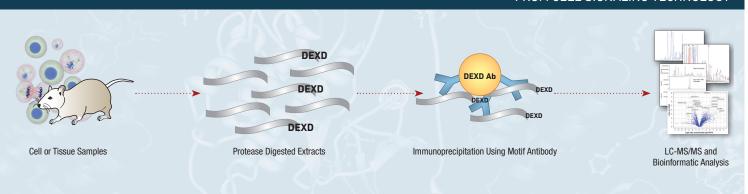
## Caspase Cleavage Substrate Proteomics

#### FROM CELL SIGNALING TECHNOLOGY



Both the intrinsic and extrinsic apoptotic pathways involve a cascade of caspases, and the human proteome contains thousands of known or putative caspase cleavage sites. The majority of caspase substrates are cleaved at an aspartic acid residue, generating fragments containing a carboxy-terminal aspartate with a general DEXD motif.

PTMScan® technology for caspase cleavage substrate proteomics uses an antibody to the DEXD motif to enrich caspase cleaved substrate peptides from trypsin digested samples prior to LC-MS/MS analysis.

### **Feature and Benefits**

- The proprietary caspase cleaved substrate motif antibody developed by CST is a unique and sensitive tool for quantitative profiling of hundreds to thousands of caspase cleaved substrates.
- PTMScan technology can be applied to many biological systems and species to encompass diverse research interests.
- **Experienced CST scientists provide technical support throughout** the PTMScan workflow to facilitate research progress.

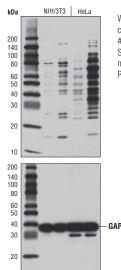
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Caspase Cleaved Substrate Motif: The motif logo was generated from a PTMScan® LC-MS/MS experiment using 1044 nonredundant tryptic peptides with carboxy-terminal aspartates derived from HeLa cells treated with Staurosporine #9953 (1 µM, 3 hr) to induce apoptosis. Peptides were immunoprecipitated with the PTMScan® Cleaved Caspase Substrate Motif [DE(T/S/A)D] Kit #12810. The logo represents the relative frequency of amino acids in each position leading up to the carboxy-terminal aspartate.

### **Products and Services**

- PTMScan® Cleaved Caspase Substrate Motif [DE(T/S/A)D] Kit #12810
- **::** Caspase Cleavage Substrate Proteomics Service

Staurosporine



Western blot analysis of NIH/3T3 and HeLa cells, untreated (-) or treated with Staurosporine #9953 (1 µM, 3 hr; +), using Cleaved Caspase Substrate Motif [DE(T/S/A)D] MultiMab™ Rabbit mAb mix (upper) or GAPDH (D16H11) XP® Rabbit mAb #5174 as a loading control (lower).

For additional information on caspase cleaved proteomics visit: www.cellsignal.com/cl-caspase

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