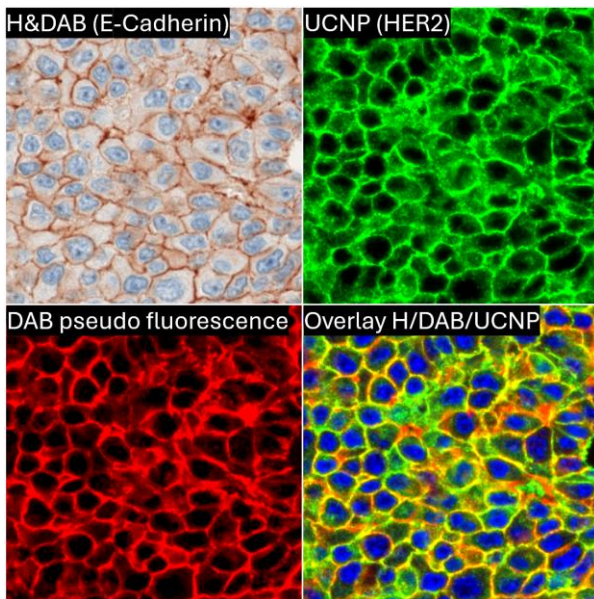


Ultra-Sensitive UCNP Imaging Powered by SCIZYS

- Lumito is a spin-off from Lund University Division of Atomic Physics and Laser Centre focusing on high-quality whole-slide tissue imaging based on upconverting nanoparticles (UCNP).
- The SCIZYS solution enables quantitative analysis in immunohistochemistry, combining ultra-high sensitivity with morphological tissue information.
- SCIZYS scanner and labeling kit are available at: www.lumito.se/order



High-Precision, Autofluorescence-Free Multiplexed IHC



- Brightfield (BF) and UCNP images are acquired sequentially without moving the sample, resulting in a pixel-perfect spatial alignment between the BF and luminescence images.
- Near-infrared laser excitation and anti-Stokes emission enable autofluorescence-free imaging.
- Compatibility with chromogenic methods, such as haematoxylin counterstaining and HRP/DAB, enables multiplexed analysis within standard IHC workflows.

Detection of Ultralow Biomarker Signals with High Repeatability

- Human tissue samples previously scored as HER2 0 (negative) using HRP/DAB were labelled in triplicate with SCIZYS Erbium and scanned with the SCIZYS S1 whole-slide scanner.
- SCIZYS labelling showed excellent repeatability (CV: 1.8%).
- A significant number of positive cells (40%) found in sample 1. Sample 2 did not show significant HER2 levels.

