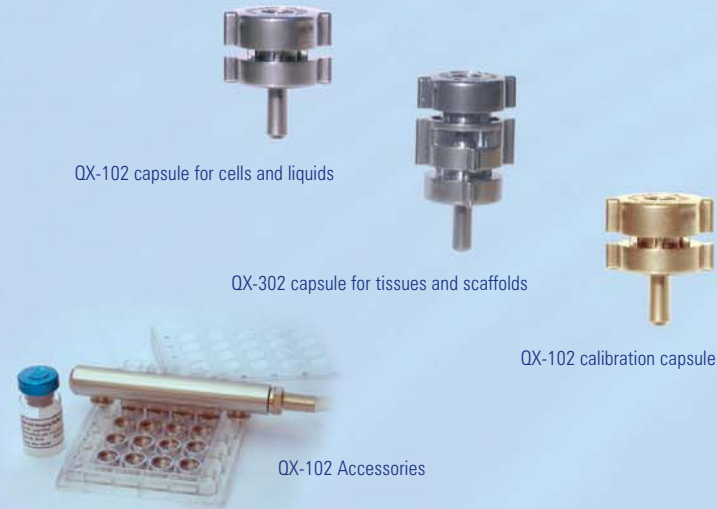


QuantomiX QX Product Line

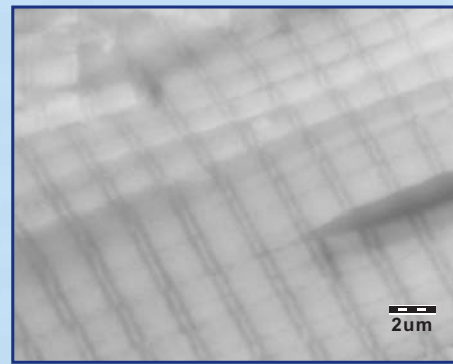


QX-102 capsule for cells and liquids

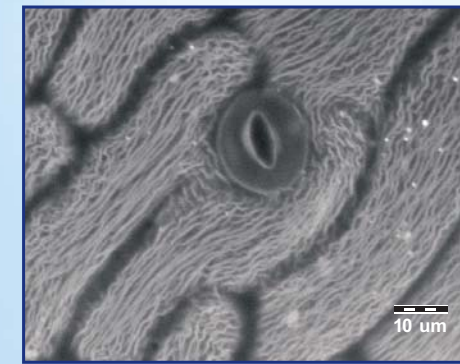
QX-302 capsule for tissues and scaffolds

QX-102 calibration capsule

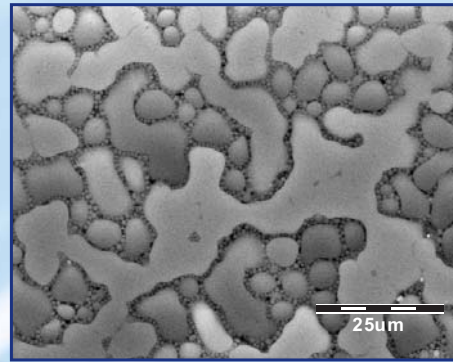
QX-102 Accessories



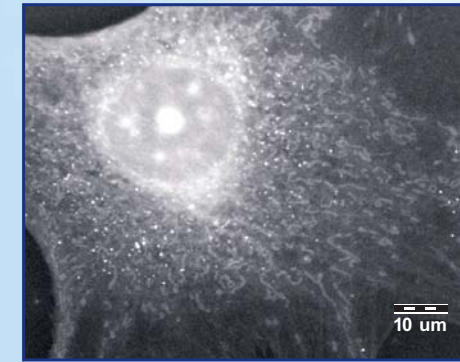
Porcine skeletal muscle, uranyl acetate



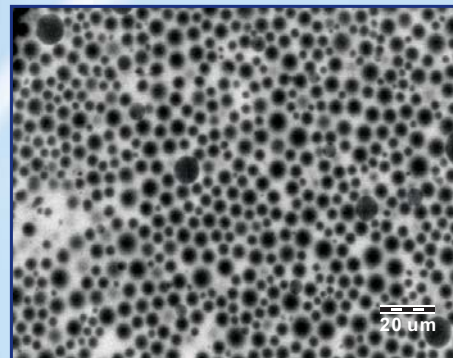
Arabidopsis thaliana stigma, osmium tetroxide



