

Raise the limits

Eppendorf Research plus



A completely new experience

Eppendorf Research plus

Eppendorf sets a new standard in pipetting. The ultra light Eppendorf Research plus pipette meets the highest needs in precision and accuracy – combined with ultimate ergonomics and increased flexibility.

It is a good feeling to know you are doing the right thing – to know you are working with one of the most advanced pipettes in the world. A spring loaded tip cone, a secondary adjustment option, an improved volume display – and all that in an ultra light, fully autoclavable pipette: That is the new Eppendorf Research plus pipette. **Ergonomics:** Feel the difference in weight, pipetting forces and the spring loaded tip cone.

Flexibility: Your next experiment will need new pipetting schemes. Your new laboratory might have different sources of contamination. Your new pipette should offer all the flexibility you need. Adjust your Research plus to your needs, autoclave the entire pipette or only the lower part. Choose among single channel, multi channel and fix-volume pipettes in different sizes.

Robustness: Durability was tested thoroughly and has met our highest quality requirements. Resistance to chemical, thermal and mechanical stress is now unchallenged!

Even online: www.eppendorf.com/research-plus

Outstanding ergonomic concept

PhysioCare Concept

The Eppendorf PhysioCare Concept stands for ultimate durability, perfect balance, intuitive operation and minimal user exertion. All this has been further optimized in the Eppendorf Research plus pipette.

Check out **www.physiocare-concept.info** or try the new Eppendorf Research plus pipette!

The more strain you experience, the less energy you have. And because energy is a very precious and exhaustible resource, we try to use it as efficiently as possible. Thus, we have reduced the operating forces and the weight considerably.

Patent pending.

PhysioCare concept

 Take advantage of the high quality of the Eppendorf epT.I.P.S. (see page 10–11)

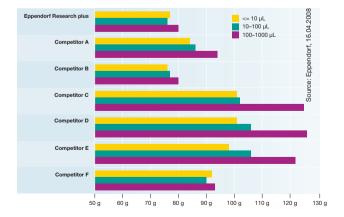
Outstanding light weight design

Lighter than you would think!



An Eppendorf Research plus pipette is of extremely low weight!

This can only be achieved by using the most advanced materials and production processes, including the new Eppendorf PerfectPiston system, made of Fortron. Fortron is an organic polymer with impressive characteristics. It is highly resistant to heat, acids and alkalies, mildew, bleaches, aging, sunlight and abrasion. It absorbs only small amounts of solvents and resists dyeing. This means your pipette is safe, robust and ultra light.



• See the low weight of the Research plus – no matter which size.

Outstanding ease of use

Don't waste energy!

Attachment force

Achieve optimal tightness with minimal attachment forces with the Eppendorf Research plus. The spring loaded tip cone helps to reduce stress without sacrificing tightness. Just give it a try – you will love it!

