

# 384. Ready. Set. Pipette!

384-well pipetting made easy  
NEW: 16 or 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.

Eppendorf's new 16 or 24-channel pipettes and epT.I.P.S.® 384 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 or 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!

**SOFTeject 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

**Rounded tip cones**

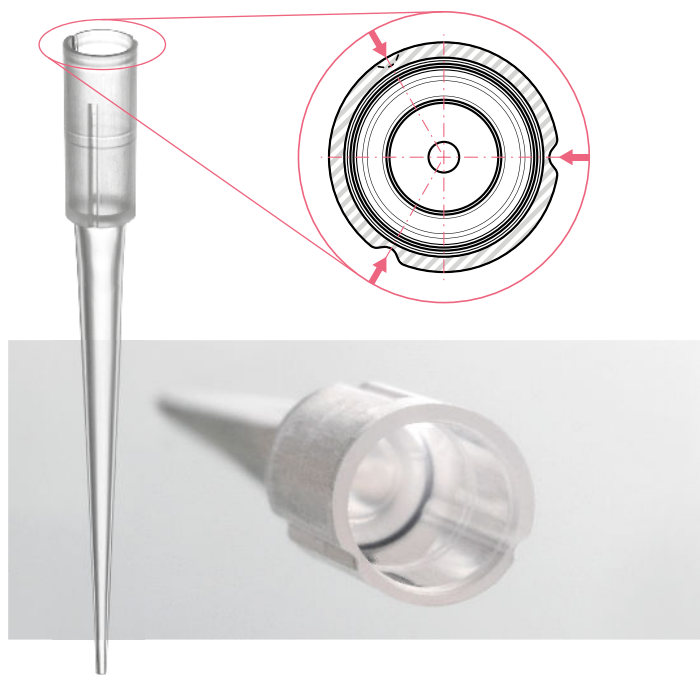
- > Glide easily into all 16 or 24 tips

**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

\*\* available for all Eppendorf pipettes up to 1 mL

# Ergonomics – Practiced Innovation



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

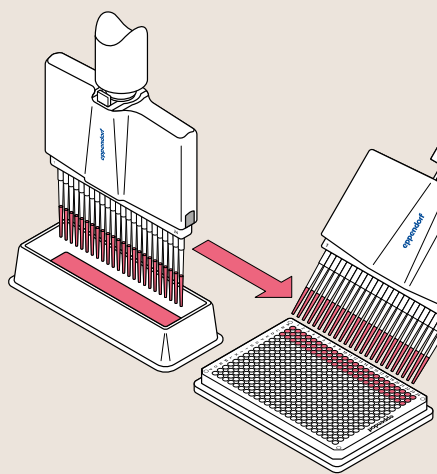
For the first time, pipette tips have elastic forming grooves. They allow the tips to stretch as much as necessary to enable a perfect seal while operating forces are reduced to a minimum.

### Your benefit:

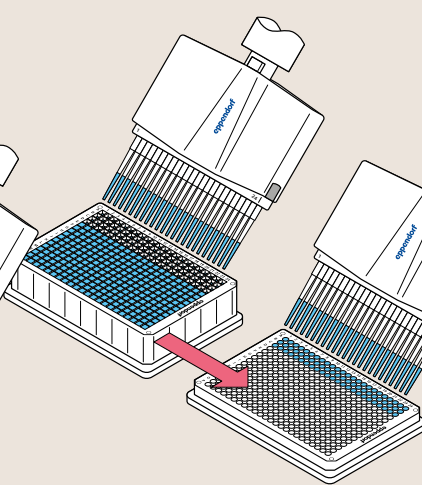
- > Outstanding and reliable tip fit and tightness
- > Reduced tip attachment and ejection forces

## Applications for 384 Well Plates

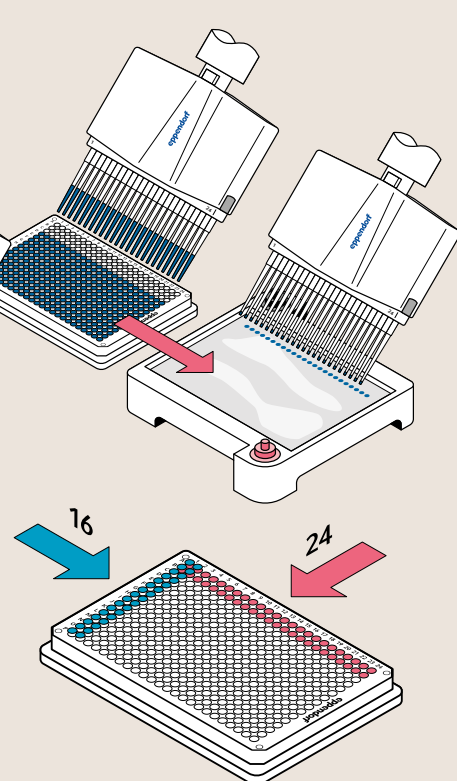
### 1 From reagent reservoir to 384-well plate



