

Discover your research potential

*Fully automated multiplex staining with
DISCOVERY ULTRA staining system*

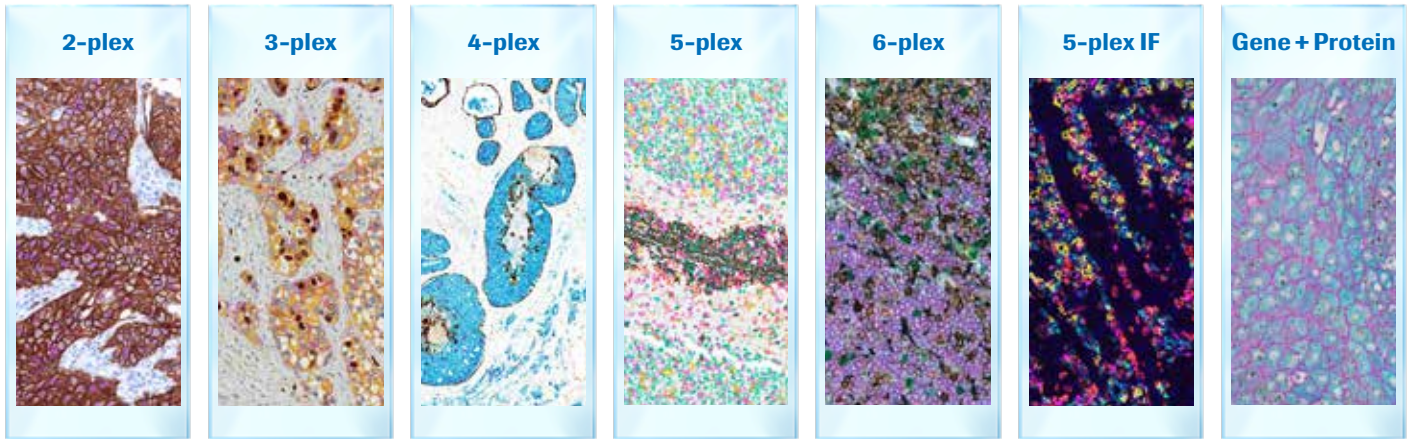


#PATHART

Multiplexing on DISCOVERY ULTRA system

Doing more with less

- Preserve precious samples
- Identify markers in context of tissue
- Understand co-expression and organization of markers

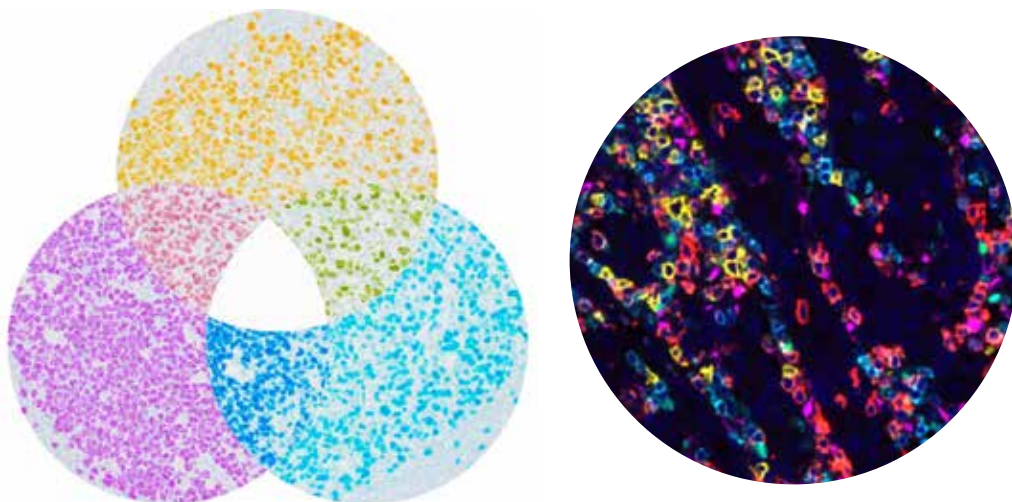


Discover

- Marker localization and interaction
- Panel development
- Increased diagnostic/predictive accuracy

