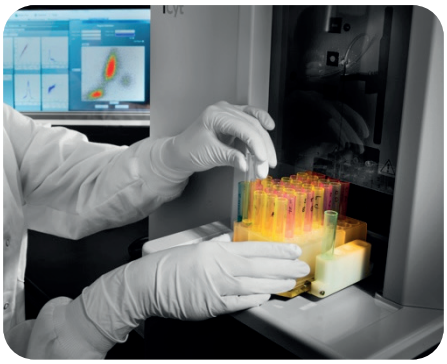
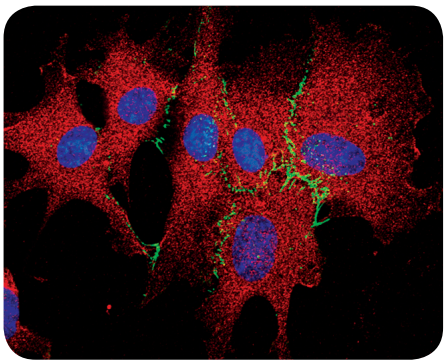
BioNordika
YOUR SCIENTIFIC SUPPLIER

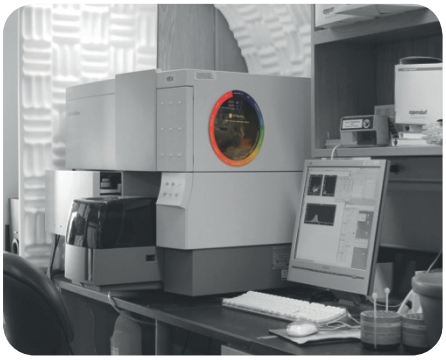
Cell Signaling TECHNOLOGY®

seminar

Western Blot, Immunofluorescence and Flow Cytometry







PROGRAM:

12.00 - 12.15: Registration and welcome

12.15 - 13.00: Solutions for successful Western Blotting

13.00 - 13.15: Coffee, fruits and cake

13.15 - 14.00: Monitoring cellular events using fluorescent imaging

14.00 - 14.15: Coffee and waffles

14.15 - 15.00 Intracellular Flow Cytometry: New possibilities for the study of cellular processes

For abstracts see reverse side.

Date: May 30, 2018
Time: 12.00 - 15.00

Venue: Linken
Møterom: Hollendaren
Sykehusveien 23

REGISTRATION:

Please e-mail your contact details to: malfrid@bionordika.no
Registration no later than May 24th.
NB! Please note that it is a limited number of places.

The seminar is free of charge. The coffee breaks are included.

ABSTRACTS:

SOLUTIONS FOR SUCCESSFUL WESTERN BLOTTING

Western Blot is a well established and widely used technique for the detection and analysis of proteins, still used routinely in most labs today. This versatile technique allows many applications- to analyze if a protein is present in your sample, changes in the expression of a given target, comparison of expression and changes in modification status.
During this seminar, we will discuss the different steps of a typical Western Blot experiment, showing what influence changes in the protocol can have on your result. We'll give tips and tricks on how to get the optimum out of your Western Blot experiments.

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MONITORING CELLULAR EVENTS USING FLUORESCENT IMAGING

Immunofluorescence (IF) combines the use of antibodies with fluorescence imaging techniques to visualize target proteins and other biomolecules within fixed cell or tissue samples. This process can reveal the localization, relative expression, and even activation states of target proteins. When performing IF experiments, proteins of interest can be detected using either primary antibodies covalently conjugated to fluorophores (direct detection) or a two-step approach with unlabeled primary antibody followed by fluorophore-conjugated secondary antibody (indirect detection). At Cell Signaling Technology (CST), our goal is to provide highly specific antibodies that yield strong, specific signal with minimal background. Our scientists screen a large number of antibodies and recommend only those best suited for the application. In this seminar, we will discuss the critical steps for a successful immunofluorescence experiment, and our validation efforts on extensive protocol optimization and antibody titration to determine the best working conditions for each antibody, providing supporting data to explain our recommendations. We will also introduce tyramide signal amplification, a system that allows fluorescent detection of multiple protein markers in FFPE tissues (referred to as multiplex immunohistochemistry).

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INTRACELLULAR FLOW CYTOMETRY – NEW POSSIBILITIES TO STUDY CELLULAR PROCESSES

Flow cytometry is a powerful tool that has been used originally to study extracellular markers. Using this technology to study intracellular processes allows for the analysis of complex biological processes in defined cell subsets in an easy, quick and quantitative assay.
This seminar wants to give an overview of the use of flow cytometry to study intracellular processes, highlighting several strategies used in literature and going over the most important steps leading to a successful intracellular flow cytometry experiment.

Specifically, the topics are:

- Basic concepts of intracellular flow cytometry – advantages over other applications
- Innovative use of intracellular flow cytometry to analyze cell signaling processes, stem cell differentiation and epigenetic mechanisms
- The importance of antibody validation
- Considerations for intracellular flow cytometry – which steps in the protocol are important? How to optimize your intracellular flow cytometry protocol?

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