CMMC CENTER FOR MOLECULAR MEDICINE COLOGNE

Tissue Embedding and Histology Unit

Requirements and Protocols

Requirements

Tissue for paraffin embedding:
For optimal preservation of tissue morphology, the thickness of the tissue should be between 0.2 and 0.5 cm.
In preparation for the paraffin infiltration, we recommend to fix your sample and store them in 70% ethanol at 4-8°C. The fixation protocol depends on the tissue and subsequent analysis.

Tissue for frozen section
Here, we recommend not to fix the samples for cryo-sectioning. Place tissue in a mould and embed into a cryoprotectant (e.g. OCT) before snap freezing in liquid nitrogen.

Protocols:

Deparaffinisation and HE-stain:

After embedding and sectioning of your tissues we offer to stain your sections with Hämatoxylin-Eosin (H&E)

Our standard protocol for H&E or/and deparaffininisation:	
100% Xylol	10 min.
100% Xylol	10 min.
100% Ethanol	5 min.
100% Ethanol	5 min.
95% Ethanol	3 min.
70% Ethanol	3 min.
50% Ethanol	1 min.
H2O	short
dest. H2O	short

Hämatoxylin-Eosin staining :	
Hämalaun	1-3 min. (it depends on the freshness of the Hämalaun)
With tap water you have to blue	3-5 min. (it depends on the strength of the colour)
Dest. H2O	short
Eosin	short (maximum 10seconds, you have to dip the slides up and down)
70% Ethanol	dip the slides up and down twice
95% Ethanol	dip the slides up and down twice
100 % Isopropanol	dip the slides up and down twice
100 % Isopropanol	dip the slides up and down twice
Xylol	dip the slides up and down twice
Xylol	the Slides can stay here for a short time
Mount slides with Pertex	