Materials List for:

## A Rapid Method for Multispectral Fluorescence Imaging of Frozen Tissue Sections

Dinesh Jaishankar<sup>1</sup>, Cormac Cosgrove<sup>1</sup>, Ryan J. Deaton<sup>2</sup>, I. Caroline Le Poole<sup>1,3</sup>

Correspondence to: I. Caroline Le Poole at caroline.lepoole@northwestern.edu

URL: https://www.jove.com/video/60806

DOI: doi:10.3791/60806

## **Materials**

Name	Company	Catalog Number	Comments
Acetone (histological grade)	Fisher Scientific	A16F-1GAL	Fixing tissues
Alexa Fluor 488 anti-mouse CD3	BioLegend	100212	Clone - 17A2; primary conjugated antibody
Alexa Fluor 488, eBioscience anti- human CD20	ThermoFisher Scientific	53-0202-82	Clone - L26; primary conjugated antibody
Alexa Fluor 555 Mouse anti-Ki-67	BD Biosciences	558617	Primary conjugated antibody
Alexa Fluor 594 anti-human CD3	BioLegend	300446	Clone - UCHT1; primary conjugated antibody
Alexa Fluor 594 anti-mouse CD8a	BioLegend	100758	Clone - 53-6.7; primary conjugated antibody
Alexa Fluor 647 anti-human CD8a	BioLegend	372906	Clone - C8/144B; primary conjugated antibody
Alexa Fluor 647 anti-mouse CD206 (MMR)	BioLegend	141711	Clone - C068C2; primary conjugated antibody
Alexa Fluor 647 anti-mouse CD4 Antibody	BioLegend	100426	Clone - GK1.5; primary conjugated antibody
C57BL/6 Mouse	Charles River Laboratories	27	Mouse frozen tissues used for multispectral training
Coplin Jar	Sigma Aldrich	S6016-6EA	Rehydrating and washing slides
DAPI Solution	BD Biosciences	564907	Nucleic Acid stain
Diamond White Glass Charged Slides	DOT Scientific	DW7590W	Adhering tissue sections
Dulbecco's Phosphate Buffered Saline 1x (without Ca and Mg)	Fisher Scientific	MT21031CV	Washing and diluent
Gold Seal Cover Slips	ThermoFisher Scientific	3306	Protecting stained tissues
Human Normal Tonsil OCT frozen tissue block	AMSBio	AMS6023	Human frozen tissue used for multispectral staining
Human Serum 1x	Gemini Bio-Products	100-512	Blocking and diluent for human tissues
inForm	Akoya Biosciences	Version 2.4.1	Machine learning software
PerCP/Cyanine5.5 anti-human CD4	BioLegend	300529	Clone - RPA-T4; primary conjugated antibody
PerCP-Cy 5.5 Rat Anti-CD11b	BD Biosciences	550993	Clone - M1/70; primary conjugated antibody
Phenochart	Akoya Biosciences	Version 1.0.8	Whole slide scan software
ProLong Diamond Antifade Mountant	ThermoFisher Scientific	P36965	Mounting medium

<sup>&</sup>lt;sup>1</sup>Robert Lurie Comprehensive Cancer Center and Department of Dermatology, Feinberg School of Medicine, Northwestern University

<sup>&</sup>lt;sup>2</sup>Department of Pathology, University of Illinois at Chicago

<sup>&</sup>lt;sup>3</sup>Department of Microbiology and Immunology, Feinberg School of Medicine, Northwestern University



Research Cryostat	Leica Biosystems	CM3050 S	Sectioning tissues
Superblock 1x	ThermoFisher Scientific	37515	Blocking mouse tissues
Tissue-Tek O.C.T Solution	Sakura Finetek	4583	Embedding tissues
Vectra 3.0 Automated Quantitative Pathology Imaging System, 6 Slide			Semi-automated multispectral imaging system
Vectra Software	Akoya Biosciences	Version 3.0.5	Software to operate microscope