

Improve your peaks.

Thermo Scientific Pierce Detergent Removal Spin Columns are an effective and specific method for the removal of detergents from protein and peptide samples for downstream analysis, including mass spectrometry (MS). This MS-grade resin removes a large variety of detergents over a broad range of concentrations from your samples quickly and efficiently, improving data quality.

- Fast protocol
- Improved MS peptide coverage
- > 95% detergent removal from peptide samples
- > 90% peptide recovery

For more information or to request a sample, visit www.thermoscientific.com/pierce and search on detergent removal.

Detergent and Removable Concentration (%)	Detergent Removal (%)	BSA Recovery (%)
SDS (2.5)	99	95
Sodium deoxycholate (5)	99	100
CHAPS (3)	99	90
Octyl glucoside (5)	99	90
Octyl thioglucoside (5)	99	95
Lauryl maltoside (1)	98	99
Triton® X-100 (2)	99	87
Triton X-114 (2)	95	100
NP-40 (1)	95	91
Brij®-35 (1)	99	97
Tween®-20 (0.25)	99	87

Remove detergents with high protein recovery. Samples (0.1 ml containing 100 µg BSA and detergent) were processed through 0.5 ml of Pierce Detergent Removal Resin and the percent detergent removed was determined. See website for data on additional detergents and peptides.



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Investing involves risk, including the risk of loss.

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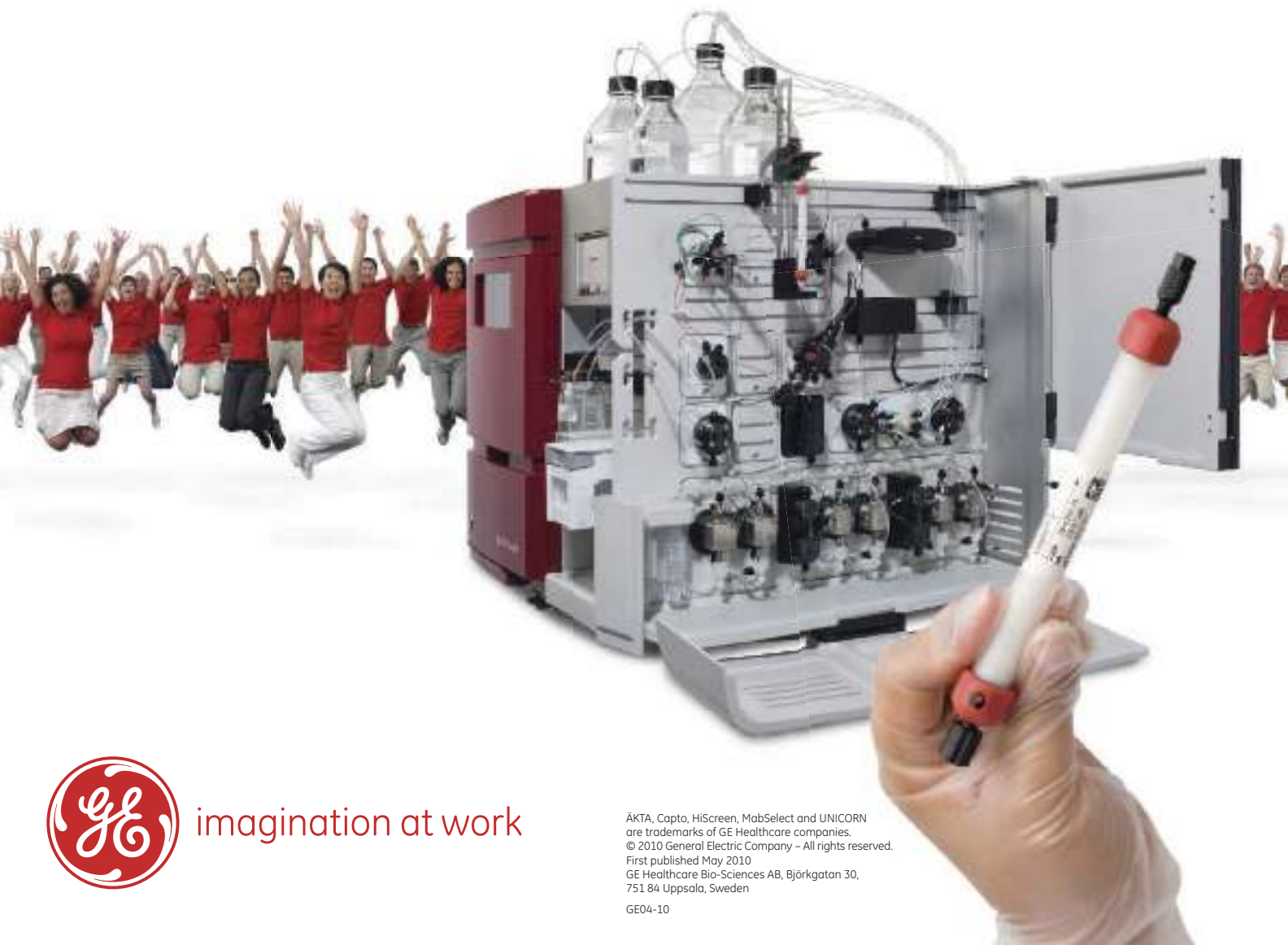
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ÄKTA avant is designed to achieve rapid and reliable scale-up with HiScreen™ columns prepacked with MabSelect™ and Capto™ media. Column tracking is secured by UniTag. All this is backed by the service, support, and investment in the future that GE brings to Life Sciences.