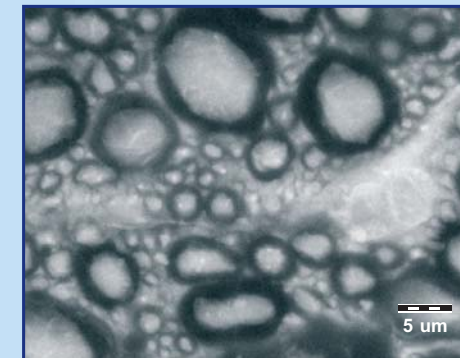
Deodorant



NIH-3T3 cell, osmium tetroxide



Maternal milk



Cross-section of mouse spinal cord, uranyl acetate

QuantomiX Wet SEM Technology



About QuantomiX

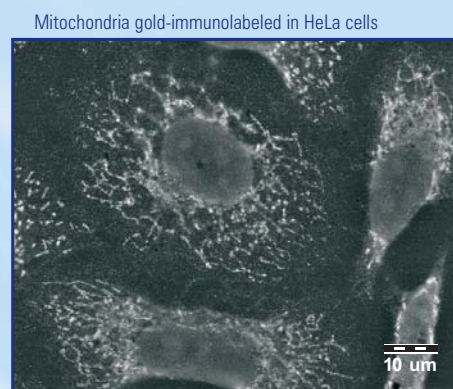
QuantomiX develops and manufactures breakthrough solutions and products that enable direct scanning electron microscopy (SEM) of wet samples. With QuantomiX QX-capsules, samples of wet cells, tissue biopsies, foods, inks and more can be imaged and analyzed in their native environment. Eliminating the need for time-consuming preparation procedures, the capsules ensure that sample integrity is not compromised by artifacts. The single-use QX-capsules are sold to R&D and Q/C laboratories in the pharmaceutical, printing, food and cosmetics industries and in academia. The easy-to-use, affordable technology opens new opportunities for application-specific tools for improved drug discovery, and advances treatment and diagnostic solutions for the medical and pharmaceutical markets.

QuantomiX technology was developed in the Physics Department of the Weizmann Institute of Science. The company's managerial team and development staff include an experienced cadre of business and industry professionals. Founded in 2001, QuantomiX is a privately held company with operations in North America, Europe and Japan.

- Attain-EM-level imaging of wet samples
- Eliminate artifacts and time-consuming sample preparation
- Achieve reliable, reproducible and quantifiable results

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www.quantomix.com / info@quantomix.com



Mitochondria gold-immunolabeled in HeLa cells



Trypanosoma brucei, uranyl acetate



QUANTOMIX TECHNOLOGY OPENS A NEW WINDOW OF OPPORTUNITY IN SCIENTIFIC RESEARCH, INDUSTRIAL R&D, QUALITY CONTROL AND DRUG DISCOVERY. THE COMPANY'S QX-CAPSULES ENABLE WET SAMPLES TO BE IMAGED AND ANALYZED IN CONVENTIONAL SCANNING ELECTRON MICROSCOPES, ELIMINATING THE NEED FOR COSTLY SPECIALIZED PREPARATION PROCEDURES.

Wet SEM – a new era in research

While scanning electron microscopy (SEM) extends imaging resolution to the nanometer range, its applications are limited when it comes to wet samples. QuantomiX technology breaks this barrier. With QuantomiX QX-capsules, it is possible to introduce wet samples directly into an electron microscope, eliminating preparation artifacts. With the ability to image and analyze wet samples with the contrast and resolution SEM users are accustomed to, QuantomiX is ushering in a new era in medical, pharmaceutical and industrial R&D and quality control, and opening the world of electron microscopy to more and more applications.

