

NARG 2006 Study: Priming Strategies for Real-Time RT-PCR

Dear Colleagues,

The Association for Biomolecular Resource Facilities (ABRF) Nucleic Acid Research Group (NARG) invites you to participate in their latest study, " Priming Strategies for Real-Time RT-PCR ". The research project for this year is designed with the following goals:

- To provide members of the real-time PCR community with an opportunity to appraise their technique
- To contrast different cDNA priming strategies utilizing the participants' assay reagents and instruments.

The study is open to those who use either Taqman® probes or SYBR Green I detection chemistries. Your skills will be tested, anonymously, and the combined dataset describing the consistency of the RT step as well as of the individual participants will contribute to everyone's shared knowledge base.

- Each investigator will use five alternative priming strategies -- no primer, random hexamers, oligo-dT, assay-specific primer and random hexamers:oligo-dT (1:1) - - to prepare cDNA, using the kits or homemade mixes and protocols which they routinely use
- Two genes will be tested with a provided reference RNA. The genes will differ in abundance which will be reflected in a ΔC_t of 5 to 10 between the two transcripts.
- The resultant cDNA will be amplified by standard reagents and protocols used in the lab utilizing primers or primers and probe provided by the NARG.
- Each lab will submit results to the NARG committee for further analysis.

The NARG will supply labs with sufficient materials to perform Taqman® probe-based and/or SYBR Green I assays. Instructions on preparing the supplied reagents will be available as well as examples of protocols to set up the experiments. You will also be supplied with instructions for submission of the data by email and a WEB-based questionnaire will query specific information about the reagents, protocols and real-time platforms used.

The results of the study will be presented at the ABRF 2006 meeting in Long Beach CA and posted on the ABRF WEB site. You will be able to compare your results to those of your colleagues, again in anonymity.

To learn more and to participate in this study, please go to <http://www.abrf.org/index.cfm/group.show/NucleicAcids.32.htm> and look for: NARG 2006 Study: Priming Strategies for Real-Time RT-PCR

For your data to be included in the NARG study, they must be received by December 15, 2005.

Contact Deborah Grove (dsg4@psu.edu or 814 865 3332) to request study materials or with any questions.

The ABRF Nucleic Acid Research Group

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Pamela Scott Adams -- Trudeau Institute
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