

FAQ: Analysis & Imaging

Q1: WHAT METHODS OF ANALYSIS ARE CELLEVATES SCAFFOLDS COMPATIBLE WITH?

A: Most standard methods of analysis are applicable. Standard imaging techniques, immunostainings, histological analysis, protein extraction and western blotting, cell viability assays, MTT, electrophysiological measurements using multiple electrode arrays (MEAs), absorbance and fluorescence-based assays, etc. have all been performed successfully.

Q2: WHAT IMAGING TECHNIQUES ARE APPROPRIATE FOR ANALYSIS OF CELLS IN THE SCAFFOLDS?

A: Optical microscopy (to some extent, imaging through the scaffold may be difficult), fluorescence microscopy, confocal microscopy, SEM, TEM, phase holographic microscopy.

Q3: ARE THE SCAFFOLDS AUTOFLUORESCENT?

A: No. No significant levels of autofluorescence have been measured for Cellevate scaffolds using standard excitation wavelengths. However, PCL exhibits a slight green autofluorescence during confocal microscopy. This is typically easy to exclude from images by adjusting threshold settings.

Q4: ARE ABSORBANCE- OR FLUORESCENCE-BASED ASSAYS PREFERRED?

A: Scaffolds will give rise to a background signal when used in absorbance-based assays and fluorescence-based assays are thus preferred when possible. For absorbent based assays, well contents can be transferred and analyzed separately.