A diverse range of applications

QuantomiX QX-capsules broaden the horizons of electron microscopy to enable robust scanning and analysis of a wide spectrum of wet samples including:

Life Sciences & Medicine

Cultured and primary cells / Tissue histology / Nerve cells and myelin imaging / Lipid-containing cells and tissues / Microbiology / Viruses / Plants

Industrial R&D

Emulsions / Suspensions / Foods / Personal care goods / Cosmetics / Inks

QuantomiX QX-capsule walk-through

1. Prepare multi-well plate for QX-capsules
2. Apply sample via conventional pipetting
3. Quick seal the single-use QX-capsule
4. Place the QX-capsule in the SEM chamber



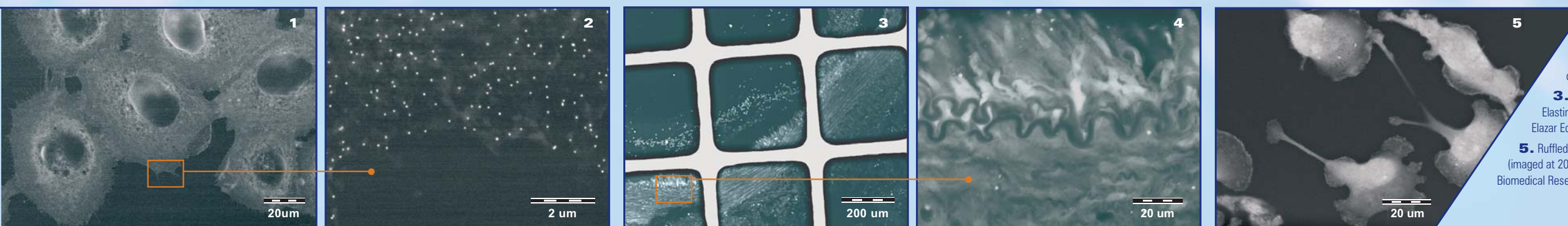
A technological breakthrough – the QuantomiX QX-capsule

The QuantomiX QX-capsule is a vacuum tight container bounded by a unique, electron-transparent and pressure-resistant membrane. This ultra-thin membrane completely isolates hydrated samples from the microscope's chamber vacuum, while allowing penetration and reflection of a scanning electron beam. The unique, easy-to-use QX-capsule enables electron microscopy of samples held in a liquid medium at atmospheric pressure.

Samples are placed directly in the capsules and imaged in a conventional SEM. Imaging of samples in the QX-capsule can be accomplished with backscattered electron detection and X-ray detection to reveal structure as well as material composition.

QuantomiX QX-capsule features

- Direct imaging of all types of wet samples, including suspensions, emulsions, creams, cells and tissues
- Rapid and simplified sample preparation
- Compositional analysis of wet samples by X-ray microanalysis
- Excellent preservation and imaging of lipid structures
- High-resolution 3-D histopathology
- Easy-to-automate sample processing and imaging
- Images large fields, with zoom-in to obtain higher magnifications
- Unique contrast mechanism based on atomic number differences
- Compatible with light microscopy for comparative studies
- Single-use



1./ 2. Epidermal growth factor receptors immuno-labeled with 40-nm gold nanoparticles on A431 cells (imaged at 30 kV). The distribution of receptors on the cell membrane is shown by counterstaining with uranyl acetate. In collaboration with Professor Joseph Schlessinger, Department of Pharmacology, Yale University School of Medicine.

3./ 4. Cross-section of rabbit aorta counterstained with uranyl acetate. Elastin in the tissue is seen in black (imaged at 30 kV). In collaboration with Professor Elazar Edelman, Harvard-MIT Biomedical Engineering Center.

5. Ruffled borders in macrophage A-21 cells, counterstained with uranyl acetate (imaged at 20 kV). In collaboration with Professor Paul Matsudaira, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology (MIT).