

A large graphic in the background consisting of a white circle with a blue border, divided into four quadrants by a blue cross. In the center of the circle is a smaller blue circle with a light green center.

HUNTING FOR CANDIDATE PROTEINS

Product line 2DE

for modern gel based top down proteomics



Proteome analysis using intact protein

The demand for systems in research and routine analysis of intact proteins has been increasing. Therefore, we focus on the development of solutions providing easier handling, higher reproducibility and faster results.

2D electrophoresis (2DE) is the most powerful way to separate complex protein samples, protein isoforms and post translational modified proteins (PTM). In combination with stain-free fluorescent protein labels even low abundant proteins and quantitative changes in protein expression can be visualized.

Multiplexing technologies for differential gel electrophoresis (DIGE) such as Refraction-2D™ introduced in 2008 and the corresponding 4-color Refraction-2D™ QPLEX technology introduced in 2013 provide state of the art top down approaches used for proteome studies, identifications of novel protein biomarkers, or in combination with 2D blots for host cell protein (HCP) analysis.

Yours faithfully
NH DyeAGNOSTICS GmbH

Product line 2DE

Application overview

- Proteome studies
- Differential protein expression
- Post translational protein modifications
- Biomarker identification
- 2D Western blotting
- Host cell protein analysis



DETECT PROTEIN ISOFORMS



**3.55 FOLD
DETECT PROTEIN UPREGULATION**



**0.15 FOLD
DETECT PROTEIN DOWNREGULATION**



**OXIDATION
DETECT PROTEIN MODIFICATION**



**REDUCTION
DETECT PROTEIN MODIFICATION**

Stain-free, high sensitivity protein analysis

Specifically designed G-Dyes, S-Dyes and T-Rex allow for sophisticated differential protein analysis of 2D gels and corresponding blots.

Our fluorescent labels provide excellent performance in terms of sensitivity, photostability and the kits come with all necessary components: dye solvent, buffers, and to ensure minimal loss of dyes - low retention pipette tips and tubes.



Refraction-2D™ QPLEX 4 color DIGE

Refraction-2D™ QPLEX allows to compare up to 4 different samples within the same 2D gel (and 2D blot) analysis.

Combine a set of four powerful fluorescence G-Dyes with superior photostability and easy, accurate spot picking.



Refraction-2D™ 3 color DIGE

Run and compare up to 3 different samples within the same 2D gel (and 2D blot) analysis.

Refraction-2D™ combines most powerful fluorescence properties of a set of three G-Dyes with superior photostability and easy, accurate spot picking.



Saturn-2D™ Analysis of scarce samples

Kit for the differential protein analysis of scarce samples using 2D gel based top down proteomics.

Samples with as little as 5 µg protein can be analyzed. Saturn-2D™ allows for a protein detection of up to 0.003 ng.



Saturn-2D™ REDOX Oxidative post translational protein modification

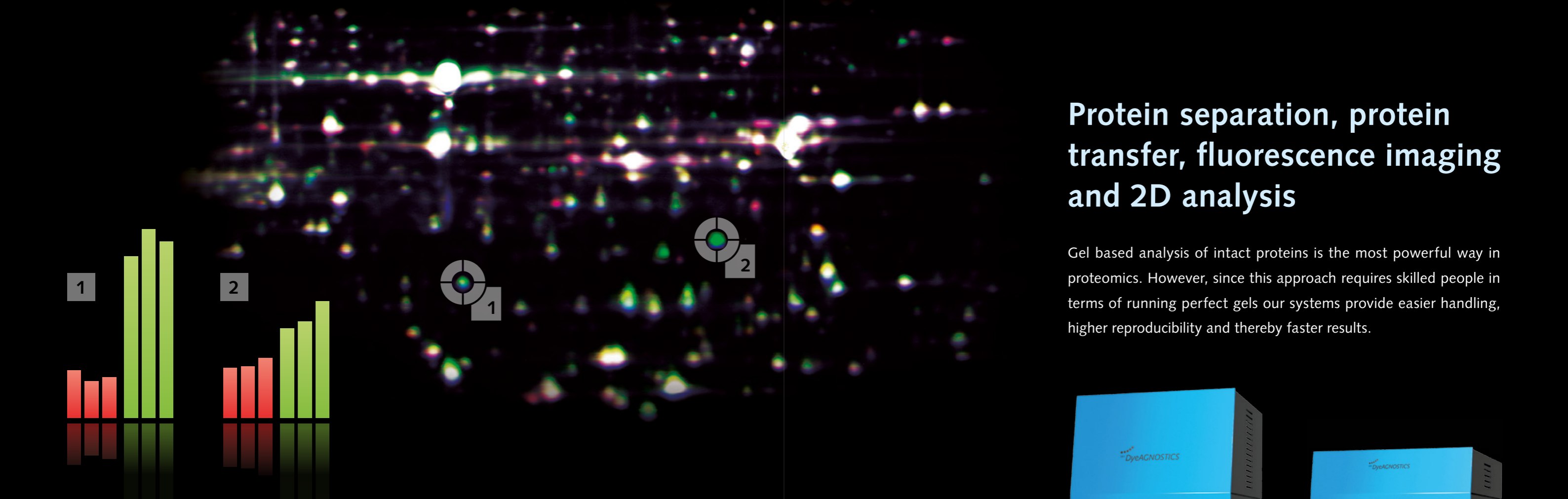
Kit for the visualization of complex oxidative responses of the proteome using differential 2D gels (and blots). Samples with as little as 5 µg sample protein can be analyzed.



