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### **Labcyte Awarded 27<sup>th</sup> U. S. Patent Describing Acoustic Transfer for the Preparation of Protein Microarrays**

**Sunnyvale, CA, August 15, 2006** – Labcyte Inc. announces the issuance of U.S. Patent 7,090,333 describing the use of acoustic droplet ejection (ADE) for the preparation of microarrays of proteins and peptides. ADE uses sound to move fluids eliminating all physical contact with the liquid being transferred. This dispenses of the need for pin tools, pipettes and nozzles that are currently used to make protein arrays and are known to cause loss of protein due to adsorption on the device surfaces. ADE is also extremely precise with the coefficient of variation, the measure of precision, often less than a few percent even at the nanoliter and picoliter level. ADE can even transfer volumes as low as 25 femtoliters (0.000025 nanoliters).

“This broad patent expands the horizons for protein array preparation,” said Chief Executive Officer, Dr. Elaine J. Heron. “While the challenges of producing DNA arrays have largely been addressed, protein arrays present new problems that have not been adequately solved. ADE solves these problems by eliminating the possibility of adsorption on the transfer device, which leads to variation in the amount of protein as well as cross contamination.

“Our next step in the array area is to work with customers who wish to make highly reproducible protein or peptide arrays for their own use or for sale.

“The Labcyte ADE technology is used in our award-winning Echo™ Series 500 liquid handlers. These systems have quickly become the state-of-the-art in sample transfer in high-throughput screening laboratories in the pharmaceutical industry. The elimination of pipette tips and pin tools with their large incremental costs in operation was an early driving force for their adoption. But the improved results in precision and in assay results have had an even bigger impact upon users of the systems.

“ADE transfers compounds directly from source microplates to assay plates or to microscope slides for arrays by quickly moving a transducer from underneath one well



to the next. The focused sound energy generates a droplet from the source fluid for transfer at each well, and there is no need to clean the sound generator as it does not touch the source fluid. This method of transfer eliminates the loss of compounds by adsorption to pin tools and pipettes. Pharmaceutical researchers have proved that these losses lead to missing hits in screening. We feel that the elimination of pin tools and pipettes in protein array preparation will have a similar impact on results.”

Labcyte Inc., headquartered in Sunnyvale, California, provides plastic laboratory supplies, as well as the new Echo 555 liquid handler and the award-winning Echo 550 liquid handler, which are used in seven of the 10 top pharmaceutical companies as well as at leading academic and research institutions and contract research organizations. The Labcyte acoustic liquid handling technology has broad applications in the life science including dispensing equipment, assay systems, arraying, particle manufacturing, reagent multispotting for MALDI imaging applications, and living-cell transfer devices. Labcyte has 27 issued U.S. patents, 1 issued European patent and additional international filings. For more information, visit the company’s website, [www.labcyte.com](http://www.labcyte.com).

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