



Leica TCS MP5

Optimized for Multiphoton Imaging

- Deep tissue imaging at video rate scan speed
- Elaborate experiments with seven detectors simultaneously
- High transmission up to 1300 nm for efficient OPO excitation

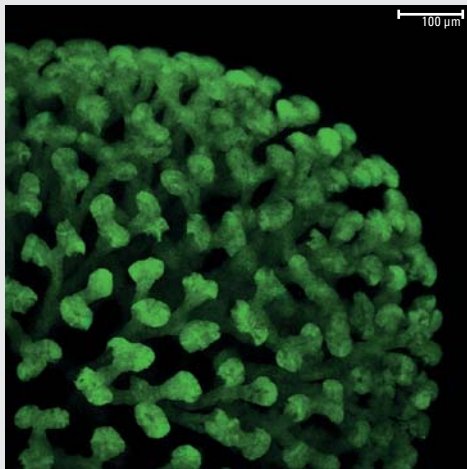
Living up to Life

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Leica TCS MP5 – Optimized for Multiphoton Imaging

Multiphoton applications

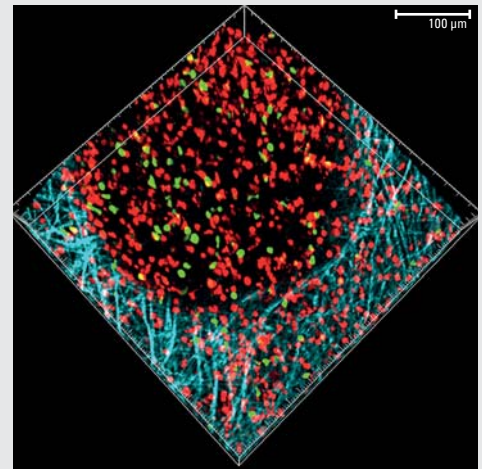
Multiphoton microscopy is the method of choice when imaging thick tissue sections, whole organs or animals. Long wavelength light from ultra-fast pulsed IR lasers can penetrate deep into the tissue with reduced scattering and no absorption outside of the focal plane. Multiphoton applications range from neuroscience and developmental biology to immunology.



Ureteric bud from an embryonic day 16 kidney from a Hox-B7 EGFP mouse.
Courtesy of Prof. Deborah Hyink, Mount Sinai School of Medicine, New York, NY, USA



Blood cells labeled with DsRed (red) in zebrafish embryo, second harmonic generation (SHG) signal of muscle (gray).
Courtesy of Dr. Julien Vermot, IGBMC, Strasbourg, France



Dynamics of an anti-viral T cell response in the inguinal lymph node. Anti-viral CD8 (CFP, red) and CD4 (GFP, green) T cells, SHG of the collagen structure (cyan) encapsulating the lymph node.
Courtesy of Dr. Dorian McGavern and Dr. Bernd Zinselmeyer, National Institute of Neurological Disorders and Stroke, Bethesda, MD, USA

Outstanding optics for multiphoton microscopy

- High transmission of scan head up to 1300 nm
- Easy-to-change filter cubes with hard-coated filters
- Wide range of objectives for live cell imaging and electrophysiology

High light collection efficiency by external detectors

- Non-descanned detection close to the objective
- 1 or 2 channel NDDs, 4 channel NDD unit – both in RLD or TLD position
- Transmitted light contrast channel (Dodt gradient contrast or DIC)
- Detect up to seven channels simultaneously

Full flexibility of a Leica scanning microscope

- Choose your optimal scan speed: conventional, resonant or Tandem scanner with up to 28 frames/sec (512 x 512 px)
- Leica TCS MP5 can be combined with a fixed stage, an upright or inverted microscope stand
- Intuitive operation through guided experiments in the Leica LAS AF software
- Expand the range of IR excitation wavelengths up to 1300 nm with Leica's fully integrated OPO solution



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