



Association of Biomolecular Resource Facilities

Proteomics Standards Research Group (sPRG):

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Re: sPRG2010 Study Sample Request

October 8, 2009

Dear Fellow ABRF Member:

Phosphorylation of proteins is among the most important of the posttranslational modifications, playing a critical role in regulation of many cellular processes. Proteomics laboratories are often called upon to determine sites of phosphorylation. Although there are numerous strategies available to carry out phosphopeptide analysis; many still find these analyses a formidable challenge. Successful analysis requires that techniques in the laboratory be optimized through use of phosphorylated peptide standards that resemble the samples to be analyzed as closely as possible. A clear need exists for a reasonably complex phosphopeptide mixture to serve as a phosphopeptide reference standard.

The Proteomics Standards Research Group (sPRG) of the Association of Biomolecular Resource Facilities (ABRF) would like to invite you to participate in a collaborative study that focuses on the ability of core facilities to determine the identities and phosphorylation sites of multiple phosphopeptides that are present in a single sample.

The primary goals of this study are to provide each participating laboratory with an opportunity to evaluate its capabilities and approaches with regard to detecting phosphopeptides and identifying sites of phosphorylation. In the analysis of the study sample, participants may find it valuable to use one or more steps of phosphopeptide enrichment.

Most importantly, this study represents the first step in developing a phosphopeptide standard that more closely resembles a "real life" sample. Laboratories requesting samples will receive a mixture containing a tryptic digest of up to 6 proteins, all of which will contain one or more phosphorylated residues. The peptides will be present in sufficient quantities (10 pmoles each) to permit utilization of a variety of strategies. Participants will be asked to complete an on-line survey and submit data supporting their identification of phosphorylation sites.

This year's study is again open to both ABRF members and non-members. However, the total number of samples is limited, and priority will be given to ABRF members. Non-members are encouraged to join the ABRF (for more information, go to <http://www.abrf.org>). Vendors/sponsors are welcome to participate. Each laboratory interested in participating should only request one sample per lab.

The sPRG anticipates distributing the samples on October 19, 2009 and requests the resulting data to be returned by December 11, 2009 so that sufficient time will be available to tabulate the results and present them at the 2010 ABRF Meeting (March 20-23; Sacramento, California).

Requests for samples must be submitted by e-mail to SPRG2010@gmail.com **prior to close of business on Friday, October 16**. Please include the words "Sample request" in the subject line of the message and provide a contact name, affiliation, and complete mailing address in the body of the message. To reiterate, because of limited availability and the significant effort involved in preparation of the samples by the sPRG, the Research Group asks that samples only be requested if there is a reasonable probability that you will be able to return data by the deadline. As in the past, result submissions will be coded to insure anonymity of the participating laboratories. A summary of the results of this study will be presented orally and as a poster at the ABRF 2010 meeting; the results will be subsequently posted on the ABRF website and will ultimately be published.

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We thank you for your support of the ABRF. We look forward to your participation in this study and your help in producing a phosphopeptide standard.

Sincerely,

The ABRF Proteomics Standards Research Group

James G. Farmer (Chair) - University of Virginia
Christopher M. Colangelo - Yale University
Alexander R. Ivanov - Harvard School of Public Health
Christopher R. Kinsinger - National Cancer Institute
Jeffrey A Kowalak (EB Liaison) – National Institute of Mental Health
Karl Mechtler - Research Institute of Molecular Pathology
Brett S. Phinney - UC Davis Genome Center
Manfred R. Raida - Experimental Therapeutic Center
Susan T. Weintraub - University of Texas Health Science Center at San Antonio