

# 384. Ready. Set. Pipette!

384 well pipetting made easy  
16- and 24-channel pipettes and epT.I.P.S.® 384

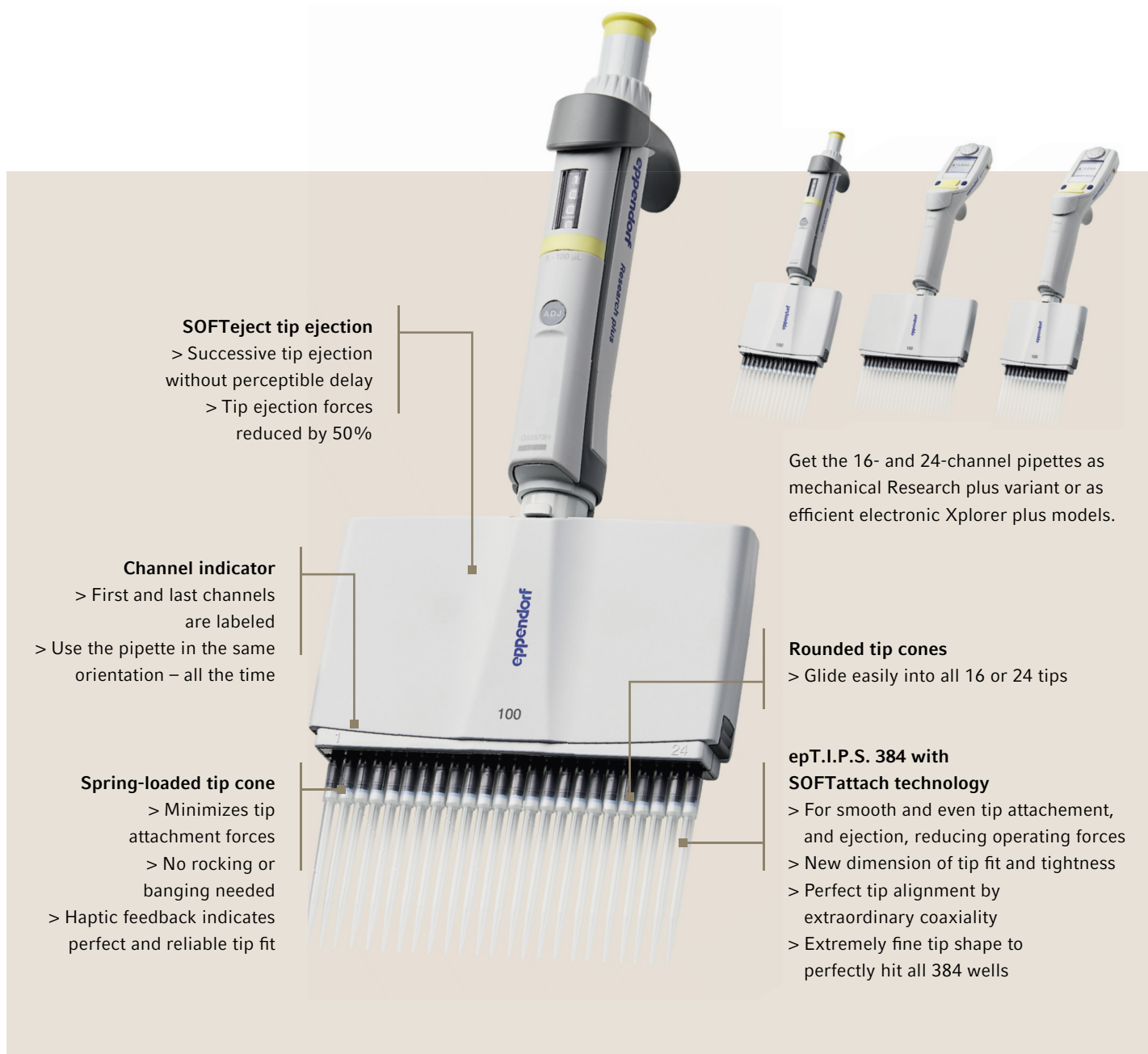
# 16 and 24 Wells in Just One Step

## Pipette into 384-well plates without the pain

Do you work with 384-well plates and strive for more efficient manual pipetting methods? Your worries are over. 16- and 24-channel pipettes and epT.I.P.S.® 384 pipette tips from Eppendorf make working with 384-well plates convenient, ergonomic and safe.

