



# The New Legend

Eppendorf Reference® 2 Pipette



# »The new Reference class for modern liquid handling tools.«

The name »Reference« stands for extraordinary precision and accuracy, a long service life, and an ergonomic design. The new Reference 2 boasts these proven Premium characteristics and this operating philosophy with its innovative state of the art technology; making it a reliable partner for you and your demanding work.



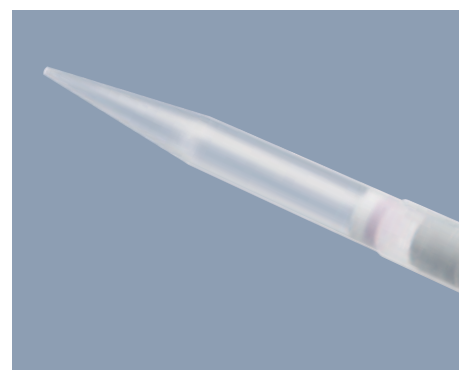
## Eppendorf TrackIT **NEW**

- > Including RFID Reader and Software
- > Embedded RFID chip contains all relevant data regarding the pipette (serial no., article no. etc.)
- > Ability to add your own data (e.g. calibration time and location)
- > Simple identification and documentation
- > For more information:  
[www.eppendorf.com/trackit](http://www.eppendorf.com/trackit)



## Multi-channel version **NEW**

- > Channel indicator guarantees a continuously identical pipette alignment during the work process
- > Spring-loaded tip cone for reproducible tip fit and reduced effort (to be switched on/off optionally)
- > High flexibility and simple maintenance with the ability to remove single cones



## Systematic success

- > epT.I.P.S.®: High-grade pipette tips for increased result quality ([www.eppendorf.com/consumables](http://www.eppendorf.com/consumables))
- > epServices™: Professional service for reliable results and long service life ([www.eppendorfnna.com/epServices](http://www.eppendorfnna.com/epServices))

## The Eppendorf Reference<sup>®</sup> 2 at a glance



### **A pipette is only as good as its tip**

- > Eppendorf epT.I.P.S.<sup>®</sup> pipette tips, Totally Integrated Pipetting System
- > Maximum Precision and Reliability

### **Spring-loaded tip cone**

- > Improved reproducibility
- > Low effort during operation/ejection

### **Heightened Traceability**

- > Serial number is printed on multiple components of the pipette
- > Internal RFID technology



- > Color coded and volume labeled for quick identification of the volume size/ tip size
- > Round upper part makes it possible to work in every position
- > 4-digit display for exact volume setting (clearly visible from every angle)
- > Quick and secure volume setting, include volume lock
- > Fully autoclavable
- > Movable parts and external edges made from stainless steel equip the pipette with outstanding robustness at potential impact sites and for internal components

**Sturdy Upper Handle**

- > Guarantees long service life and increased robustness

**Unique surface**

- > Few rough edges
- > Smooth surface for comfortable working and simple cleaning

**Single-button operation**

- > Ergonomic handling with reduced operating effort.
- > Simple and quick tip ejection with active aerosol reduction
- > Reduce repetitive strain injuries by not having to move your thumb sideways
- > Haptic feedback before tip ejection

**Additional advantages:**

- > High precision and accuracy provides reliable pipetting results
- > User friendly secondary adjustment
- > Customizable labeling area