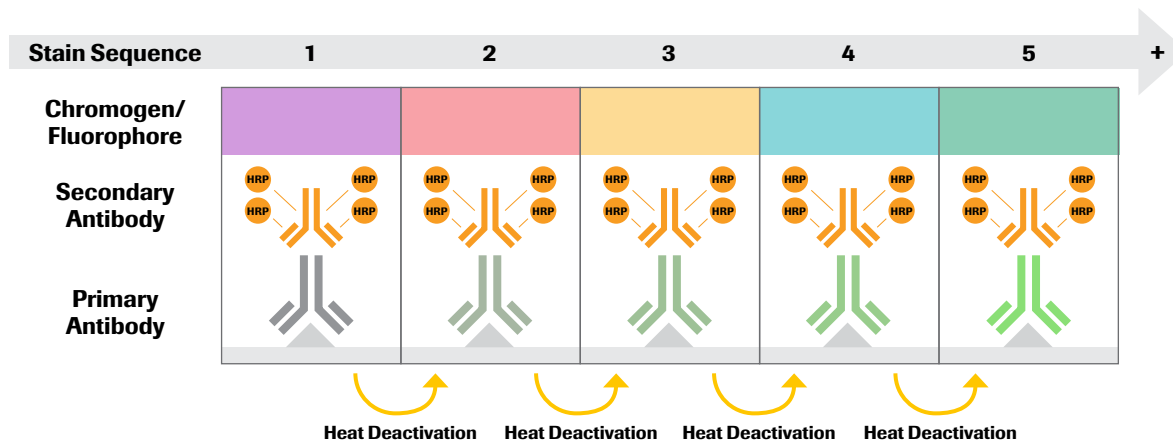
Freedom to build your assay

- Advanced chemistry: Translucent chromogen technology creates new colors upon target co-localization
- Tyramide fluorophores: Provide increased stability and signal intensity than conventional reagents
- Distinct absorbance spectra of new chromogens allows for visualization with light microscopy and image analysis
- Up to 7 ready-to-use chromogens; up to 7 ready-to-use fluorophores
- Leverage a comprehensive menu of ready-to-use, fully automated research reagents to empower multiplex applications



Fully automated, end-to-end staining

- Sequential staining provides the flexibility to stain any combination of up to 8 distinct markers (Protein, DNA, RNA or miRNA)
- Automated denaturing using heat and chemical deactivation, prevents cross reactivity
- Open or ready-to-use detection at any sequence allows you to customize your assay



A Guide to Multiplexing

1. Optimize individually

- Stain each antibody individually to create a reference library and understand performance



CD4 with DISCOVERY Purple



CD8 with DISCOVERY Teal HRP detection kit



Ki-67 with DISCOVERY Green HRP



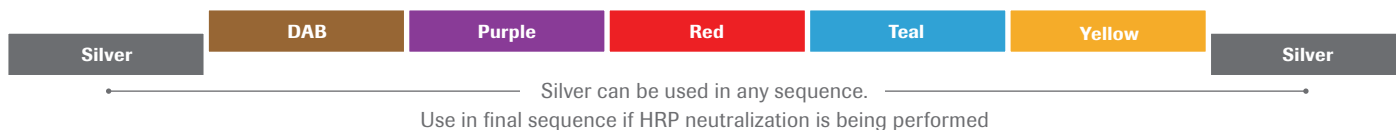
CD68 with DISCOVERY Yellow



Pan Keratin with DISCOVERY Silver

2. Determine your sequence of markers

- Markers can behave differently depending on the sequence in which they are stained—Test all combinations of DISCOVERY detection kits to find the optimal order
- Low expression targets should be placed first in the staining sequence
- Consider the cellular compartment that is to be stained—Start from the nucleus to membrane



3. Fine tune your assay!

- Adjust sequence and/or intensity of markers and detection
- Verify specificity through proper controls
- Ensure efficient denaturing to prevent cross reactivity
- Cross reference to single staining



Optimized IHC 5-plex on tonsil tissue

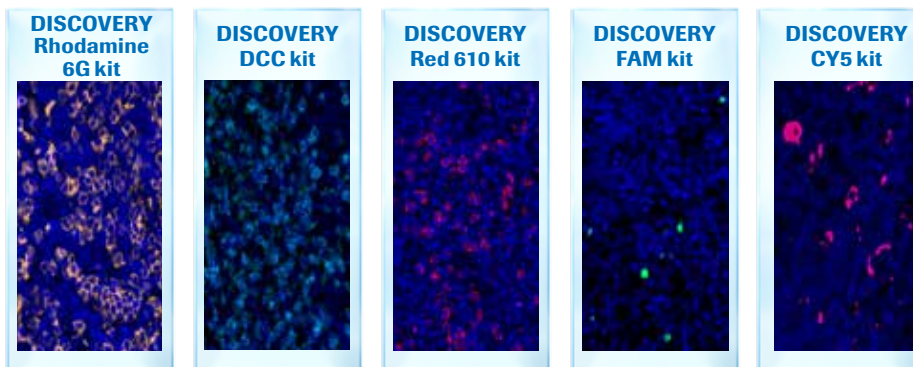
Staining reference sheet

Chromogenic detection



Product name	Catalog number	Ordering code
ChromoMAP DAB kit	760-159	05266645001
DISCOVERY Purple kit	760-229	07053983001
DISCOVERY Silver kit	760-227	07053649001
DISCOVERY Teal HRP kit	760-247	08254338001
DISCOVERY Red kit	760-228	07425333001
DISCOVERY Yellow kit	760-239	07698445001
ChromoMAP Blue kit	760-161	05266661001

Fluorescent detection



Product name	Catalog number	Ordering code
DISCOVERY Rhodamine 6G kit	760-244	07988168001
DISCOVERY DCC kit	760-240	07988192001
DISCOVERY Red 610 kit	760-245	07988176001
DISCOVERY FAM kit	760-243	07988150001
DISCOVERY CY5 kit	760-238	07551215001
DISCOVERY FITC kit	760-232	07259212001
DISCOVERY Rhodamine kit	760-233	07259883001

DISCOVERY products are for research use only. Not for use in diagnostic procedures.

VENTANA, DISCOVERY and the VENTANA logo are trademarks of Roche.
All other product names and trademarks are the property of their respective owners.

© 2018 Roche MC-US-02457-1118

Roche Diagnostics Corporation
9115 Hague Road
Indianapolis, Indiana 46256

usdiagnostics.roche.com