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## **NuGEN LAUNCHES THE OVATION™ RNA AMPLIFICATION SYSTEM FOR GENE EXPRESSION ANALYSIS**

*New product allows researchers to detect transcripts while saving biological samples*

**San Carlos, California – September 14, 2004** - NuGEN Technologies, Inc., a privately held company developing and commercializing the new standard for nucleic acid amplification and labeling, today announced the launch of its Ovation™ RNA Amplification System. The third product in the Ovation family, the Ovation RNA Amplification System enables life scientists to successfully analyze small samples for gene expression experiments, especially those based on real-time quantitative PCR (QPCR). Use of the system prior to QPCR analysis amplifies mRNA in potentially limited, biologically important samples such as small biopsies or flow sorted cells, giving researchers the ability to both analyze all gene transcripts of interest and to save additional material for future reference. The Ovation RNA Amplification System offers a standardized 3.5-hour protocol in a complete kit format that works equally well with large or small total RNA sample amounts, allowing experimentation from samples as small as 5ng of total RNA. Moreover, the end product of the protocol is cDNA, which can be directly measured by QPCR, thus eliminating the need for the traditional reverse transcriptase (RT) step.

“To study gene expression, NuGEN’s customers spend significant resources generating RNA for their experiments, often consuming precious biological samples,” said John Todd, Ph.D. Vice President of Marketing for NuGEN. “If those experiments fail to yield desirable results, then time, effort, money and sample are wasted. We developed the Ovation RNA Amplification System because life scientists told us that they often do not have enough RNA to study all gene transcripts of interest and that they would like to preserve samples for additional experimentation. The new Ovation RNA Amplification System achieves 10,000-fold amplification and creates sufficient cDNA product to perform up to 250 QPCR reactions. Importantly, the relative abundance of the gene transcripts is maintained during amplification.”

NuGEN’s Ovation family of products is powered by the company’s proprietary Ribo-SPIA™ technology, a patented linear amplification method that generates sensitive and high fidelity results. Pre-amplification proportionally increases the amount of mRNA species in a sample, which enhances the sensitivity of subsequent QPCR analyses. According to Dr. Todd, “low abundance gene transcripts are of high interest but unfortunately they are often difficult to measure with QPCR; however, when researchers pre-amplify RNA using the Ovation RNA Amplification System, such transcripts are easier to study.”

“NuGEN’s core Ribo-SPIA technology continues to yield new and useful tools for research-based gene expression applications,” said Jan D’Alvise, President and CEO of NuGEN. “Our Ovation Biotin and Ovation Aminoallyl reagent systems have proven themselves for preparing targets for Affymetrix GeneChip® arrays and spotted oligo or cDNA arrays respectively. Our new Ovation RNA Amplification System will enable researchers to examine gene expression using analysis tools other than microarrays. This newest addition to the Ovation product family leverages the power of Ribo-SPIA™ for quantitative PCR applications, enabling high quality results from very small and often difficult samples.”

### **About NuGEN Technologies Inc.**

NuGEN Technologies is focused on the development and commercialization of sensitive, rapid and cost-effective amplification and detection systems for genomic and proteomic research. The company’s technologies enable the comprehensive analysis and discovery of biological mechanisms, cellular responses, and disease pathologies. NuGEN’s proprietary SPIA™ and Ribo-SPIA™ amplification and labeling system for DNA and RNA based applications, form the foundation for a wide range of methods and products used by life scientists. The Ovation™ amplification and labeling system, the company’s first commercially available product line, has applied these technologies to enhancing the sensitivity, convenience, and accuracy of gene expression analysis. Based in San Carlos, CA, NuGEN has a world-class investor syndicate, several collaborations with leading academic and commercial organizations and a management team with significant experience developing and marketing products for research or clinical diagnostic applications.

NuGEN, Ovation, SPIA and Ribo-SPIA are trademarks or service marks of NuGEN Technologies, Inc. All other marks are the property of their respective owners.

*This press release contains forward-looking statements that are subject to risks and uncertainties, including continued growth in demand by researchers for total RNA analysis, continued use of oligo and cDNA microarrays, acceptance by researchers of the Company's technologies and products, and competition from existing and newly developed products. Accordingly, actual results may differ materially from those anticipated. These forward-looking statements represent the Company's current expectations as of the date of this release. The Company disclaims, however, any intent or obligation to update these forward-looking statements.*

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