## Fill 384 wells within a minute

- > No more mistakes or tedious work due to inconvenient alternate well pipetting with 8- and 12-channel pipettes
- > Set up or validate an automated process manually, and have a back-up system in case automation fails
- > Increase your throughput today and change from 96 to 384-well plates. There's no reason to hesitate anymore!



### SOFTject tip ejection

- > Successive tip ejection without perceptible delay
- > Tip ejection forces reduced by 50%

### Channel indicator

- > First and last channels are labeled
- > Use the pipette in the same orientation – all the time

### Spring-loaded tip cone

- > Minimizes tip attachment forces
- > No rocking or banging needed
- > Haptic feedback indicates perfect and reliable tip fit

Get the 16- and 24-channel pipettes as mechanical Research plus variant or as efficient electronic Xplorer plus models.

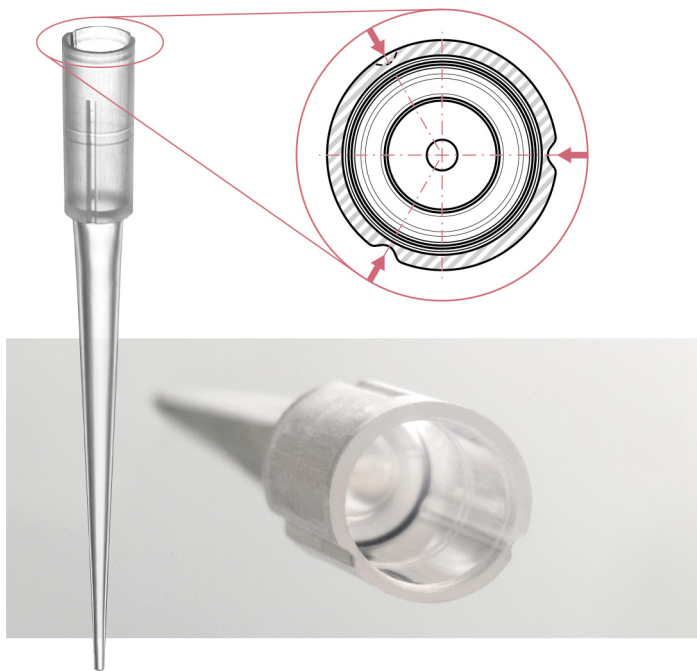
### Rounded tip cones

- > Glide easily into all 16 or 24 tips

### epT.I.P.S. 384 with SOFTattach technology

- > For smooth and even tip attachment, and ejection, reducing operating forces
- > New dimension of tip fit and tightness
- > Perfect tip alignment by extraordinary coaxiality
- > Extremely fine tip shape to perfectly hit all 384 wells

# Ergonomics – Practiced Innovation



## epT.I.P.S. 384 with SOFTattach technology – the key innovation

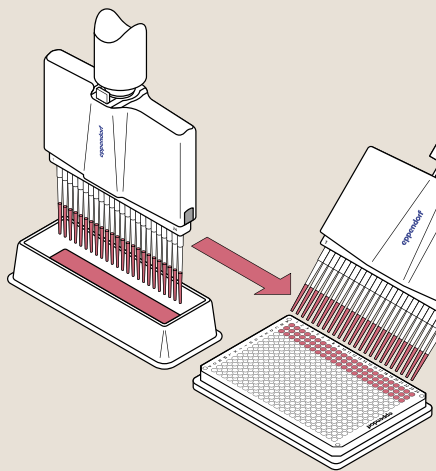
For the first time, pipette tips have elastic forming grooves. They allow the tips to stretch as much as necessary to enable a perfect seal while operating forces are reduced to a minimum.

