

NOTE TO INVESTIGATORS CONSIDERING A LETTER OF INTENT FOR TMAs:

The tissue microarray sections, prepared through routine sectioning, are placed on positively charged glass slides. These “water bath” sections are at risk for misplaced or lost cores, as well as distortions in orientation and alignment. Additional tissue core loss may occur during the assay procedure, with the rate of loss depending on assay conditions used. Interpretation of TMAs is performed best by a pathologist, who is familiar with the nuances of the melanocytic lesions, immunohistochemistry and interpretation of tissue microarrays.

Recommendations for staining the TMAs include a deparaffinization protocol with a minimum of 3 x 5 min in fresh xylene or another de-waxing agent. **Microwave-mediated antigen retrieval should not be used.** Other harsh antigen retrieval conditions are likely to result in core loss. If you have any questions about antigen retrieval, including the conversion of microwave antigen retrieval protocols to other means of heat induced antigen retrieval, please contact Dr. Stephen Hewitt at genejock@helix.nih.gov The slides, stored under vacuum to prevent their oxidation, are shipped in vacuum-sealed containers. Do NOT open the package until you are ready to stain the slides.

Prior to shipment, all TMA sections are inspected by the TARP laboratory, and judged to be of acceptable quality. Please note that it is not unusual for some spots on the TMAs to be missing or not to contain the intended target tissue. These difficulties are inherent to the TMA construction process, and the nature of nevus and melanoma tissue specimens. They are not unique to NCI TMAs. Our quality control studies have indicated that missing or incorrect target tissue may occur with a frequency as high as 25-30%, depending on the depth at which the tissue sections were cut from a TMA block. The TMAs have been designed with these limitations in mind, and therefore, the number of cases present on the TMAs has been increased to account for the expected rate of unusable tissue cores.