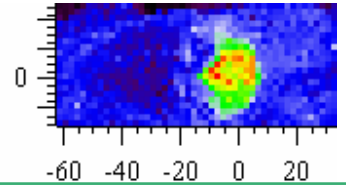


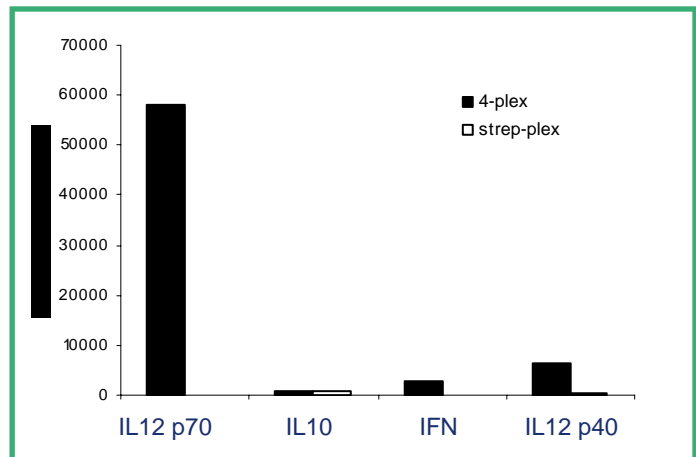
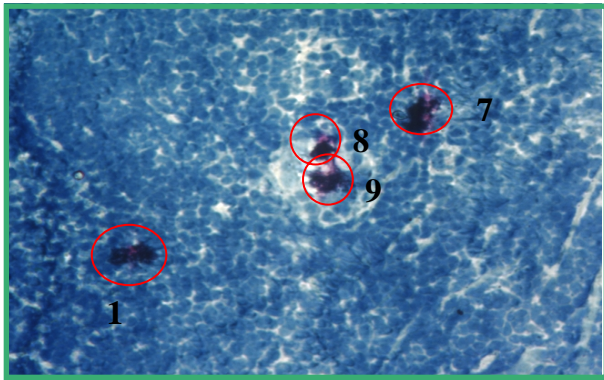
Nanoplex™ Biomarker Detection: Technical Note #5: SERS Imaging Applications



Nanoplex™ Biotags can be used potentially in any application where fluorescence labelling and conventional stains have traditionally been used, for example, for biological imaging. In both ex vivo and in vitro imaging applications, Nanoplex™ Biotags bring the same performance benefits that they offer to in vitro diagnostics. Namely, the ability to obtain signal against a background of sample autofluorescence, improved analyte detection sensitivity and extended multiplex capabilities.

Quantitative ImmunoHistochemical labelling

- Unaffected by background from classical H&E staining
- Transformation of IHC to quantitative protocol
- Demonstrated multiplex of up to four analytes in tissue samples



Cellular labelling

- Cell surface labelling capabilities with standard Nanoplex™ Biotags
- Smaller tags offer improved cellular penetration
- Binning of Raman spectral peaks (1600 cm^{-1} in example) allows rapid imaging and multiplex detection
- No photobleaching of signal on extended exposure

