

# Plastic - Embedding

## MMA

### Lowicryl® MonoStep™ Single Component Embedding Media

Pre-mixed, ready to use MonoStep Lowicryl Embedding Media saves time and minimizes chemical contact. These products are ideal for use in Immunohistochemistry. They are based on our popular Lowicryl K4M and HM20 formulations for low temperature embedding or freeze substitution. MonoStep products are especially appropriate for immunolabeling, resulting in better preservation of antigenicity and lower background labeling.

#### MonoStep™ Lowicryl® K4M Polar Embedding Media

Cat. #23646

MonoStep™ Lowicryl® K4M is a polar, hydrophilic, embedding media that is based on our popular Lowicryl K4M formulations for applications requiring temperatures as low as -35°C. MonoStep products are especially appropriate for immunolabeling resulting in better preservation of antigenicity and lower background labeling compared to other methods.

**Contains:** 1 x 225g bottle



#### MonoStep™ Lowicryl® HM20 Non-polar Embedding Media

Cat. #23994

MonoStep™ Lowicryl® HM20 is a non-polar, hydrophobic, embedding media that is based on our popular Lowicryl HM20 formulations for use down to -70°C. MonoStep products are especially appropriate for immunolabeling resulting in improved preservation of antigenicity and lower background labeling.

**Contains:** 1 x 225g bottle



## Lowicryl® Embedding Kits

Lowicryl Embedding kits were developed in cooperation with the University of Basel, Switzerland. MonoStep K4M and MonoStep HM20 offer a convenient single bottle of material for Polar -35°C and Non-polar -70°C applications. Photopolymerization is by long wavelength (360nm) UV. Polymerization can take place at -70°C or at room temperature with UV light. Lowicryl gives enhanced preservation of protein molecules and membrane structures. It is a methacrylate based, UV curing resin. All kits are useful for freeze-substituted samples. Resins should be used at maximum temperature of -20°C to minimize disruption of proteins. Lowicryl embedments have been reported to have rougher surfaces than epoxy embedments yielding more antigen at the section surface. Metal stains with Lowicryl are superior to uranyl and lead combinations.

### Lowicryl® HM Kits

Lowicryl HM kits are non-polar and hydrophobic. They are used to produce high contrast images of completely unstained thin sections by Z-contrast. Also these HM kits are particularly suitable for dark field observation because of their relatively low density.

#### HM20 Non-polar, hydrophobic, -70°C Embedding Kit

Cat.#15924

**Kit Contains:**

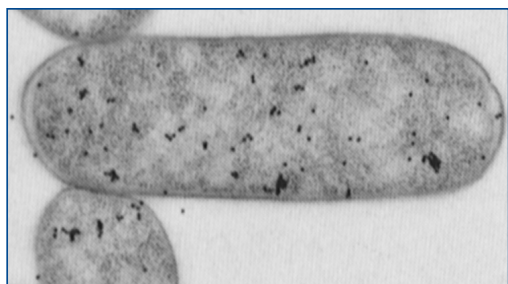
3x225gm of monomer E, 1x130gm of crosslinker D and  
1x4.8gm of initiator C

#### HM23 Non-polar, hydrophobic, -80°C Embedding Kit

Cat. #18162

**Kit Contains:**

3x225gm of monomer G, 1x40gm of crosslinker F  
1x3.7gm of initiator C and 1x5.5gm of initiator J



*Immunocytochemical labeling on thin sections of E.coli  
embedded in HM23 Resin*

### Lowicryl® K Kits

Lowicryl K kits are polar and therefore hydrophilic. During dehydration and infiltration specimens may be kept partially hydrated. Polymerization can occur with up to 5% water. Immunolabeling with polar kits result in better preservation of structure and antigenicity with lower background labeling.

#### K4M Polar Kit, hydrophilic, -35°C Embedding Kit

Cat. #15923

**Kit Contains:**

3x250gm of monomer B, 1x130gm of crosslinker A and  
1x4.8gm of initiator C

#### K11M Polar Kit, hydrophilic, -60°C Embedding Kit

Cat. #18163

**Kit Contains:**

3x250gm of monomer I, 1x40gm of crosslinker H and  
1x4.3gm of initiator C