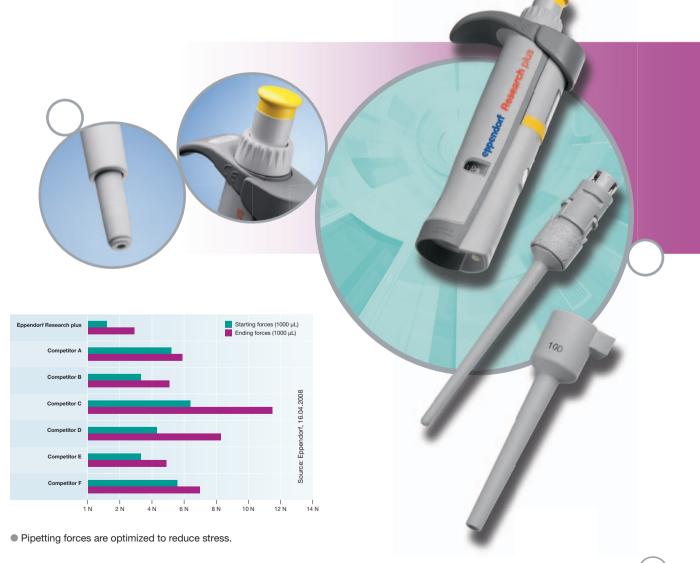
Tip ejection forces

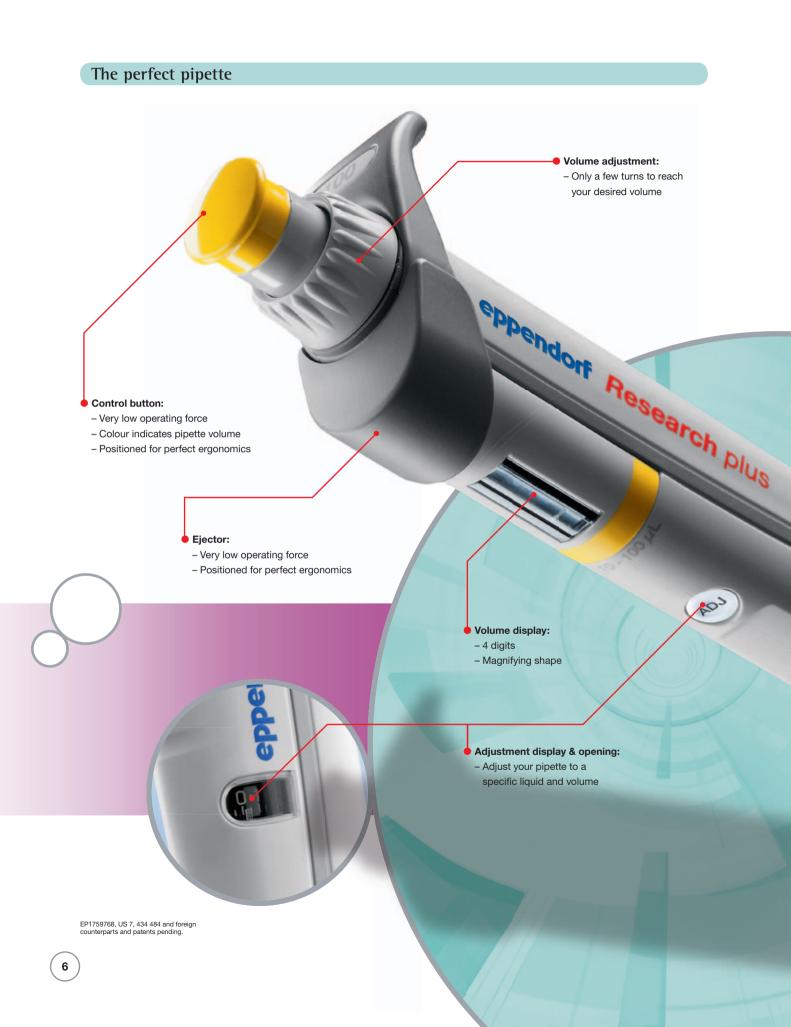
How many tips do you use per day? Even small differences in the tip ejection forces make a big change if you do it day by day. The tip ejection forces of the Eppendorf Research plus can be as low as only 3.6 N, depending on the size and the force you use to fix the tip.

