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## Imaging of cellular localization of nanoparticles using STED technology

Visualization of subcellular levels is always difficult to be achieved by conventional fluorescence microscopy due to the diffraction limit of light. Stimulated Emission Depletion (STED) is a super-resolution microscopy that can improve the spatial resolution to below 70 nm. Herein, we demonstrated cellular localization of nanoparticles in A549, human lung epithelial cell line by using a STED super-resolution microscope. This Imaging technique will be useful for toxicological studies on cell-nanoparticles interaction, as well as pharmacological studies on effects of nano-drug carrier at the target tissues.

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