Want to know more? Why not talk with us today. www.gelifesciences.com/aktaavant



imagination at work

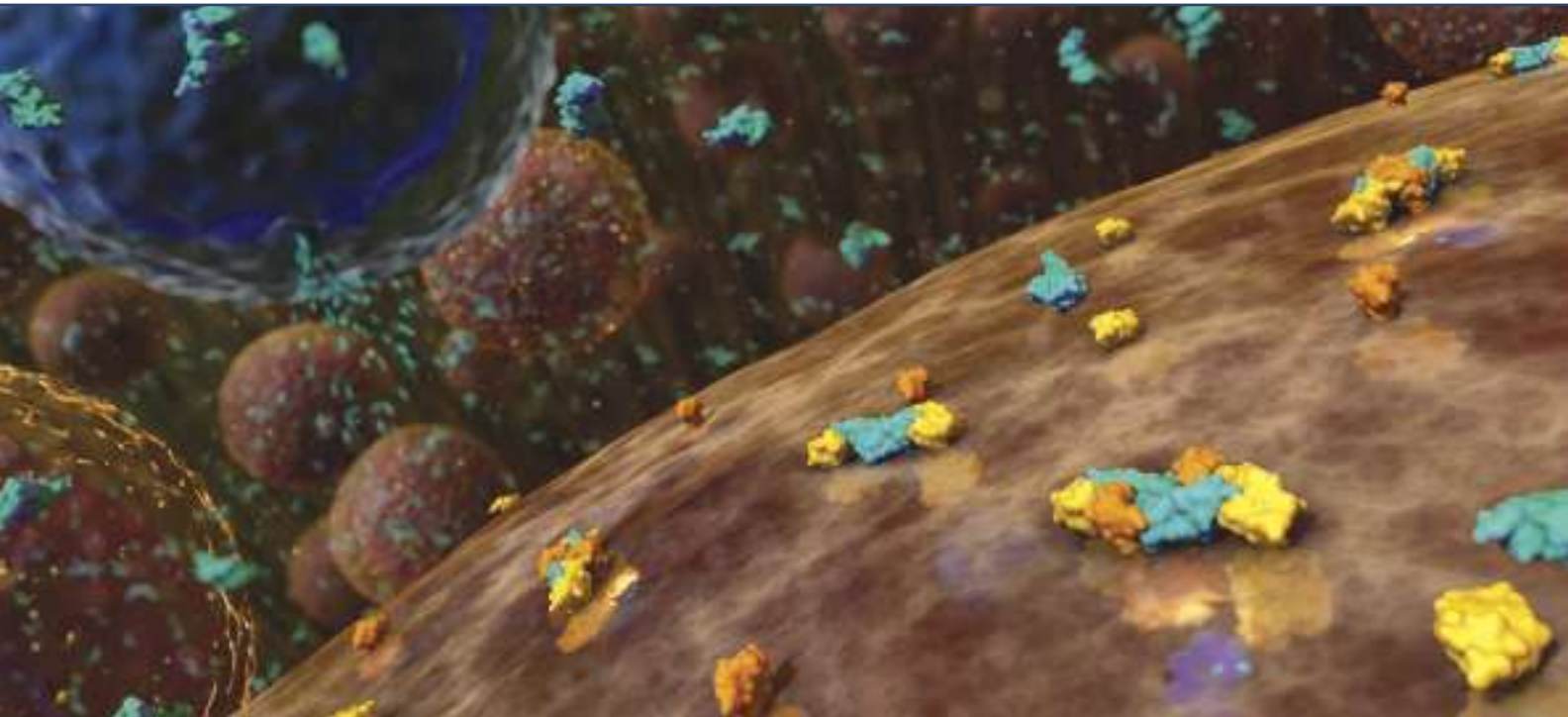
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- **Animal and veterinary testing**
- **Genetic identity and forensics**
- **Life science research**



Sample & Assay Technologies



New Recombinant Human Transforming Growth Factor

hTGF- β 1, - β 2, - β 3

...from Cell Signaling Technology®

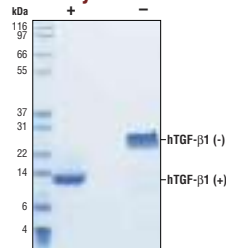
The world's highest quality antibody provider has now extended its expertise to Cytokine production.

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- ∴ Products are free of tags or additional amino acids, and many are produced in mammalian cells to maximize natural conformation and glycosylation.
- ∴ Multi-milligram quantities always available.

