Multiplex Phenotyping
Automated Phenotyping in High Dimensional Images

Simplyfing the analysis of high dimensional images
Interpreting high dimensional, multiplexed images represent a significant challenge to the unaided human cognitive system. Examples of high dimensional multiplex images include those generated through immunofluorescence or Imaging Mass Cytometry™ (IMC™).

Multiplex Phenotyping offers a streamlined and intuitive workflow for analysis of up to **255 channels by automatically** identifying individual cells and performing **cell-based phenotyping**.

Multiplex Phenotyping is a dedicated software tool for performing comprehensive quantitative measurements of expression, (co)-localization, proximity, counts, neighborhoods, and more.

**Multiplex Phenotyping is typically used for:**
- Identification of novel cell phenotypes
- Interrogation of tumor microenvironment (TME)
- Analysis of potential therapeutic targets
- Biomarker discovery

**Benefits**
- Offers a streamlined and intuitive workflow for phenotyping cells and performing subsequent analysis
- Automates manual steps and calculations
- Capable of analyzing up to 255 channels
- Visualizes results of multidimensional relationships in high parameter images
- Enables deeper understanding of potential relationships between distribution of phenotypes and patient outcome
Streamlined analysis workflow of high dimensional images
Automated phenotyping of up to 255 channels

A streamlined workflow with the analysis of up to 255 channels, enabling tissue and cell segmentation for cell-based phenotyping.

Explore and visualize your results
Multiplex Phenotyping’s state of the art visualization tools enable phenotypic investigation for single image exploration to large study quantification.

Multiplex Phenotyping Features
- Works with non-mixed systems and Imaging Mass Cytometry™ (IMC™) from the Fluidigm Hyperion™ Imaging System
- Works with PerkinElmer Vectra® and Vectra® Polaris™ systems (Spectral multiplexing)
- Automatically clusters high dimensional data into cell phenotypes, and names them based on the markers they express
- Automatically generates phenotypic matrix and phenotypic profiles for the identified phenotypes
- Automatically generates t-SNE plots to visualize phenotypic relationships
- Multiplex Phenotyping is an add-on module to the Oncotopix®/Biotopix™ platform

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