T-Rex stain-free protein visualization

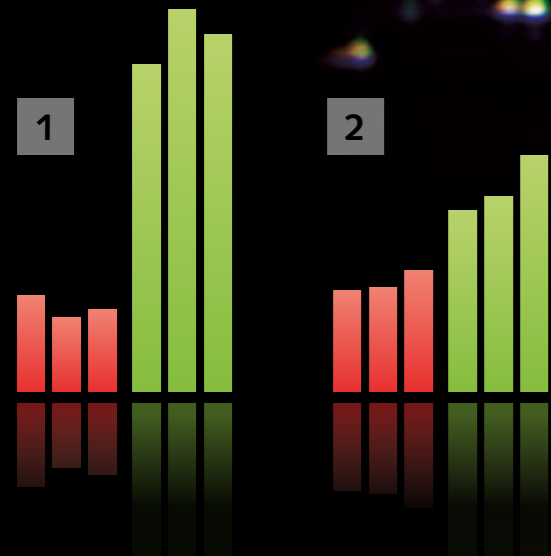
Red fluorescent protein label for gels and corresponding blots with excellent signal to noise ratio. Time saving and much better reproducibility compared to fluorescent stains.

Sensitivity up to 10 fold better than silver, up to 100 fold higher than Coomassie.



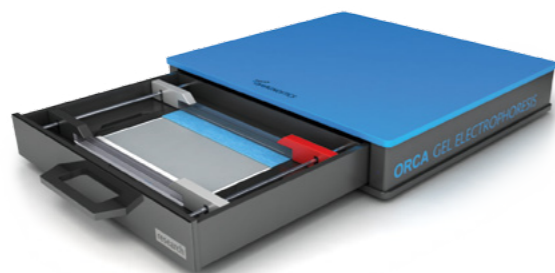
Protein separation, protein transfer, fluorescence imaging and 2D analysis

Gel based analysis of intact proteins is the most powerful way in proteomics. However, since this approach requires skilled people in terms of running perfect gels our systems provide easier handling, higher reproducibility and thereby faster results.



Protein separation VELUM Gold Precast Gels

VELUM GOLD Precast Gels combine perfect resolution and reproducibility with very easy handling. Ideally suited for all fluorescence applications. Choose either gels for 18/ 24 cm IEF strips or 2 x 7/ 11 cm IEF strips.



Protein separation ORCA Gel Electrophoresis

This modular horizontal gel electrophoresis system offers best protein separation in terms of resolution and reproducibility. Direct cooling of thin film-backed precast gels. Unique array of electrodes. Up to 4 ORCA units can be combined to run simultaneously.



Protein transfer BEO Dry Blotter

Transfer proteins from VELUM gels onto blotting membranes in HD quality. The BEO Dry Blotter takes up to 3 blots from large gels (large 2D gels) or 18 mini blots at the same time. Easy to use, no buffers or current required.



Image analysis Delta2D Software

State of the art 2D analysis software. Analysis of 2D gel images as easy as point and click even for larger projects. Capable of quantitative DIGE approaches using 4 color sample multiplexing (Refraction-2D™ QPLEX). Offers advanced statistical methods and impressive visualization of results - ready for publication.



Image acquisition ORCA Fluorescence Imager

Sensitive and rapid analysis of large size (25 x 20 cm) RGB multiplex-fluorescence gels and blots. Compared to laser-based systems the ORCA Fluorescence Imager acquires images up to 30 x faster. Very robust system for daily use, very easy handling.



Image acquisition OctoPlus QPLEX

Sensitive and rapid analysis of large size (25 x 20) RGB + NIR multiplex-fluorescence gels and blots. Compared to laser-based systems the OctoPlus QPLEX acquires images up to 30 x faster. Very robust system for daily use with easy handling.

Product information

For detailed product information please visit our website at www.dyeagnostics.com or send us an email at info@dyeagnostics.com.

Prod. No.	Description
PR09	Refraction-2D™ labeling kit
PR62	Refraction-2D™ QPLEX labeling kit
PR32	Saturn-2D™ labeling kit
PR412	Saturn-2D™ REDOX labeling kit
PR06	T-REX labeling kit
PR201	Orca Gel Electrophoresis unit
PR237	VELUM GOLD precast gel for 18/24 cm IEF strips
PR241	VELUM GOLD precast gel for 2x 7/11 cm IEF strips
PR87	BEO Dry Blotter
PR54	Delta2D analysis software
PR213	ORCA Fluorescence Imager RGB large area power-fluorescence
PR435	Octoplus QPLEX RGB + NIR large area power-fluorescence + chemilumescence imaging

Contact

Information, quotes, orders

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