

## Eppendorf Research® plus

The Eppendorf Research plus combines over 50 years of innovation in liquid handling to provide you with one of the safest and most ergonomic pipettes available today. The Research plus is remarkably light, both in terms of weight and pipetting forces, setting new standards for ergonomic operation. It is comforting 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. The Research plus pipette will become an indispensable tool in your laboratory.

### Product benefits

- > Ultra light mechanical pipette designed according to the strict criteria of the Eppendorf PhysioCare Concept
- > Very low weight and operating forces for advanced ergonomics to limit strain on your hand and arm
- > User adjustment option to offset inaccuracies when pipetting warm, cold, volatile or high density liquids and return to factory adjustment without calibration
- > One of the most commonly used pipettes in the world is available as a single channel pipette in fixed or variable volume as well as 8 and 12 channel pipette



**CE\***

\* The Research plus pipette is designed and constructed for low-contamination transfer of liquids, in particular for samples from the human body and for reagents within the scope of an in-vitro diagnostic application in order to allow the in-vitro diagnostic medical device to be used as intended. This pipette is an in-vitro diagnostic device according to Directive 98/79/EC of the European Parliament and the Council dated October 27, 1998. It is intended exclusively for indoor use and for operation by qualified staff.



reddot design award  
winner 2009

#### High flexibility

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.

#### Secondary adjustment option for various liquid classes

Adjust your pipette in seconds for better accuracy when pipetting various difficult liquids like ethanol or even when pipetting at high altitudes.

#### Advanced ergonomics

Feel the difference in weight, pipetting forces and the spring loaded tip cone.

#### Low tip attachment force

Achieve optimal tightness and minimal attachment forces with the Eppendorf Research plus. The spring loaded tip cone helps to reduce stress without sacrificing tightness.

#### Low tip ejection force

How many tips do you use per day? Even small differences in the tip ejection force make a big change if you do it day by day. The tip ejection force of the Eppendorf Research plus can be as low as 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 to ensure stress-free workflow and intuitive usage.



# Eppendorf Research<sup>®</sup> plus

## Eppendorf Research<sup>®</sup> plus (single-channel, variable volume)\*1

Volume range	Color code	Volume	Systematic error*2		Random error*2		Order no.
0.1–2.5 µL	■ dark gray (for epT.I.P.S. <sup>®</sup> 10 µL)	0.1 µL	±48.0%	±0.048 µL	±12.0%	±0.012 µL	3120 000.011
		0.25 µL	±12.0%	±0.03 µL	±6.0%	±0.015 µL	
		1.25 µL	±2.5%	±0.031 µL	±1.5%	±0.019 µL	
		2.5 µL	±1.4%	±0.035 µL	±0.7%	±0.018 µL	
0.5–10 µL	■ medium gray (for epT.I.P.S. <sup>®</sup> 20 µL)	0.5 µL	±8.0%	±0.04 µL	±5.0%	±0.025 µL	3120 000.020
		1 µL	±2.5%	±0.025 µL	±1.8%	±0.018 µL	
		5 µL	±1.5%	±0.075 µL	±0.8%	±0.04 µL	
		10 µL	±1.0%	±0.1 µL	±0.4%	±0.04 µL	
2–20 µL	■ light gray (for epT.I.P.S. <sup>®</sup> 20 µL L)	2 µL	±5.0%	±0.1 µL	±1.5%	±0.03 µL	3120 000.097
		10 µL	±1.2%	±0.12 µL	±0.6%	±0.06 µL	
		20 µL	±1.0%	±0.2 µL	±0.3%	±0.06 µL	
2–20 µL	■ yellow (for epT.I.P.S. <sup>®</sup> 200 µL)	2 µL	±5.0%	±0.1 µL	±1.5%	±0.03 µL	3120 000.038
		10 µL	±1.2%	±0.12 µL	±0.6%	±0.06 µL	
		20 µL	±1.0%	±0.2 µL	±0.3%	±0.06 µL	
10–100 µL		10 µL	±3.0%	±0.3 µL	±1.0%	±0.1 µL	3120 000.046
		50 µL	±1.0%	±0.5 µL	±0.3%	±0.15 µL	
		100 µL	±0.8%	±0.8 µL	±0.2%	±0.2 µL	
20–200 µL		20 µL	±2.5%	±0.5 µL	±0.7%	±0.14 µL	3120 000.054
		100 µL	±1.0%	±1.0 µL	±0.3%	±0.3 µL	
		200 µL	±0.6%	±1.2 µL	±0.2%	±0.4 µL	
30–300 µL	■ orange (for epT.I.P.S. <sup>®</sup> 300 µL)	30 µL	±2.5%	±0.75 µL	±0.7%	±0.21 µL	3120 000.100
		150 µL	±1.0%	±1.5 µL	±0.3%	±0.45 µL	
		300 µL	±0.6%	±1.8 µL	±0.2%	±0.6 µL	
100–1,000 µL	■ blue (for epT.I.P.S. <sup>®</sup> 1,000 µL)	100 µL	±3.0%	±3.0 µL	±0.6%	±0.6 µL	3120 000.062
		500 µL	±1.0%	±5.0 µL	±0.2%	±1.0 µL	
		1,000 µL	±0.6%	±6.0 µL	±0.2%	±2.0 µL	
0.5–5 mL	■ purple (for epT.I.P.S. <sup>®</sup> 5 mL)	0.5 mL	±2.4%	±0.012 mL	±0.6%	±0.003 mL	3120 000.070
		2.5 mL	±1.2%	±0.03 mL	±0.25%	±0.006 mL	
		5 mL	±0.6%	±0.03 mL	±0.15%	±0.008 mL	
1–10 mL	■ turquoise (for epT.I.P.S. <sup>®</sup> 10 mL)	1 mL	±3.0%	±0.03 mL	±0.6%	±0.006 mL	3120 000.089
		5 mL	±0.8%	±0.04 mL	±0.2%	±0.01 mL	
		10 mL	±0.6%	±0.06 mL	±0.15%	±0.015 mL	

