

Hyperspectral Imaging General Capabilities



- Hyperspectral Imaging Systems for Microscopy and Life Sciences
- Hyperspectral Remote Sensing Platforms
- Optical System Design, Engineering, Development and Manufacture
- Image Analysis Software Development

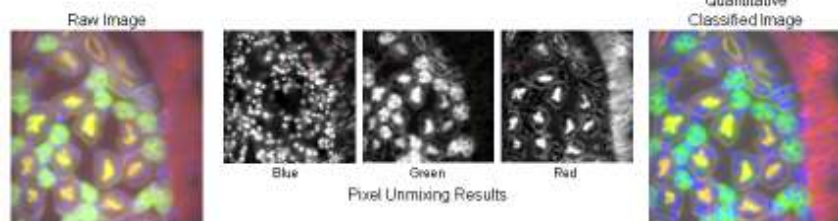
Product Summary

At the heart of ChromoDynamics flagship product, the HSi-300 Hyperspectral Imaging System is ChromoDynamics' patented acousto-optic tunable filter (AOTF) imaging module. This technology fulfills the promise of multispectral and hyperspectral imaging through unmatched spectral flexibility and switching speed. The performance capabilities of this technology make it ideally suited for high-content, high-throughput fluorescence studies, as well as spectral transmission and reflectance imaging. Potential applications range from live cell and whole animal studies to fixed slide clinical diagnostics.

An AOTF is a high-speed, high-throughput, random-access solid-state optical filter with an adjustable optical passband. ChromoDynamics' proprietary AOTF technology delivers diffraction-limited image quality with variable bandwidth resolution down to 1.5 nm. Wavelength switching time, including computer control overhead, is less than one hundred microseconds.

The ChromoDynamics Hyperspectral Imaging System features an integrated EMCCD scientific camera, AOTF-based spectral filter system, instrument driver and control module and a powerful, intuitive image capture and hyperspectral analysis software suite. A number of fluorescence microscopy research techniques benefit from the speed and resolution of ChromoDynamics hyperspectral imaging technology:

- Immunohistochemistry
- Quantum Dots (Q-Dots)
- Fluorescence in-situ hybridization (FISH)
- Fluorescence resonance energy transfer (FRET)
- Spectral Karyotyping (SKY)



Mouse kidney section (Fluo-3), DAPI-stained nuclei, Alexa 488 glomeruli and tubules, Alexa 568 actin and brush border.

ChromoDynamics, Inc.

ChromoDynamics has development facilities in New Jersey and over 25,000 square feet of production, sales and marketing facilities in Orlando, Florida. Gooch & Housego PLC has over 400 employees at seven locations world-wide and is listed on the Alternative Investment Market (AIM) of the London Stock Exchange with a market capitalization of £75M (US\$145M).



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