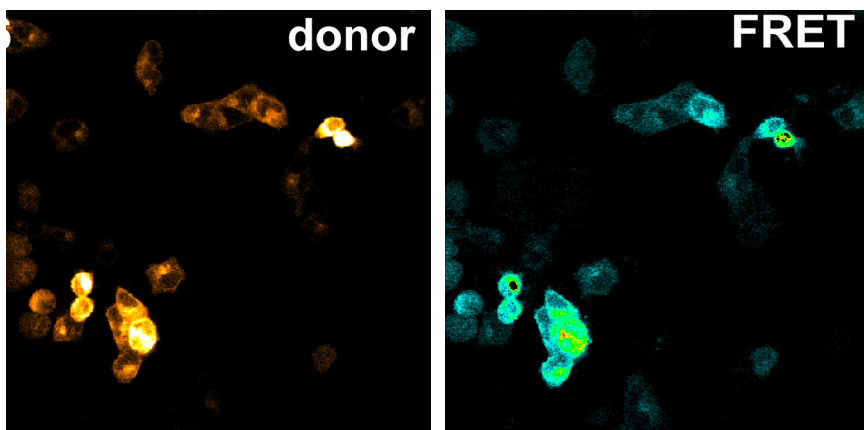


Pixel-precise bleaching & impressive heat maps

FRET for ZEISS ZEN Imaging Software



Sample image of Hep G2 cells, LSM 800 application image for FRET, two interacting proteins (donor false-colored in green, acceptor false-colored in red) in HepG2 cells ("before bleach").

Upgrade your ZEISS microscope

Upgrade your ZEISS microscope with the FRET option and benefit from pixel-precise bleaching and impressive heat maps.

As technical requirements may apply on some systems, please contact us to learn more about FRET upgrade and how your process will benefit from an upgrade:

microscopy@zeiss.com

Förster Resonance Energy Transfer (FRET) for ZEISS ZEN Imaging Software is an improved module to observe interactions of molecules. With FRET two differently strained molecules will transfer energy at a distance of less than 10nm, such as that the second fluorophore, which is not excited with light, will start emitting light. Through heat maps based on the most commonly used models: Gordon, Youvan, and Xia, FRET enables to demonstrate its efficiencies at structural changes of molecules (protein folding).

Highlights

Pixel-precise bleaching

Define your ROIs with pixel-precise for Acceptor Photobleaching (AP)

Two steady-state techniques

Benefit from two steady-state techniques at disposal: Acceptor Photo-bleaching (AP) and Sensitized Emission (SE)

Heat maps

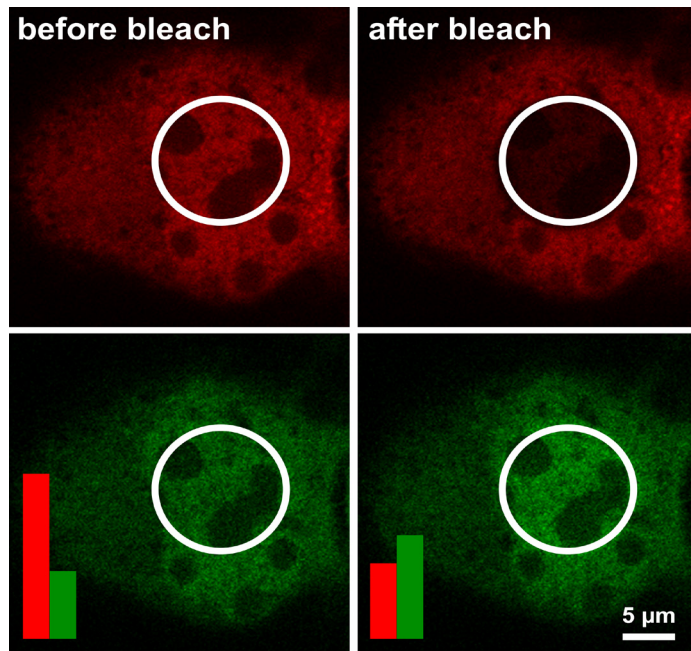
Display your FRET efficiencies by heat maps based on the three most commonly used models



Seeing beyond

FRET for ZEISS ZEN Imaging Software

Impressive heat map



Sample image of two interacting proteins tagged with CFP (donor) and YFP (acceptor) in HepG2 cells. Left panel shows the donor. Right panel indicates the FRET channel obtained by sensitized emission from which the FRET efficiencies calculated according to Youvan are displayed as fraction.

Availability

The FRET upgrade is available for the following software:

ZEN pro (blue edition)	
ZEN desk (blue edition)	
ZEN desk (black edition)	●
ZEN system (blue edition)	
ZEN system (black edition)	●
ZEN lite	
ZEN 2 core	
ZEN 2 starter	

● Included in ZEN

● Optional in ZEN



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