### Your benefit:

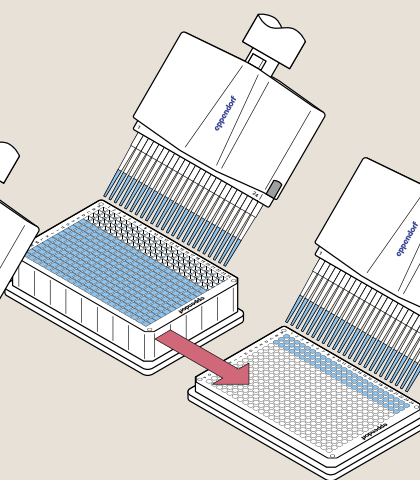
- > Outstanding and reliable tip fit and tightness
- > Reduced tip attachment and ejection forces

## Applications for 384 Well Plates

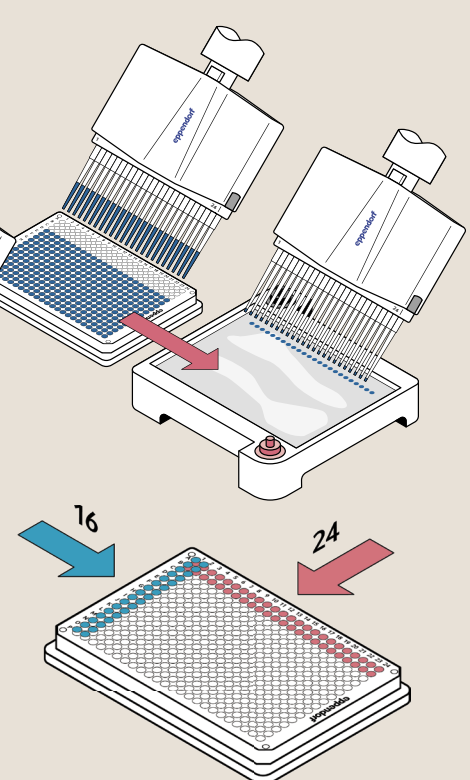
### 1 From reagent reservoir to 384-well plate



### 2 From 384 to 384-well plate



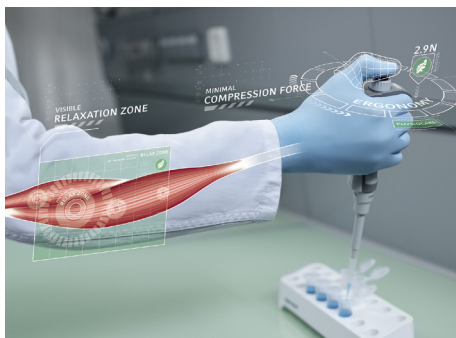
### 3 From 384-well plate to agarose gel



- > Biochemical assays
- > Cell based assays
- > Immunoassays
- > Storage of biological samples or chemical compounds

- > Nucleic acid based methods
  - Amplification
  - Loading of agarose gels
  - Purification
  - Quantification
  - Sequencing

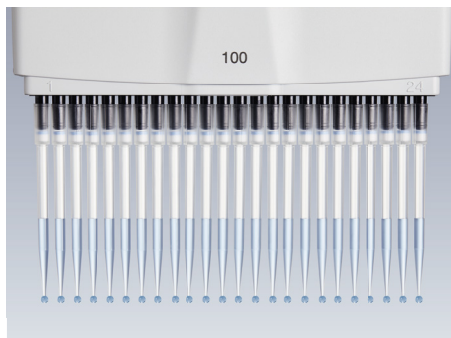




### Superior ergonomics

Ergonomic operation and energy saving. Reduced ejection forces and 40% lower tip attachment forces per cone:

- > **epT.I.P.S. 384 with SOFTattach technology:** outstandingly smooth and even tip attachment
- > **Spring-loaded tip cone:** with haptic feedback there is no need for rocking and banging, one gentle touch, and done
- > **SOFTject:** 50% reduction of ejection forces by successive tip ejection



### Reproducible results

High level reproducibility and user safety:

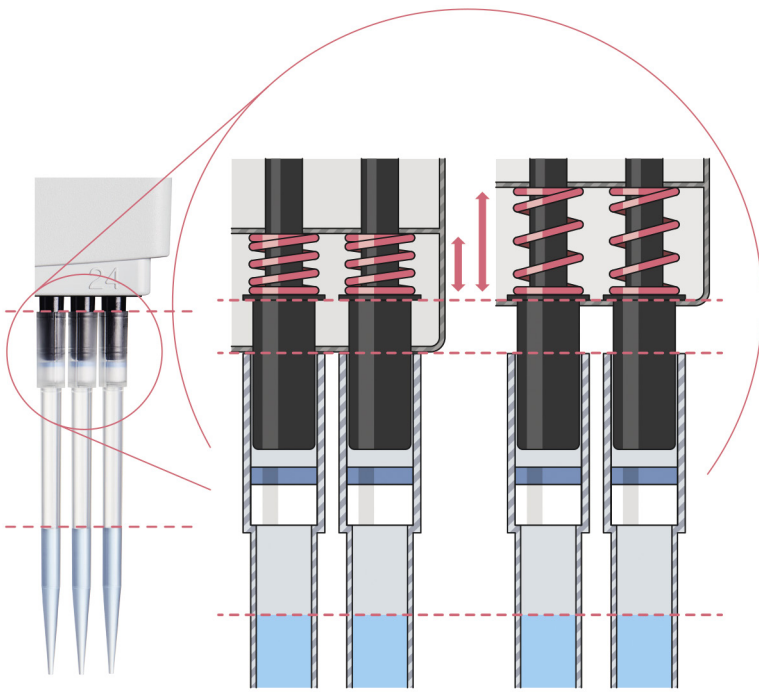
- > **Start 16 or 24 reactions simultaneously:** for equal starting conditions
- > **SOFTattach technology and optimal pipette-tip compatibility:** for reliable tip tightness
- > **Perfectly aligned epT.I.P.S. 384:** for safe plate maneuvering and liquid transfer



### Time-saving

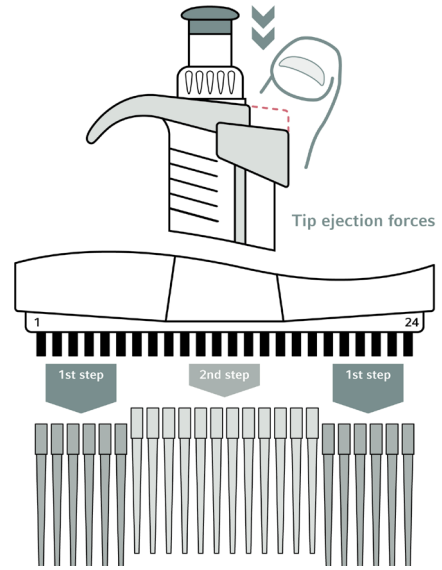
Alternate well pipetting with 8- or 12-channel pipettes is a thing of the past:

- > **In just one step:** process complete columns or rows with 16- and 24-channel pipettes
- > **Protects from accidental well misidentification and repeating of experiments**
- > **Improve efficiency with 384-well plates:** 50% reduction in pipetting steps by processing one 384 instead of four 96 well plates



**Spring-loaded tip cone for ergonomic and safe work**

- > Reduced tip attachment force
- > Haptic feedback indicates reproducible and safe tip fit
- > Uniform uptake of liquid



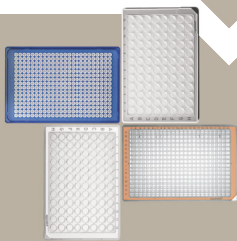
**SOFTject for reduced tip ejection force**

During a single tip ejection stroke, the outside tips eject before the inside tips. This reduces the tip ejection forces by 50%.

## Workflow

**Complete Solutions from Eppendorf**

As a solution provider, we offer 384 well formats with our microplates, thermocyclers, thermomixers, centrifuges and services to complete your 384 well workflow demands. More information about our workflow solutions on: [www.eppendorf.com](http://www.eppendorf.com)



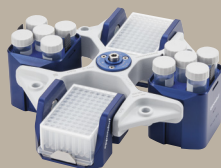
Eppendorf 384-well plates



Eppendorf ThermoMixer® FP



Mastercycler® X50h



Eppendorf Centrifugation

## Ergonomics – Then and Now

**Always focusing on scientists' needs**

To sustainably support the health of our customers, Eppendorf introduced the PhysioCare Concept®. Our philosophy is to continuously listen to scientists' needs while challenging the status quo of existing tools. Eppendorf has surpassed themselves once again with the new system for 384-well plates by combining proven concepts with new innovations:

