

Choosing the Best Pipette Tip for your Application

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Key Words

- **Extended length pipette tips** – Provide an extra level of contamination control by significantly extending the reach to the bottom of sample vessels without contact by the pipette.
- **Solvent safe carbon filtered tips** – Offer pipette and sample protection against aggressive aerosols and vapors from volatile organic solvents, all without compromising pipetting accuracy and precision.
- **Wide orifice tips** – Have a larger tip orifice designed to eliminate cell sheering and flow resistance.
- **Individually wrapped tips** – Used for applications requiring the strictest aseptic conditions.
- **Gel loading tips** – For loading acrylamide and agarose gels.
- **Sterilized filter tip** – Use is indispensable to prevent aerosol contamination when using PCR (polymerase chain reaction) and amplification methods, pipetting RNA/DNA solutions, infectious samples, etc.
- **Low retention pipette tips** – Specifically designed for applications requiring high accuracy and reproducibility.

Selecting the Right Tip Ensures the Success of the Assay

A standard tip is a multi-purpose tip for many laboratory applications with varying performance requirements, ranging from very high accuracy to reagent dispensing with greater tolerance. Sterile standard tips are available for applications demanding the highest level of purity from pathological microorganisms.

- **Specialty tips** – Specialty tips are designed for unique pipetting applications to save time, increase productivity, reduce contamination, increase accuracy and precision. Today, there is a pipetting system for virtually every

Standard Pipette Tips



ART Pipette Tip with Low Retention Technology



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application and requirement. The type of experiment you are performing and the physical properties of the liquid will determine which pipette tip you should use.

- **Low retention pipette tips** – Low retention pipette tips reduce sample retention by three to five times when compared to an ordinary pipette tip. This polymer technology makes the inner surface of the pipette tip more hydrophobic, resulting in a significant reduction in sample loss due to adhesion. The result is less liquid retention and improved liquid handling. Improve sample accuracy, increase reliability, save expensive reagents, deliver samples precisely and 100% inert.

- **Extended length pipette tips** – Extended length tips allow you to access the bottom of test tubes, reagent bottles, flasks and other vessels without touching the shaft of the pipette against the side of the tube. By preventing the pipette's shaft from touching the inside of the sample vessel, you add a layer of security in protecting samples and virtually eliminating the chance of carryover contamination. The longer tip length allows you to reach the bottom of long or narrow vessels that standard tips cannot reach.
- **Sterile filter tips** – A filter tip is beneficial when the assay is sensitive to cross-contamination or the sample can contaminate the lower part of the pipette. The filter prevents liquid from splashing accidentally inside the pipette and aerosols from penetrating into the pipette tip cone during pipetting. Perfect for low-volume applications in genetic studies, forensics, PCR and radioisotope sampling. Available with both self-sealing barrier and non-self-sealing filter, both designed to prevent cross-contamination. Barrier tips for pipette protection from over-aspiration.
- **Solvent safe carbon filtered tips** – Solvent safe carbon filtered pipette tips for acids, bases and aggressive organic solvents. Best solution for handling pipetting rigors of combinatorial chemistry. Strong acids, bases and aggressive organic solvents cause pipette failures and critical inaccuracies. Revolutionary folded activated carbon ART barrier provides sample protection against destructive carryover aerosols and vapors without compromising pipetting accuracy and precision.
- **Wide orifice tips** – Wide orifice tips are perfect for working with genomic DNA, fragile cell lines and other viscous materials. With a distal end orifice nearly 70% larger than that of a standard pipette tip, they provide the flexibility required for handling difficult-to-pipette samples. Designed for researchers working with macromolecules like genomic DNA and are especially critical when transferring fragile cellular samples such as macrophages, hybridomas and hepatocytes. Forcing these samples through the narrow tip orifice of standard tips subjects them to mechanical shearing forces that can cause trauma and fragmentation to the cells being transferred. Using wide-bore tips increases plating capability and cell viability.
- **Individually wrapped tips** – For extremely sensitive applications, single-wrapped tips are available. Individually wrapped sterile tips are ideal for applications requiring strict aseptic conditions.
- **Gel loading tips** – Loading acrylamide or agarose gels with standard pipette tips can be a time-consuming process. Round gel loading tips for agarose gels and specialized ultra round and ultra flat gel tips for your polyacrylamide gels.

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