

MACSwell[™] Imaging Frames

Lab handout

This handout provides a good overview of the different disposables available for the MACSima[™] Instrument and how to put them together and set them up.



Typical parts of a MACSwell[™] Imaging Frame:

On the left, you can see an overview of the typical makeup and the typical parts of a MACSwell[™] Imaging Frame, exemplarily for the MACSwell[™] Four Imaging Frame.

From top to bottom, you will find here the lid, the frame containing the cavities (one to four depending on your MACSwell[™] Carrier), the sealing, the microscope slide that contains the organ slice(s) and finally the sliding frame that fixes the microscope slide in place.

* Sealing is fixed on the sliding frame ** Microscope slide (not included)

Figure 1: Parts of the MACSwell™ Imaging Frames

How to setup a MACSwell[™] Imaging Frame (step by step):



Figure 2: Setup of the MACSwell™ Imaging Frame.

Prerequisite: Prepare a microscope slide with a fixed slice or sample of choice. For positioning of the sample(s) on the microscope slide, refer to Figure 2.

- Open the casing and take out the MACSwell[™] Imaging Frame.
- 2. Remove the frame including the lid from the sliding frame by pushing it open (to the left / opposite side of what you see in Figure 2, B.2).
- 3. Turn the frame upside down. The sealing should be visible on top now.
- Place the microscope slide with your sample on the sealing with the sample orientated to the sealing ("upside down") (Figure 2, A.1).
- 5. Ensure that the sample is not placed underneath the sealing (Figure 2, A.2). Avoid fingerprints on the microscope slide and carefully move it around to avoid damage to the slice.
- 6. Place the sliding frame on the frame with the little hooks facing the frame. Start inserting the sliding hooks in the wider spots of the gaps, away from the logo (Figure 2, B.1). Make sure the sliding hooks are positioned correctly and all of them are clicking into the frame.
- Adjust the sliding frame in the direction of the logo (Figure 2, B.2).
- 8. Turn the MACSwell[™] Imaging Frames back up (Figure 2, C).
- Add the initial sample volume of MACSima[™] Running Buffer to each chamber
 - 1,900 µL using MACSwell™ One
 - 950 µL using MACSwell™ Two
 - 475 µL using MACSwell™ Four
- 10. Proceed with loading the MACSwell Imaging Frames into the MACSima Imaging System.

For more information and a more detailed overview of the MACSwell[™] Imaging Frames, please refer to the data sheets found here:

https://www.miltenyibiotec.com/products/macswell-imaging-frames.html