Positioning of control elements

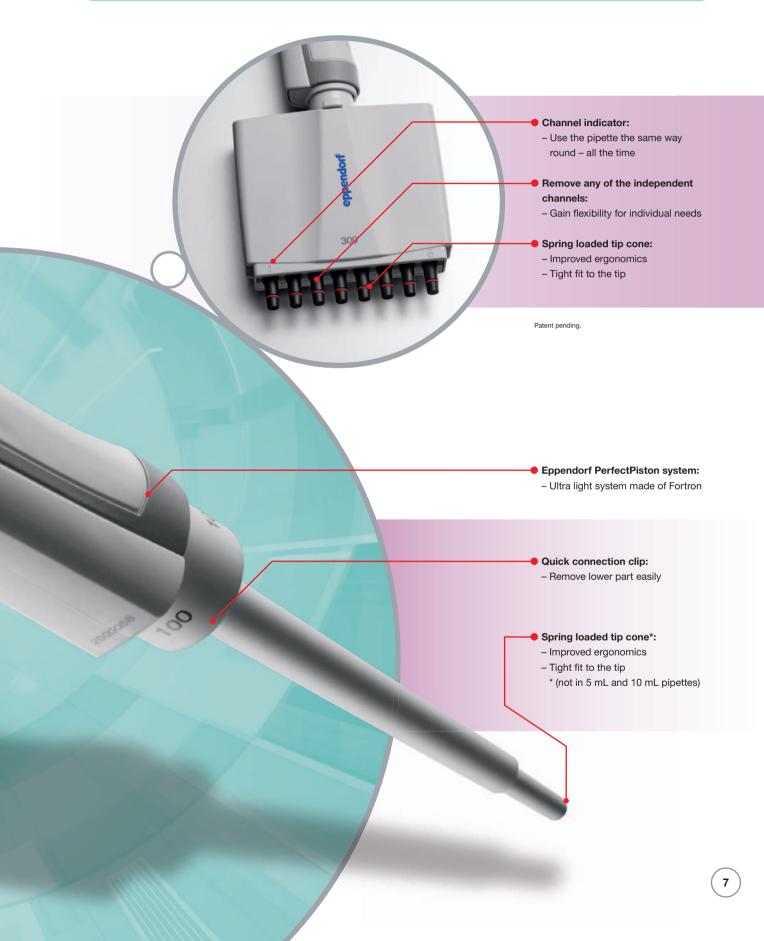
The positions and shapes of all control buttons and displays have been optimized again to ensure stress-free workflow and intuitive usage. The volume adjustment wheel needs only a few turnarounds from maximum volume to minimum volume.

5





High Quality in every detail



Eppendorf Research plus

Eppendorf Research® plus (adjustable)

