SUBZERO-MATRIX TISSUE FREEZING MEDIUM

DESCRIPTION

SubZero-Matrix is a support matrix, or form, of embedding medium for fresh frozen tissue sectioning. This medium freezes quickly, supporting the tissue for section at 4µ and greater at temperatures of -8˚C to -25˚C. SubZero-Matrix is compatible with IHC procedures and does not cause autofluorescence.

PROCEDURE

Using Heat Extractor:

1. Obtain a specimen chuck and place a small amount of SubZero-Matrix on it.
2. Orient your specimen on the medium and place in cryochamber.
3. Quickly pour additional SubZero-Matrix medium until specimen is covered.
4. Apply heat extractor over chuck with specimen to expedite freezing.
5. After clear medium is observed as a white solid, lift heat extractor.
6. Specimen should be fully encompassed in the freezing medium matrix.
7. Allow several minutes for specimen matrix to acclimate to desired set cryostat temperature prior to cutting.
8. Select desired section thickness on cryostat then cut frozen specimen.
9. Apply sections to slides. When sectioning is complete, remove specimen block from chuck. Frozen specimen can be stored at temperatures below -8˚C (-18˚C to -80˚C recommended).
10. Follow staining procedures.
    Note: SubZero-Matrix does not cause autofluorescence and can easily be washed away during fixation when rinsed prior to staining. Once rinsed off the slide, there is no trace of the support matrix to interfere with staining or immunohistochemistry (IHC) reactions.

Using Peel-A-Way® Molds:

1. Use SubZero-Matrix can be used with Peel-A-Way® Molds to assist in the orientation of specimens.
2. Add a small amount of SubZero-Matrix in the bottom of the mold, then add the tissue with the primary side to be cut facing the bottom of the mold. Pour embedding medium in slowly, careful to not introduce bubbles. Since the molds are transparent, the specimen can be easily viewed to check the position. Add more SubZero-Matrix to the top of specimen to cover completely.
3. Freeze either on the quick-freeze stage of your cryostat, in liquid nitrogen, or in dry ice/2 methyl butane slurry.
4. After SubZero-Matrix embedding medium is solidified, simply peel away the sides of the mold to release the frozen block.
5. Maintain frozen block in temperatures less than -8˚C to prevent block from melting, causing potential freeze thaw artifact. Set cryostat to desired cutting temperature.
6. Attach the frozen specimen block on a chuck in the cryostat with a small amount of SubZero-Matrix embedding medium. Allow the embedding medium between the frozen block and the chuck to freeze completely.
7. Allow several minutes for block to acclimate to desired set cryostat temperature prior to cutting.
8. Select desired section thickness on cryostat then cut frozen specimen block.
9. Apply sections to slides. When sectioning is complete, remove specimen block from chuck. Frozen specimen block can be stored at temperatures below -8˚C (-18˚C to -80˚C recommended).
10. Follow staining procedures.
    Note: SubZero-Matrix does not cause autofluorescence and can easily be washed away during fixation when rinsed prior to staining. Once rinsed off the slide, there is no trace of the support matrix to interfere with staining or immunohistochemistry (IHC) reactions.

ORDERING INFORMATION

Cat. #	Description
7563	SubZero-Matrix

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