

## **SISCAPA Assay / Training Kit**

A lack of quantitative assays for most human proteins is a barrier to verification of the large number of protein biomarker candidates being produced in “-omics” experiments and also impedes basic research studies where relationships between protein abundance and biology are sought.

Stable Isotope Standards and Capture by Anti-Peptide Antibodies (SISCAPA) meets this need by combining peptide immunoaffinity enrichment with quantitative mass spectrometry (Anderson NL, Anderson NG, Haines LR, Hardie DB, Olafson RW, Pearson TW. *J Proteome Res* 2004;3:235-44). To implement a SISCAPA assay, there is value to having a known standard that can be used both as a training tool for learning this technique and as a reference quality control (QC) assay for regular monitoring of system performance.

In collaboration with the Fred Hutchinson Cancer Research Center, Bio-Rad Laboratories has developed a SISCAPA training / QC kit. The kit enables researchers who are new to the SISCAPA technique to implement an assay in their lab and gain experience with the process. Based on an assay for a murine osteopontin (OPN) peptide in a human plasma matrix, the kit provides researchers with the reagents and information needed for carrying out an assay, including a detailed standard operating procedure, antibody, heavy and light peptides, magnetic beads, and other necessary buffers and reagents. Results will be comparable to expected values, making the kit a valuable resource for quality control of the SISCAPA process.

For more details about the development of this assay, see [Whiteaker JR, Zhao L, Anderson L, Paulovich AG. \*Mol Cell Proteomics\* 2010;9:184-96.](#)

**If you would like to evaluate a kit, free of charge (while supplies last), please contact Tom Slyker at [Tom\\_Slyker@Bio-Rad.com](mailto:Tom_Slyker@Bio-Rad.com) or 510-741-6747.**