Volume range	Volume	Systematic	error	Random er	ror	Order no.
Control button anthrazite	ofor epT.I.P.S [®] pipette	e tips 10 μL				
0.1–2.5 μL	0.1 μL 0.25 μL 1.25 μL 2.5 μL	±48.0% ±12.0% ±2.5% ±1.4%	±0.048 μL ±0.03 μL ±0.031 μL ±0.035 μL	±12.0% ±6.0% ±1.5% ±0.7%	±0.012 μL ±0.015 μL ±0.019 μL ±0.018 μL	3120 000.011
Control button grey for e	pT.I.P.S [®] pipette tips	20 µL				
0.5–10 μL	0.5 μL 1 μL 5 μL 10 μL	±8.0% ±2.5% ±1.5% ±1.0%	±0.04 μL ±0.025 μL ±0.075 μL ±0.1 μL	±5.0% ±1.8% ±0.8% ±0.4%	±0.025 μL ±0.018 μL ±0.04 μL ±0.04 μL	3120 000.020
Control button light grey	for epT.I.P.S® pipette	tips 20 µL L				
2–20 µL	2 μL 10 μL 20 μL	±5.0% ±1.2% ±1.0%	±0.1 μL ±0.12 μL ±0.2 μL	±1.5% ±0.6% ±0.3%	±0.03 μL ±0.06 μL ±0.06 μL	3120 000.097
Control button yellow for	epT.I.P.S [®] pipette tip	os 200 μL				
2–20 μL	2 μL 10 μL 20 μL	±5.0% ±1.2% ±1.0%	±0.1 μL ±0.12 μL ±0.2 μL	±1.5% ±0.6% ±0.3%	±0.03 μL ±0.06 μL ±0.06 μL	3120 000.038
10–100 μL	10 μL 50 μL 100 μL	±3.0% ±1.0% ±0.8%	±0.3 μL ±0.5 μL ±0.8 μL	±1.0% ±0.3% ±0.2%	±0.1 μL ±0.15 μL ±0.2 μL	3120 000.046
20–200 μL	20 μL 100 μL 200 μL	±2.5% ±1.0% ±0.6%	±0.5 μL ±1.0 μL ±1.2 μL	±0.7% ±0.3% ±0.2%	±0.14 μL ±0.3 μL ±0.4 μL	3120 000.054
Control button orange fo	r epT.I.P.S [®] pipette ti	ps 300 µL				
30–300 μL	30 μL 150 μL 300 μL	±2.5% ±1.0% ±0.6%	±0.75 μL ±1.5 μL ±1.8 μL	±0.7% ±0.3% ±0.2%	±0.21 μL ±0.45 μL ±0.6 μL	3120 000.100
Control button blue for e	pT.I.P.S [®] pipette tips	1000 µL				
100–1,000 μL	100 μL 500 μL 1,000 μL	±3.0% ±1.0% ±0.6%	±3.0 μL ±5.0 μL ±6.0 μL	±0.6% ±0.2% ±0.2%	±0.6 μL ±1.0 μL ±2.0 μL	3120 000.062
Control button violet for	epT.I.P.S [®] pipette tips	s 5 mL				
0.5–5 mL	0.5 mL 2.5 mL 5 mL	±2.4% ±1.2% ±0.6%	±0.012 mL ±0.03 mL ±0.03 mL	±0.6% ±0.25% ±0.15%	±0.003 mL ±0.006 mL ±0.008 mL	3120 000.070
Control button turquoise	for epT.I.P.S [®] pipette	tips 10 mL				
1–10 mL	1 mL 5 mL 10 mL	±3.0% ±0.8% ±0.6%	±0.03 mL ±0.04 mL ±0.06 mL	±0.6% ±0.2% ±0.15%	±0.006 mL ±0.01 mL ±0.015 mL	3120 000.089

The data for systematic and random deviations only applies when using Eppendorf epT.I.P.S. pipette tips.

Eppendorf Research plus

Volume range	Volume	Systematic en	ror	Random error		Order no. 8-channel	12-channel	
Control button gre	Control button grey for epT.I.P.S [®] pipette tips 20 μL							
0.5–10 μL	0.5 μL 1 μL 5 μL 10 μL	±12.0% ±8.0% ±4.0% ±2.0%	±0.06 μL ±0.08 μL ±0.2 μL ±0.2 μL	±8.0% ±5.0% ±2.0% ±1.0%	±0.04 μL ±0.05 μL ±0.1 μL ±0.1 μL	3122 000.019	3122 000.027	
Control button yel	low for epT.I.P.S	[®] pipette tips 20	0 μL					
10–100 µL	10 μL 50 μL 100 μL	±3.0% ±1.0% ±0.8%	±0.3 μL ±0.5 μL ±0.8 μL	±2.0% ±0.8% ±0.3%	±0.2 μL ±0.4 μL ±0.3 μL	3122 000.035	3122 000.043	
Control button orange for epT.I.P.S [®] pipette tips 300 µL								
30–300 µL	30 μL 150 μL 300 μL	±3.0% ±1.0% ±0.6%	±0.9 μL ±1.5 μL ±1.8 μL	±1.0% ±0.5% ±0.3%	±0.3 μL ±0.75 μL ±0.9 μL	3122 000.051	3122 000.060	

Eppendorf Research® plus (adjustable, multichannel)

The data for systematic and random deviations only applies when using Eppendorf epT.I.P.S. pipette tips.

