer®/	0.1 – 10 μL	0.1 – 10 μL	0.1 – 20 μL	0.5 – 20 μL	2 – 20 μL	2 – 100 μL	2 – 200 μL	20 – 300 μL
Eppendorf Xplorer® plus	S, dark	M, medium	medium	L, light	yellow	yellow	yellow	orange
	gray	gray	gray	gray				
epT.I.P.S.® Standard								
epT.I.P.S.® LoRetention								
ep Dualfilter T.I.P.S.®								
ep Dualfilter	-							
T.I.P.S.® LoRetention						_		
ep Dualfilter T.I.P.S.®								
SealMax								
0.5 – 10 μL								
5 – 100 μL					•		=	•
15 – 300 μL				· '	*	•	•	
50 – 1,000 μL								
50 – 1,200 μL								
0.2 – 5 mL							-	-
0.5 – 10 mL						_		

■ normal volume ◆ limited volume

50 – 1,000 μL	50 – 1,250 μL	50 – 1,250 μL L,	0.25 - 2.5 mL	0.1 – 5 mL	0.2 – 5 mL L	0.5 – 10 mL	0.5 – 10 mL L	GELoader/
blue	green	dark green	red	violet	violet	turquoise	turquoise	Microloader 0.5-20 μL
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50 – 1,000 μL	50 – 1,250 μL	50 – 1,250 μL	0.25 - 2.5 mL	0.1 – 5 mL	0.2 – 5 mL L	0.5 – 10 mL	0.5 – 10 mL L	GELoader/
blue	green	L, dark green	red	violet	violet	turquoise	turquoise	Microloader
								0.5-20 μL
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epT.I.P.S.® Compatibility chart for Eppendorf Research® plus

Liquid Handling

Eppendorf Reference® 2	0.1 – 10 μL S,	0.1 – 10 μL M,	0.1 – 20 μL	0.5 – 20 μL L,	2 – 20 μL	2 – 100 μL	2 – 200 μL	20 – 300 μL
	dark gray	medium gray	medium gray	light gray	yellow	yellow	yellow	orange
epT.I.P.S.® Standard						- -		<u> </u>
epT.I.P.S.® LoRetention							-	
ep Dualfilter T.I.P.S.®								
ep Dualfilter T.I.P.S.® LoRetention				•				-
ep Dualfilter T.I.P.S.® SealMax	•			•				
Fixed volume pipettes								
1 μL/2 μL	_	_						
5 μL/10 μL						_		
20 μL								
10 μL								
20 μL								
25 μL/50 μL/100 μL								
200 μL								
200/ 250/ 500/ 1,000 μL								
2 mL/2.5 mL								
Adjustable volume pipettes								
0.1 – 2.5 μL								
0.5 – 10 μL						_		
2 – 20 μL	•	•						
2 – 20 μL								•
10 – 100 μL					*			•
20 – 200 μL					*	*		
30 – 300 μL					*	*	*	
100 – 1,000 μL								
0.25 – 2.5 mL								
0.5 – 5 mL						-	-	
1 – 10 mL								

■ normal volume ◆ limited volume

50 – 1,000 μL	50 – 1,250 μL	50 – 1,250 μL L,	0.25 – 2.5 mL	0.1 – 5 mL	0.2 – 5 mL L	0.5 – 10 mL	0.5 – 10 mL L	GELoader/
blue	green	dark green	red	violet	violet	turquoise	turquoise	Microloader
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