\*1 Eppendorf Research<sup>®</sup> plus single-channel variable volume pipettes up to 1,000 µL include an epT.I.P.S.<sup>®</sup> box. The 5 mL and 10 mL versions include an epT.I.P.S.<sup>®</sup> sample bag.

\*2 The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

# Eppendorf Research® plus

## Eppendorf Research® plus (multichannel, variable volume)\*1

Volume range	Color code	Volume	Systematic error*2		Random error*2		Order no. 8-channel	Order no. 12-channel
0.5–10 µL	■ medium gray (for epT.I.P.S.® 20 µL)	0.5 µL	±12.0%	±0.06 µL	±8.0%	±0.04 µL	3122 000.019	3122 000.027
		1 µL	±8.0%	±0.08 µL	±5.0%	±0.05 µL		
		5 µL	±4.0%	±0.2 µL	±2.0%	±0.1 µL		
		10 µL	±2.0%	±0.2 µL	±1.0%	±0.1 µL		
10–100 µL	■ yellow (for epT.I.P.S.® 200 µL)	10 µL	±3.0%	±0.3 µL	±2.0%	±0.2 µL	3122 000.035	3122 000.043
		50 µL	±1.0%	±0.5 µL	±0.8%	±0.4 µL		
		100 µL	±0.8%	±0.8 µL	±0.3%	±0.3 µL		
30–300 µL	■ orange (for epT.I.P.S.® 300 µL)	30 µL	±3.0%	±0.9 µL	±1.0%	±0.3 µL	3122 000.051	3122 000.060
		150 µL	±1.0%	±1.5 µL	±0.5%	±0.75 µL		
		300 µL	±0.6%	±1.8 µL	±0.3%	±0.9 µL		

## Eppendorf Research® plus (single-channel, fixed volume)

Volume	Color code	Systematic error*2		Random error*2		Order no.
10 µL	■ medium gray (for epT.I.P.S.® 20 µL)	±1.2%	±0.12 µL	±0.6%	±0.06 µL	3121 000.015
20 µL	■ light gray (for epT.I.P.S.® 20 µL L)	±0.8%	±0.16 µL	±0.3%	±0.06 µL	3121 000.031
10 µL	■ yellow (for epT.I.P.S.® 200 µL)	±1.2%	±0.12 µL	±0.6%	±0.06 µL	3121 000.023
20 µL		±1.0%	±0.2 µL	±0.3%	±0.06 µL	3121 000.040
25 µL		±1.0%	±0.25 µL	±0.3%	±0.08 µL	3121 000.058
50 µL		±0.7%	±0.35 µL	±0.3%	±0.15 µL	3121 000.066
100 µL		±0.6%	±0.6 µL	±0.2%	±0.2 µL	3121 000.074
200 µL	■ blue (for epT.I.P.S.® 1,000 µL)	±0.6%	±1.2 µL	±0.2%	±0.4 µL	3121 000.082
200 µL		±0.6%	±1.2 µL	±0.2%	±0.4 µL	3121 000.090
250 µL		±0.6%	±1.5 µL	±0.2%	±0.5 µL	3121 000.104
500 µL		±0.6%	±3.0 µL	±0.2%	±1.0 µL	3121 000.112
1000 µL		±0.6%	±6.0 µL	±0.2%	±2.0 µL	3121 000.120

\*1 Eppendorf Research® plus multichannel variable volume pipettes include an epT.I.P.S.® box.

\*2 The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Accessories

<b>Tip-Tub reagent reservoir</b> , autoclavable reservoir for aspirating liquids with multichannel pipettes, 1 set = 10 reservoirs and 10 lids	<b>Order no.</b> 0030 058.607
<b>Eppendorf TrackIT</b>	3903 000.014

## Eppendorf Research® plus 3-pack including epT.I.P.S.® box and Eppendorf ballpoint pen

<b>Option 1:</b> 0.5–10 µL, 10–100 µL, 100–1,000 µL	<b>Order no.</b> 3120 000.909
<b>Option 2:</b> 2–20 µL yellow, 20–200 µL, 100–1,000 µL	3120 000.917
<b>Option 3:</b> 100–1,000 µL, 0.5–5 mL, 1–10 mL	3120 000.925

This pipette is an in-vitro diagnostic device according to Directive 98/79/EC of the European Parliament and the Council dated October 27, 1998.