## Ordering information

| Description                                        |         | Volume | Systematic error |         | Random error |            | Catalog No. |            |
|----------------------------------------------------|---------|--------|------------------|---------|--------------|------------|-------------|------------|
|                                                    |         |        | ± %              | ± µL/mL | ± %          | ± µL/mL    |             |            |
| Eppendorf Reference® 2, single-channel variable*   |         |        |                  |         |              |            |             |            |
| 0.1–2.5 µL<br>■ dark gray                          | 0.1 µL  | ±48.0  | ±0.048           | ±12.0   | ± 0.012      | 4920000016 |             |            |
|                                                    | 0.25 µL | ±12.0  | ±0.03            | ±6.0    | ±0.015       |            |             |            |
|                                                    | 1.25 µL | ±2.5   | ±0.031           | ±1.5    | ±0.019       |            |             |            |
|                                                    | 2.5 µL  | ±1.4   | ±0.035           | ±0.7    | ±0.018       |            |             |            |
| 0.5–10 µL<br>■ medium gray                         | 0.5 µL  | ±8.0   | ±0.040           | ±5.0    | ±0.025       | 4920000024 |             |            |
|                                                    | 1 µL    | ±2.5   | ±0.025           | ±1.8    | ±0.018       |            |             |            |
|                                                    | 5 µL    | ±1.5   | ±0.075           | ±0.8    | ±0.04        |            |             |            |
|                                                    | 10 µL   | ±1.0   | ±0.10            | ±0.4    | ±0.04        |            |             |            |
| 2–20 µL<br>■ light gray                            | 2 µL    | ±5.0   | ±0.10            | ±1.5    | ±0.03        | 4920000032 |             |            |
|                                                    | 10 µL   | ±1.2   | ±0.12            | ±0.6    | ±0.06        |            |             |            |
|                                                    | 20 µL   | ±1.0   | ±0.20            | ±0.3    | ±0.06        |            |             |            |
| 2–20 µL<br>■ yellow                                | 2 µL    | ±5.0   | ±0.10            | ±1.5    | ±0.03        | 4920000040 |             |            |
|                                                    | 10 µL   | ±1.2   | ±0.12            | ±0.6    | ±0.06        |            |             |            |
|                                                    | 20 µL   | ±1.0   | ±0.2             | ±0.3    | ±0.06        |            |             |            |
| 10–100 µL<br>■ yellow                              | 10 µL   | ±3.0   | ±0.3             | ±0.7    | ±0.07        | 4920000059 |             |            |
|                                                    | 50 µL   | ±1.0   | ±0.5             | ±0.3    | ±0.15        |            |             |            |
|                                                    | 100 µL  | ±0.8   | ±0.8             | ±0.20   | ±0.20        |            |             |            |
| 20–200 µL<br>■ yellow                              | 20 µL   | ±2.5   | ±0.5             | ±0.7    | ±0.14        | 4920000067 |             |            |
|                                                    | 100 µL  | ±1.0   | ±1.0             | ±0.3    | ±0.3         |            |             |            |
|                                                    | 200 µL  | ±0.6   | ±1.2             | ±0.2    | ±0.4         |            |             |            |
| 30–300 µL<br>■ orange                              | 30 µL   | ±2.5   | ±0.75            | ±0.7    | ±0.21        | 4920000075 |             |            |
|                                                    | 150 µL  | ±1.0   | ±1.5             | ±0.3    | ±0.45        |            |             |            |
|                                                    | 300 µL  | ±0.6   | ±1.8             | ±0.2    | ±0.6         |            |             |            |
| 100–1000 µL<br>■ blue                              | 100 µL  | ±3.0   | ±3.0             | ±0.6    | ±0.6         | 4920000083 |             |            |
|                                                    | 500 µL  | ±1.0   | ±5.0             | ±0.2    | ±1.0         |            |             |            |
|                                                    | 1000 µL | ±0.6   | ±6.0             | ±0.2    | ±2.0         |            |             |            |
| 0.25–2.5 mL<br>■ red                               | 0.25 mL | ±4.8   | ±0.012           | ±1.2    | ±0.003       | 4920000091 |             |            |
|                                                    | 1.25 mL | ±0.8   | ±0.010           | ±0.2    | ±0.0025      |            |             |            |
|                                                    | 2.5 mL  | ±0.6   | ±0.015           | ±0.2    | ±0.005       |            |             |            |
| 0.5–5 mL<br>■ purple                               | 0.5 mL  | ±2.4   | ±0.012           | ±0.6    | ±0.003       | 4920000105 |             |            |
|                                                    | 2.5 mL  | ±1.2   | ±0.030           | ±0.25   | ±0.006       |            |             |            |
|                                                    | 5.0 mL  | ±0.6   | ±0.030           | ±0.15   | ±0.0075      |            |             |            |
| 1–10 mL<br>■ turquoise                             | 1.0 mL  | ±3.0   | ±0.030           | ±0.6    | ±0.006       | 4920000113 |             |            |
|                                                    | 5.0 mL  | ±0.8   | ±0.040           | ±0.2    | ±0.010       |            |             |            |
|                                                    | 10.0 mL | ±0.6   | ±0.060           | ±0.15   | ±0.015       |            |             |            |
| Eppendorf Reference® 2, 8- and 12-channel variable |         |        |                  |         |              |            | 8-channel   | 12-channel |
| 0.5–10 µL<br>■ medium gray                         | 0.5 µL  | ±12.0  | ±0.06            | ±8.0    | ±0.04        | 4922000013 | 4922000021  |            |
|                                                    | 1 µL    | ±8.0   | ±0.08            | ±5.0    | ±0.05        |            |             |            |
|                                                    | 5 µL    | ±4.0   | ±0.2             | ±2.0    | ±0.1         |            |             |            |
|                                                    | 10 µL   | ±2.0   | ±0.2             | ±1.0    | ±0.1         |            |             |            |
| 10–100 µL<br>■ yellow                              | 10 µL   | ±3.0   | ±0.3             | ±2.0    | ±0.2         | 4922000030 | 4922000048  |            |
|                                                    | 50 µL   | ±1.0   | ±0.5             | ±0.8    | ±0.4         |            |             |            |
|                                                    | 100 µL  | ±0.8   | ±0.8             | ±0.3    | ±0.3         |            |             |            |
| 30–300 µL<br>■ orange                              | 30 µL   | ±3.0   | ±0.9             | ±1.0    | ±0.3         | 4922000056 | 4922000064  |            |
|                                                    | 150 µL  | ±1.0   | ±1.5             | ±0.5    | ±0.75        |            |             |            |
|                                                    | 300 µL  | ±0.6   | ±1.8             | ±0.3    | ±0.9         |            |             |            |

