

HISTOLOGY

12.3 Tissue Preparation

1. Prepare the set of marked tubes (supplied by Alpers Lab) containing:
 - a. Formalin (green top, with tube labeled “F”).
 - b. RNAlater (red top, with tube labeled “R”).
 - c. Proteomic/ Mass spec buffer (blue top, with tube labeled “M”).
 - d. Frozen tissue (clear top, with tube labeled “Z”).
2. Before sectioning the vein sample, determine its length in order to judge how to proceed:
 - a. If the vein sample is 5 mm or longer, the tissue will be divided into four equal pieces.
 - b. If the vein sample is less than 5 mm, divide the tissue into slices that are at least 1.25 mm thick.
 - If the vein sample is less than 2.5mm, place it in formalin (green).
 - If the vein sample is from 2.5 to 3.75 and you are only able to obtain two at least 1.25 mm segments, place one in formalin (green) and one in the RNAlater (red).
 - If the vein sample is from 3.75 to 4.9, and you are only able to obtain three at least 1.25 mm segments, place one in formalin (green), one in RNAlater (red) and the third in frozen tissue cryotube (clear).
 - If the vein sample is more than 5mm, the tissue will be divided into four equal pieces.
 - If the segments obtained are uneven in thickness, prioritize the samples in a similar way (i.e., place the thickest sample in formalin, second thickest in RNAlater, etc).

13. Summary

