

## Imaging Mass Cytometry Modality Overview V.2

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1 W

Works for me

dx.doi.org/10.17504/protocols.io.bgatjsen

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Human BioMolecular Atlas Program (HuBMAP) Method Development Community Tech. support email: Jeff.spraggins@vanderbilt.edu

Process donor organs into samples for analysis.

Lymph Node: dx.doi.org/10.17504/protocols.io.bbgnijvehttps://drive.google.com/drive/my-drive

Thymus: <a href="mailto:dx.doi.org/10.17504/protocols.io.bbgmiju6">dx.doi.org/10.17504/protocols.io.bbgmiju6</a> Spleen: <a href="mailto:dx.doi.org/10.17504/protocols.io.bc3kiykw">dx.doi.org/10.17504/protocols.io.bbgmiju6</a>

2 Register organ donor, organs received, and common coordinate region information in the HuBMAP UUID generator at <a href="https://uuid.hubmapconsortium.org">https://uuid.hubmapconsortium.org</a>

3 Prepare paraffin blocks from tissue samples.

Cassette Processing: <u>dx.doi.org/10.17504/protocols.io.8nzhvf6</u>
Paraffin Embedding: <u>dx.doi.org/10.17504/protocols.io.bam9ic96</u>

4 Package and send paraffin blocks to the Bodenmiller lab: dx.doi.org/10.17504/protocols.io.bf5njq5e

5 Conjugate primary antibodies using the Maxpar Antibody Labeling Kit: dx.doi.org/10.17504/protocols.io.bf5jjq4n

6 Cut and mount paraffin sections for staining and analysis. Sectioning: <u>dx.doi.org/10.17504/protocols.io.bfz4jp8w</u>

7 Antibody staining of paraffin sections for Imaging Mass Cytometry: <a href="https://dx.doi.org/10.17504/protocols.io.bfz8jp9w">dx.doi.org/10.17504/protocols.io.bfz8jp9w</a>

8 Prepare a slide to use for compensation: dx.doi.org/10.17504/protocols.io.bf2djqa6

9 Tune the Image Mass Cytometer for acquisition: dx.doi.org/10.17504/protocols.io.bf2gjqbw

10 Data Acquisition by Image Mass Cytometry: dx.doi.org/10.17504/protocols.io.bf2ijqce

11 Compensation Slide Acquistion: dx.doi.org/10.17504/protocols.io.bf2jjqcn

	☐IMC Transfer data from Hipergator to HuBMAP HIVE Globus.docx
14	Prepare and upload data to the HuBMAP HIVE Globus landing pad using Hipergator.
	IMC_Transfer Data Zurich to HPG.docx
13	Load Imaging Mass Cytometry Datasets onto Hipergator:
12	Image Processing and Segmentation: <a href="https://github.com/BodenmillerGroup/ImcSegmentationPipeline">https://github.com/BodenmillerGroup/ImcSegmentationPipeline</a>