\* All Eppendorf Reference 2 single-channel adjustable-volume pipettes come with an epT.I.P.S. Box (except 2.5 mL, 5 mL and 10 mL)

## Ordering information

| Description                                  | Color code                                                                                    | Systematic error |         | Random error |         | Catalog No. |
|----------------------------------------------|-----------------------------------------------------------------------------------------------|------------------|---------|--------------|---------|-------------|
|                                              |                                                                                               | ± %              | ± µL/mL | ± %          | ± µL/mL |             |
| Eppendorf Reference® 2, single-channel fixed |                                                                                               |                  |         |              |         |             |
| 1 µL                                         |  dark gray   | ±2.5             | ±0.025  | ±1.8         | ±0.018  | 4921000010  |
| 2 µL                                         |  dark gray   | ±2.0             | ±0.04   | ±1.2         | ±0.024  | 4921000028  |
| 5 µL                                         |  medium gray | ±1.2             | ±0.06   | ±0.6         | ±0.03   | 4921000036  |
| 10 µL                                        |  medium gray | ±1.0             | ±0.1    | ±0.5         | ±0.05   | 4921000044  |
| 10 µL                                        |  yellow      | ±1.2             | ±0.12   | ±0.6         | ±0.06   | 4921000052  |
| 20 µL                                        |  light gray  | ±0.8             | ±0.16   | ±0.3         | ±0.06   | 4921000060  |
| 20 µL                                        |  yellow      | ±1.0             | ±0.2    | ±0.3         | ±0.06   | 4921000079  |
| 25 µL                                        |  yellow      | ±1.0             | ±0.25   | ±0.3         | ±0.075  | 4921000087  |
| 50 µL                                        |  yellow      | ±0.7             | ±0.35   | ±0.3         | ±0.15   | 4921000095  |
| 100 µL                                       |  yellow      | ±0.6             | ±0.6    | ±0.2         | ±0.2    | 4921000109  |
| 200 µL                                       |  yellow      | ±0.6             | ±1.2    | ±0.2         | ±0.4    | 4921000117  |
| 200 µL                                       |  blue        | ±0.6             | ±1.2    | ±0.2         | ±0.4    | 4921000125  |
| 250 µL                                       |  blue        | ±0.6             | ±1.5    | ±0.2         | ±0.5    | 4921000133  |
| 500 µL                                       |  blue        | ±0.6             | ±3.0    | ±0.2         | ±1.0    | 4921000141  |
| 1000 µL                                      |  blue        | ±0.6             | ±6.0    | ±0.2         | ±2.0    | 4921000150  |
| 2 mL                                         |  red         | ±0.6             | ±0.012  | ±0.2         | ±0.004  | 4921000168  |
| 2.5 mL                                       |  red         | ±0.6             | ±0.015  | ±0.2         | ±0.005  | 4921000176  |
| Accessories                                  |                                                                                               |                  |         |              |         |             |
| Eppendorf TrackIT                            |                                                                                               |                  |         |              |         | 3903000014  |
| Pipette carousel Eppendorf Reference 2       |                                                                                               |                  |         |              |         | 4923000009  |

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