Human Transforming Growth Factor β 1 (hTGF- β 1) #8915

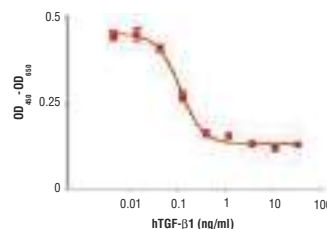
Validation includes:

Purity



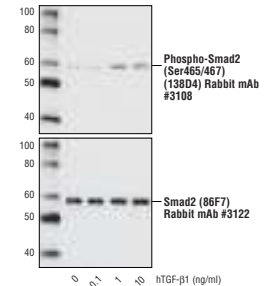
6 μ g reduced (+) and non-reduced (-) hTGF- β 1; hTGF- β 1 does not contain tags or additional amino acids.

Bioactivity



The inhibition of IL-4 induced proliferation in HT-2 cells treated for 48 hours with increasing concentrations of hTGF- β 1 was assessed.

Downstream Signaling



HeLa cells treated with hTGF- β 1 for 25 minutes were examined using phospho and total Smad2 antibodies.

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NEW PRODUCTS FOCUS: MASS SPECTROMETRY

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The TSQ Quantum XLS is a triple quadrupole gas chromatography mass spectrometry (GC-MS) system designed to offer maximum precision, sensitivity, and laboratory productivity for quantitative analysis. It features the innovative Thermo Scientific DuraBrite IRIS high sensitivity ion source, which ensures high sensitivity in the low femtogram range, high quantitative precision at trace levels, and uninterrupted operation for increased productivity. Highly inert and exchangeable ion volumes allow for quick preventive maintenance within minutes without venting the vacuum system. The TSQ Quantum XLS is designed to improve laboratory efficiency and throughput by identifying and analyzing a very large number of compounds in a single analytical run.

Thermo Fisher Scientific

For info: 800-532-4752 | www.thermo.com/getready

MICROSCALE HPLC

The ExpressLC-Ultra is a microscale high performance liquid chromatography (HPLC) system that runs at column pressures up to 10,000 psi, allowing the use of sub-2-micron particle columns. Along with a new ultraviolet (UV) detection system, the instrument delivers all the advantages of microscale LC, including solvent savings, reduced sample requirements, and reduced frictional heating. The new system's charge-coupled device UV detector works with microfabricated flow cells to ensure ultrahigh sensitivity with no band broadening. The ExpressLC-Ultra's high UV sensitivity allows detection of impurities at levels as low as 0.05 percent, meeting the needs of researchers in drug discovery and many other applications. The system incorporates Eksigent's Microfluidic Flow Control technology to generate accurate and reproducible flow rates from 1 to 50 microliters per minute.

Eksigent

For info: 925-560-2600 | www.eksigent.com

FRACTIONATION KITS

A new line of cartridge kits is available for the Gelfree 8100 Fractionation System. The fractionation kits provide research scientists with the ability to perform molecular weight-based fractionation with liquid-phase recovery over various target mass ranges. The Low Mass Target Kit is tailored to provide maximum separation resolution of proteins with a molecular weight less than 60 kDa, which is useful in the area of top-down protein analysis using mass spectrometry. The Mid Mass Cartridge Kit provides separation across the mass range of 3.5 kDa to 150 kDa, which spans over 95 percent of the predicted proteome of most biological systems. The High Mass Cartridge Kit is designed for targeted enrichment of intact biotherapeutics, providing resolution in the mass range of 60 kDa to 300 kDa.

Protein Discovery

For info: 866-670-9038 | www.proteindiscovery.com

ULTRA HPLC

The Nexera ultrahigh-performance liquid chromatography (UHPLC) system, which delivers high-speed and high-resolution analysis without sacrificing basic performance parameters such as precision, near-zero carryover, linearity, stability, and ruggedness. These attributes enable Nexera to provide superior performance in various fields, covering high-resolution and high-speed separation as well as high-sensitivity detection. The system is optimized to enable analysis at pressures up to 130 MPa. The maximized pressure over a wide flow range enables various types of analyses, including micro LC to conventional LC, regular pressure LC to ultrahigh-pressure LC, and isocratic LC to ternary high-pressure gradient and multidimensional LC. The system is also suitable for LC-mass spectrometry applications.

Shimadzu

For info: 800-477-1227 | www.shimadzu.com

MASS SPECTROMETRY SYSTEM

The TripleTOF 5600 System is a fast and sensitive high-resolution mass spectrometer for high-performance qualitative and quantitative analysis. The instrument combines the quantitative capabilities typically associated with triple quadrupoles with the qualitative capabilities of a high-resolution, accurate-mass system. It is designed to enable new and better ways for scientists to conduct mass spectrometry experiments for a broad range of life science applications, such as discovering new drugs, detecting biomarkers, and aiding in food safety and environmental analysis. The system's innovations include the fast SmartSpeed 100 Hz Acquisition, the Accelerator TOF Analyzer for high-resolution data at high speed and sensitivity, and EasyMass Accuracy to achieve stable mass accuracy without continuous user calibration.

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