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Version 2

Imaging Mass Cytometry Modality Overview V.2

DOI

<https://dx.doi.org/10.17504/protocols.io.bgatjsen>

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Protocol status: Working

We use this protocol and it's working

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Last Modified: October 02, 2020

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Keywords: HuBMAP, Imaging Mass Cytometry, TMC-Florida/Zurich, imaging mass cytometry modality overview



- 1 Process donor organs into samples for analysis.
Lymph Node: [dx.doi.org/10.17504/protocols.io.bbgnijve](https://drive.google.com/drive/my-drive)
Thymus: [dx.doi.org/10.17504/protocols.io.bbgmiju6](https://drive.google.com/drive/my-drive)
Spleen: [dx.doi.org/10.17504/protocols.io.bc3kiykw](https://drive.google.com/drive/my-drive)
- 2 Register organ donor, organs received, and common coordinate region information in the HuBMAP UUID generator at <https://uuid.hubmapconsortium.org>
- 3 Prepare paraffin blocks from tissue samples.
Cassette Processing: [dx.doi.org/10.17504/protocols.io.8nzhvf6](https://drive.google.com/drive/my-drive)
Paraffin Embedding: [dx.doi.org/10.17504/protocols.io.bam9ic96](https://drive.google.com/drive/my-drive)
- 4 Package and send paraffin blocks to the Bodenmiller lab: [dx.doi.org/10.17504/protocols.io.bf5njq5e](https://drive.google.com/drive/my-drive)
- 5 Conjugate primary antibodies using the Maxpar Antibody Labeling Kit: [dx.doi.org/10.17504/protocols.io.bf5jjq4n](https://drive.google.com/drive/my-drive)
- 6 Cut and mount paraffin sections for staining and analysis.
Sectioning: [dx.doi.org/10.17504/protocols.io.bfz4jp8w](https://drive.google.com/drive/my-drive)
- 7 Antibody staining of paraffin sections for Imaging Mass Cytometry: [dx.doi.org/10.17504/protocols.io.bfz8jp9w](https://drive.google.com/drive/my-drive)
- 8 Prepare a slide to use for compensation: [dx.doi.org/10.17504/protocols.io.bf2djqa6](https://drive.google.com/drive/my-drive)
- 9 Tune the Image Mass Cytometer for acquisition: [dx.doi.org/10.17504/protocols.io.bf2gjgbw](https://drive.google.com/drive/my-drive)
- 10 Data Acquisition by Image Mass Cytometry: [dx.doi.org/10.17504/protocols.io.bf2ijqce](https://drive.google.com/drive/my-drive)
- 11 Compensation Slide Acquisition: [dx.doi.org/10.17504/protocols.io.bf2jjqcn](https://drive.google.com/drive/my-drive)



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