Eppendorf Research® plus (fixed volume)

Volume	Systematic error		Random error		Order no.		
Control button grey for epT.I.P.S [®] pipette tips 20 μL							
10 µL	±1.2%	±0.12 μL	±0.6%	±0.06 μL	3121 000.015		
Control button light grey for ep	T.I.P.S [®] pipette t	ips 20 μL L					
20 µL	±0.8%	±0.16 μL	±0.3%	±0.06 μL	3121 000.031		
Control button yellow for epT.I.P.S [®] pipette tips 200 µL							
10 μL 20 μL 25 μL 50 μL 100 μL 200 μL	±1.2% ±1.0% ±1.0% ±0.7% ±0.6% ±0.6%	±0.12 μL ±0.2 μL ±0.25 μL ±0.35 μL ±0.6 μL ±1.2 μL	±0.6% ±0.3% ±0.3% ±0.3% ±0.2% ±0.2%	±0.06 μL ±0.06 μL ±0.08 μL ±0.15 μL ±0.2 μL ±0.4 μL	3121 000.023 3121 000.040 3121 000.058 3121 000.066 3121 000.074 3121 000.082		
Control button blue for epT.I.P.S [®] pipette tips 1000 µL							
200 μL 250 μL 500 μL 1,000 μL	±0.6% ±0.6% ±0.6% ±0.6%	±1.2 μL ±1.5 μL ±3.0 μL ±6.0 μL	±0.2% ±0.2% ±0.2% ±0.2%	±0.4 μL ±0.5 μL ±1.0 μL ±2.0 μL	3121 000.090 3121 000.104 3121 000.112 3121 000.120		

The data for systematic and random deviations only applies when using Eppendorf epT.I.P.S. pipette tips.



Pipette maintenance, calibration and adjustment services

For more information, service requests and local offers go to **www.eppendorf.com/epservices** Performance Plans are available in selected countries only and service offer may differ.

The perfect match

ep Dualfilter T.I.P.S. – Stop aerosols!

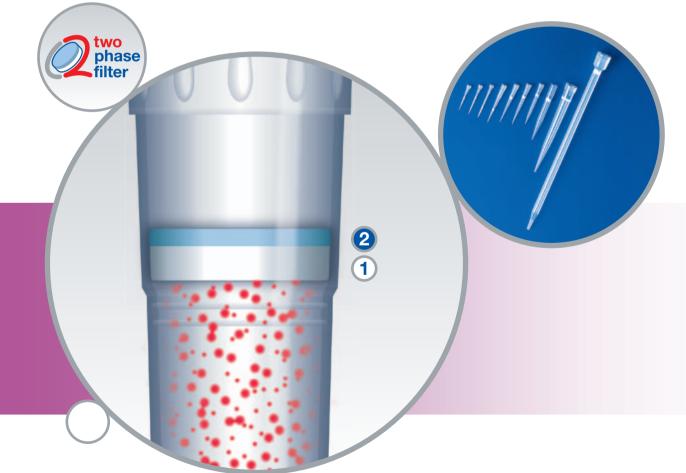
Product features:

- Double protection provided by the two phase filter
- Provides maximum protection for both pipette and sample
- Ultimate absorption of aerosols and biomolecules
- Free from PCR inhibiting additives and particles from the filter material itself
- Supplied sterile and Eppendorf PCR clean

The high quality, flexible plastic material ensures a leak-proof seal and minimum attachment and ejection forces – when used in combination with Eppendorf pipettes, they form the perfect system for contamination-free sample dispensing.

For more information, detailed certificates and important facts concerning accredited labs, visit **www.eppendorf.com**

• ep Dualfilter T.I.P.S. are available in 10 different sizes from 0.1 μL to 10 mL



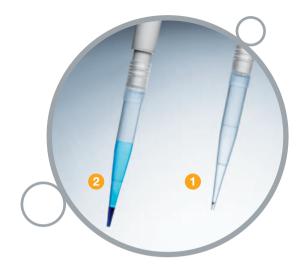
Patent pending.

