Association of Biomolecular Resource Facilities

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Dear Colleagues,

Thank you for participating in the ABRF 2006 Proteomics Standards Research Group (sPRG) study. Please find enclosed the sample (sPRG2006 Protein Mixture) that you requested. The results of your analyses should be transmitted by completing the online "sPRG 2006 Study Questionnaire". All results are submitted anonymously, and are identified only by a **5-digit identification number** that you select.

The primary goal of this study is to give each laboratory an opportunity to evaluate its capabilities and approaches with regard to:

- Separations technologies employed in proteomics analyses
- Methodologies used to identify proteins
- Bioinformatics tools used to consolidate protein identifications

Sample Information: sPRG2006 is a single vial containing approximately 50 human proteins present in equimolar amounts. As with any real life sample, for some of the proteins there are isoforms and unintended low-level protein components. Isoforms should be counted as distinct proteins only if there are discrete peptides that justify their inclusion. The total amount of protein in the vial is approximately 2.0 µg. The individual proteins are present at 5 picomoles per protein as determined by amino acid analysis. The molecular weight range of the constituent proteins falls between approximately 5 and 200 kDa. The proteins were mixed as aqueous solutions and then dried.

Analysis: The sPRG requests that participants use the proteomics technologies of their choice to identify the constituent proteins in this mixture. Proteins are present in amounts suitable for the use of 1D or 2D LC-MS/MS, 1D or 2D PAGE or other methodologies. We recommend that study participants use the UniProt Knowledgebase as their database of reference for protein identifications. A current copy of the UniProt Knowledgebase may be downloaded from ExPASy website:
        ftp://ftp.expasy.org/databases/uniprot/current_release/knowledgebase/
or the European Bioinformatics Institute:
        ftp://ftp.ebi.ac.uk/pub/databases/uniprot/current_release/knowledgebase/

Returning Data: As with past ABRF Research Group studies, all result submissions will be coded to ensure anonymity of the participating laboratories. A summary of the results of this study will be presented at the ABRF2006 meeting and will be subsequently posted on the ABRF website.

Please return your results no later than Friday, December 2, 2005 so that the sPRG will have ample time to complete the data analysis prior to the ABRF 2006 meeting, February 11-14 in Long Beach, CA. The results should be transmitted by completing the

online sPRG 2006 Study Questionnaire, which will be available on Monday, October 24, 2005 at http://www.surveymonkey.com/s.asp?u=154231423886 Please note that if your computer accepts cookies, you can return to the form and make changes later as long as you enter the data from the same computer. Otherwise you can fill out the entire survey again using the same identification code so that we can recognize the duplication and ignore your previous entry. Most importantly, in order for you to obtain feedback about your analyses you need to choose a unique 5-digit identification number that only you will know, that should be entered into the online data analysis form. The data analysis results will be identified by the number that you pick. We would like to emphasize that information about unsuccessful analyses is just as vital to a good study as successful analyses. All results are compiled in a completely anonymous manner, so there is absolutely no need to feel shy about submitting negative results.

Please fill out the online data analysis form regardless of your results. This study is not a contest!

If necessary, we will post updates about the study at the ABRF sPRG web site: http://www.abrf.org/index.cfm/group.show/ProteomicsStandardsResearchGroup.47.htm

If you have any questions about filling out the online data analysis form, please e-mail the sPRG Study 2006 anonymizer, Lora Goodridge, at lg161@columbia.edu

We thank you for your support of the ABRF and we look forward to your participation in this study!

The ABRF Proteomics Standards Research Group

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