The already proven features, the **spring-loaded tip cone** and **SOFTject**, were combined with a further innovation – epT.I.P.S. 384 with **SOFTattach** technology. All these features combined ensure greater user safety and ergonomics at work:

- > Tip attachment – even and reliable
- > Tip ejection – smooth and easy
- > Per tip cone, attachment and ejection forces are significantly reduced
- > Perfectly aligned tips ensure safe plate maneuvering and liquid transfer



[www.eppendorf.com/physiocare](http://www.eppendorf.com/physiocare)

## Eppendorf Research® plus (multi-channel, variable volume)

| No. of channels | Volume   | Color code     | Order no.    |
|-----------------|----------|----------------|--------------|
| 16 channel      | 1–20 µL  | ■ light pink   | 3125 000 079 |
|                 | 5–100 µL | ■ light yellow | 3125 000 095 |
| 24 channel      | 1–20 µL  | ■ light pink   | 3125 000 087 |
|                 | 5–100 µL | ■ light yellow | 3125 000 109 |

## Eppendorf Xplorer® plus (multi-channel, incl. charger)

| No. of channels | Volume   | Color code     | Order no.    |
|-----------------|----------|----------------|--------------|
| 16 channel      | 1–20 µL  | ■ light pink   | 4861 000 778 |
|                 | 5–100 µL | ■ light yellow | 4861 000 792 |
| 24 channel      | 1–20 µL  | ■ light pink   | 4861 000 779 |
|                 | 5–100 µL | ■ light yellow | 4861 000 793 |

## epT.I.P.S.® / ep Dualfilter T.I.P.S.® 384

| Tips 384                              | Available as  | Tip size | Color code     | epT.I.P.S.® 384<br>Order no. | ep Dualfilter<br>T.I.P.S.® 384<br>Order no. |
|---------------------------------------|---|----------|----------------|------------------------------|---|
| <b>Set</b><br>(Eppendorf Quality™)    | epT.I.P.S.® 384, 1,920 tips<br>(5 trays x 384 tips), 1 reusable box | 20 µL    | ■ light pink   | 0030 076 028                 | –   |
|                                       |   | 100 µL   | ■ light yellow | 0030 076 036                 | –   |
| <b>Reload</b><br>(PCR clean)          | epT.I.P.S.® 384,<br>3,840 tips (10 trays x 384 tips)                | 20 µL    | ■ light pink   | 0030 076 001                 | –   |
|                                       |   | 100 µL   | ■ light yellow | 0030 076 010                 | –   |
| <b>Reload</b><br>(Eppendorf Quality™) | epT.I.P.S.® 384,<br>3,840 tips (10 trays x 384 tips)                | 20 µL    | ■ light pink   | 0030 076 044                 | –   |
|                                       |   | 100 µL   | ■ light yellow | 0030 076 052                 | –   |
| <b>Rack</b><br>(PCR clean, sterile)   | ep Dualfilter T.I.P.S.® 384,<br>3,840 tips (10 racks x 384 tips)    | 20 µL    | ■ light pink   | –                            | 0030 078 853                                |
|                                       |   | 100 µL   | ■ light yellow | –                            | 0030 078 861                                |

## 384-well plates

|   | Order no.    |
|---|--------------|
| <b>Eppendorf twin.tec® PCR Plate 384</b> , PCR clean, colorless, 25 plates            | 0030 128 508 |
| <b>Eppendorf Deepwell Plate 384</b> , PCR clean, white, 40 plates (5 bags x 8 plates) | 0030 521 102 |
| <b>Eppendorf Microplate 384/V</b> , PCR clean, white, 80 plates (5 bags x 16 plates)  | 0030 621 301 |

> For more information go to: [www.eppendorf.com/plates](http://www.eppendorf.com/plates)

## The Science of Pipetting to Perfection

Do you already know everything there is to know about pipetting? We have created a comprehensive guidebook to help you carry out good science.

Discover what you should consider before selecting a new pipette and how correct usage and careful maintenance will ensure your instrument always functions at peak performance.



Download your copy today:  
<https://eppendorf.group/Pipetting-eBook>



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