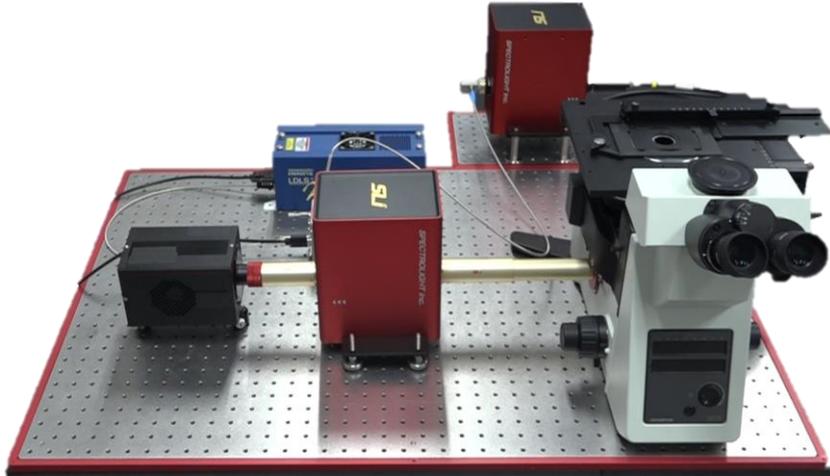


Fluorescence imaging using Flexible Wavelength Selector (FWS) and Broadband Light Source.



Any light source can be used for FWS-poly, such as laser, halogen lamp, mercury lamp, supercontinuum and plasma light. Selection of emission wavelength as well as excitation wavelength can be achieved by FWS-poly.

These properties can be highly useful for multi-color imaging of multiply labeled fluorophores. After labeling different parts of cells with different fluorophores, they can be simultaneously imaged using FWS-poly. (Figure 1). Figure 1 shows fluorescence images of fixed HeLa cells labeled with DAPI (nucleus), CMFDA green (cytosol), and Mitotracker deep Red FM (mitochondria), respectively. Simultaneous three-color imaging can be done using an FWS-poly without three kinds of filter sets or time-consuming scanning by a monochromator.

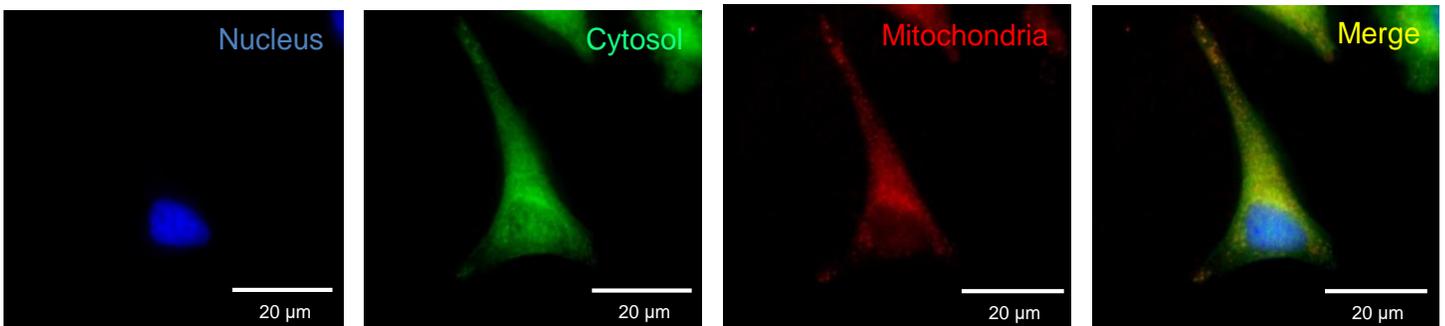


Figure 1. HeLa cells labelled with DAPI, CMFDA green and Deep Red show localization of nucleus, cytosol and mitochondria. The images were obtained using An epi-fluorescence microscope equipped with the 60X objective lens.