



Association of Biomolecular Resource Facilities

Proteomics Standards Research Group (sPRG)

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Re: sPRG2011 Study Sample Announcement

May 25, 2011

Dear Colleagues:

The Proteomics Standards Group (sPRG) is pleased to announce availability of our next study sample—a comprehensive standard for analysis of post-translational modifications. This is the second part of a multi-year proteomics project that builds on the phosphorylation standard study completed by the sPRG last year [1-4]. The current study focuses on development of a standard that can be used for both assessment of capabilities for detection and identification of an array of post-translational modifications (PTMs) in a complex proteomic sample and development of new approaches for characterization of post-translationally modified proteins.

While the previous sPRG study sample contained only O-phosphorylated peptides and their unmodified counterparts, this sample includes not only a larger set of singly and multiply phosphorylated peptides, but also sulfated, methylated (singly, di- and tri-), acetylated and nitrated tryptic peptides, with a total of 71 modified synthetic peptides included.

Laboratories requesting samples will receive two tubes: one containing only a lyophilized mixture of the synthetic modified peptides, and the second containing the same mixture combined with a tryptic digest of the six proteins from which the synthetic peptides were derived. The peptides are present in sufficient quantities (approximately 10 pmole of each) to permit multiple analyses and utilization of a variety of strategies. A list of the sequences of the modified synthetic peptides and a reporting template will be provided with the samples. Participants will be asked to submit detailed identification results, upload acquired raw LC-MS/MS data files supporting their identifications, and complete an on-line survey.

As in the past, the study is 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 strongly 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 for the group. Please consult and ensure that you can comply with the [guidelines for data use](#) prior to requesting a sample.

The sPRG anticipates distributing the samples in **June – July 2011** and requests the resulting data to be returned by **September 1, 2011** so that sufficient time will be available to tabulate the results and present them at the 2012 ABRF Meeting (March 17 – 20; Orlando, Florida).

Requests for samples must be submitted by e-mail to **sPRG2011Standard@gmail.com** **before midnight Saturday, June 25, 2011**. Please include the words “**sPRG 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, **we ask 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 2012 meeting; the results will be subsequently posted on the ABRF website and will ultimately be published.

We thank you for your support of the ABRF. We look forward to your participation in this study and your help in producing this comprehensive standard for analysis of post-translational modifications.

Sincerely,

The ABRF Proteomics Standards Research Group:

Alexander R. Ivanov (Chair), Harvard School of Public Health
Christopher Colangelo, Yale University
Craig P. Dufresne, Thermo Fisher Scientific
Jim G. Farmer, University of Virginia
Christopher R. Kinsinger, National Cancer Institute
Kathryn S Lilley, University of Cambridge
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David B. Friedman (ABRF Executive Board Liaison), Vanderbilt University

Previous sPRG Posters and Presentations regarding this standard:

1. [sPRG ABRF2011 oral presentation](#)
2. [sPRG ABRF2010 oral presentation](#)
3. [sPRG ABRF2010 poster](#)
4. [sPRG ABRF2009 poster](#)