NEW! Also available as epT.1.P.S. LoRetention

The new epT.I.P.S. LoRetention ensures best results while pipetting solutions detergents. Detergents leave an adhesive layer of liquid inside standard pipette tips. The ultrahydrophobic surface of epT.I.P.S. LoRetention creates the "Pearl Effect" – the maximum amount of sample can be recovered thus providing an unbeaten reproducibility.

 The "Pearl Effect" – a comparison of the amount of residual liquid when pipetting solutions that contain detergents:

 Maximum recovery with epT.I.P.S. LoRetention
 Significant loss of sample using standard tips.



Ordering information

ep Dualfilter T.I.P.S. [®] pipette tip	International Order no.	North America Order no.			
0.1–10 μL S	0030 077.504	022491202			
0.1–10 μL M	0030 077.512	022491211			
0.5–20 μL L	0030 077.520	022491229			
2–20 μL	0030 077.539	022491270			
2–100 μL	0030 077.547	022491237			
2–200 μL	0030 077.555	022491296			
20–300 μL	0030 077.563	022491245			
50–1,000 μL	0030 077.571	022491253			
100–5,000 μL	0030 077.580	022491261			
1–10 mL L	0030 077.598	022491288			

Ordering information

Description	Quantity	Purity	International Order No.	North America Order No.				
epT.I.P.S. [®] LoRetention Dualfilter, Racks								
0.1–10 μL S 0.5–20 μL L 2–100 μL 20–300 μL 50–1,000 μL	10×96 tips 10×96 tips	PCR clean/sterile/pyrogen-free PCR clean/sterile/pyrogen-free PCR clean/sterile/pyrogen-free PCR clean/sterile/pyrogen-free PCR clean/sterile/pyrogen-free	0030 077.610 0030 077.628 0030 077.644 0030 077.636 0030 077.652	022493000 022493002 022493006 022493004 022493008				
epT.I.P.S.® LoRetent	epT.I.P.S. [®] LoRetention, Reloads							
0.1–10 μL S 0.5–20 μL L 2–200 μL 50–1,000 μL	10×96 tips 10×96 tips 10×96 tips 10×96 tips	PCR clean PCR clean PCR clean PCR clean	0030 072.006 0030 072.014 0030 072.022 0030 072.030	022493010 022493012 022493014 022493016				
epT.I.P.S.® LoRetent	ion, Reloads							
0.1–10 μL S 0.5–20 μL L 2–200 μL 50–1,000 μL	10×96 tips 10×96 tips 10×96 tips 10×96 tips	Eppendorf Quality Eppendorf Quality Eppendorf Quality Eppendorf Quality	0030 072.049 0030 072.057 0030 072.065 0030 072.073	022493018 022493020 022493022 022493024				
epT.I.P.S. [®] LoRetention, Racks*								
0.1–10 μL S 0.5–20 μL L 2–200 μL 50–1,000 μL	10×96 tips 10×96 tips 10×96 tips 10×96 tips	PCR clean PCR clean PCR clean PCR clean		022493026 022493028 022493030 022493032				

*available in North America only

Eppendorf Research® plus

Design Awards





Your local distributor: www.eppendorf.com/worldwide

Eppendorf AG · 22331 Hamburg · Germany · Tel: +49 40 538 01-0 · Fax: +49 40 538 01-556 · E-mail: eppendorf@eppendorf.com Eppendorf North America, Inc. · 102 Motor Parkway, Suite 410 · Hauppauge, N.Y. 11788-5178 · USA Tel: +1 516 334 7500 · Toll free phone: +1 800 645 3050 · Fax: +1 516 334 7506 · E-mail: info@eppendorf.com

> Application Support Europe, International: Tel: +49 1803 666 789 · E-mail: support@eppendorf.com North America: Tel: +1 800 645 3050 menu option 2 · E-mail: techserv@eppendorf.com Asia Pacific: Tel: +60 3 8023 6869 · E-mail: support_asiapacific@eppendorf.com