### 2 From 384 to 384-well plate

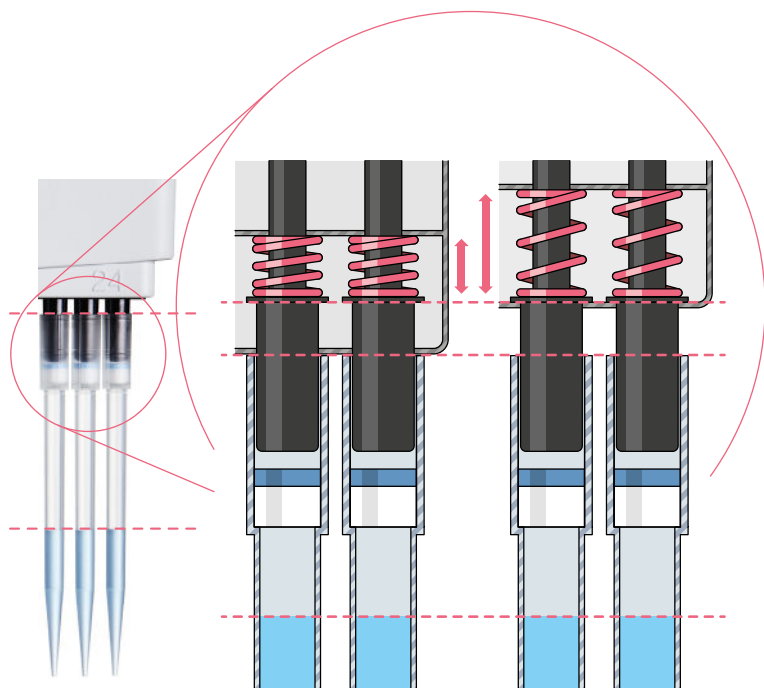


### 3 From 384-well plate to agarose gel



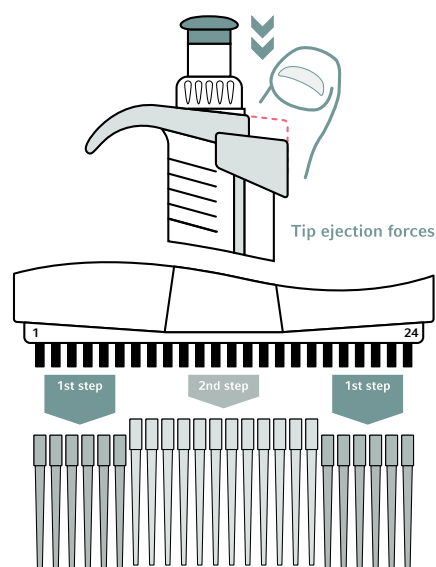
- > Biochemical assays
- > Cell based assays
- > Immunoassays
- > Storage of biological samples or chemical compounds

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



### 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)





### Superior ergonomics

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

- > **New 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 or 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

### Eppendorf Research® plus (multichannel, variable volume)

No. of channels	Volume	Color code	Order no.
16 channel	1–20 µL	□ pearl white	3122 000.078
	5–100 µL	■ light yellow	3122 000.094
24 channel	1–20 µL	□ pearl white	3122 000.086
	5–100 µL	■ light yellow	3122 000.108

### Eppendorf Xplorer® plus (multichannel, variable volume, incl. charger)

No. of channels	Volume	Color code	Order no.
16 channel	1–20 µL	□ pearl white	4861 000.778
	5–100 µL	■ light yellow	4861 000.792
24 channel	1–20 µL	□ pearl white	4861 000.779
	5–100 µL	■ light yellow	4861 000.793

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

Tips 384	Available as	Tip size	Color code	ep.T.I.P.S.® 384 Order no.	ep Dualfilter T.I.P.S.® 384 Order no.
<b>Set</b> (Eppendorf Quality™)	ep.T.I.P.S.® 384, 1,920 tips (5 trays x 384 tips), 1 reusable box	20 µL	□ pearl white	0030 076.028	–
		100 µL	■ light yellow	0030 076.036	–
<b>Reload</b> (PCR clean)	ep.T.I.P.S.® 384, 3,840 tips (10 trays x 384 tips)	20 µL	□ pearl white	0030 076.001	–
		100 µL	■ light yellow	0030 076.010	–
<b>Reload</b> (Eppendorf Quality™)	ep.T.I.P.S.® 384, 3,840 tips (10 trays x 384 tips)	20 µL	□ pearl white	0030 076.044	–
		100 µL	■ light yellow	0030 076.052	–
<b>Rack</b> (PCR clean, sterile)	ep Dualfilter T.I.P.S.® 384, 3,840 tips (10 racks x 384 tips)	20 µL	□ pearl white	–	0030 078.403
		100 µL	■ light yellow	–	0030 078.411

### 384-well plates

#### Eppendorf twin.tec® PCR plate 384

#### Eppendorf Deepwell Plate 384

#### Eppendorf Microplate 384/V

### Order no.

0030 128.508

0030 521.102

0030 621.301

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

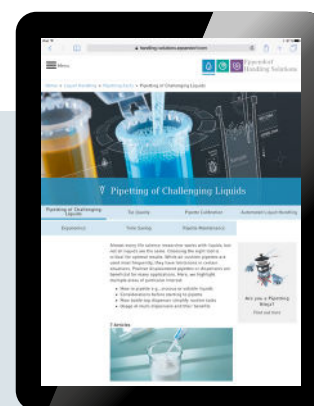
# Eppendorf Handling Solutions

## How to prevent muscle strain during work

Everyday work in a laboratory puts high demands on our bodies. Visit our Liquid Handling website »Pipetting facts/Ergonomics« for helpful tips and trick.



> Learn more about pipetting and have fun as well:  
[www.eppendorf.com/pipetting](http://www.eppendorf.com/pipetting)



Your local distributor: [www.eppendorf.com/contact](http://www.eppendorf.com/contact)

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