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FOR IMMEDIATE RELEASE

New Technology Improves Size Calling of Kilobase DNA Fragments

March 17, 2009, State College PA SoftGenetics announced a significant size calling technology addition to its GeneMarker® Software. The new sizing technology obtains accurate sizing calls with 1bp resolution to 1000 bp fragments far exceeding the traditional sizing methods of Local Southern and Cubic Spline, which are local and do not project beyond the last fragment.

“This new GeneMarker technology, explains Dr. Teresa Snyder-Leiby, offers new and exciting opportunities in many areas of molecular analysis including molecular diagnostics, forensics, ecology and plant analysis. For instance, molecular diagnostic techniques such as Multiplex ligation-dependent probe amplification (MLPA®) analysis, Amplified Fragment Length Polymorphism (AFLP), T-RFLP, VNTR, and BAC fingerprinting, as well as STR Human Identity can now increase chemistry efficiency while decreasing sample processing costs up to 75% by multiplexing samples while increasing accuracy by the addition of additional probes.”

For example: Dr. Leiby continued, “One prominent MLPA (for diagnosis of Duchenne muscular dystrophy (DMD) is separated into multiple kits covering 80 probes. Current sizing technologies require running the same sample multiple times using different PCR kits to cover all the probes of interest; followed by manual combination and normalization of data by the analyst. These steps are time consuming and error prone. MLPA will benefit from the ability to use large (up to 1200) base pair fragments – quadrupling the number of detectable peaks from 45 to 200 probes.”

“Human Identity applications will benefit from increasing the size range of fragments by increasing the probe density. Tripling the range of markers in the linear range of 100-1200 bps sets the stage for using 14 STR markers for individual genetic profiles in one dye. This would quadruple the throughput and greatly reduce the cost of profile generation. Profiles for four individuals could be generated with a 5-dye system, instead of requiring four dyes to produce one individual profile.”

“The same approach can be applied to AFLP, t-FRLP, BAC fingerprinting as well as other frequently used ecological assays.”

The company offers 30-day trials and no cost web-based training on GeneMarker as well as all of its genetic analysis software. Interested parties may request the software on the company website: www.softgenetics.com or via email: info@softgenetics.com.

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SoftGenetics, LLC specializes in the development of genetic analysis tools for both research and diagnostic applications. Hallmarks of SoftGenetics software tools are advanced technologies, providing exceptional accuracy, and sensitivity in an easy-to use Windows® user interface.

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