

Alcian Blue Staining Kit Specifications and Instruction Quick Steps



Alcian Blue Staining Kit Components

Alcian Blue stains sulfated proteoglycans deposits that are indicative of functional chondrocytes and it is a useful tool when used with Lifeline’s mesenchymal stem cells and Lifeline’s ChondroLife™ Complete Chondrogenesis Medium. This kit contains fixative solution, sucrose stabilizer solution, Alcian Blue stain solution and acetic acid wash solution for staining sulfated proteoglycans deposited by chondrocytes.

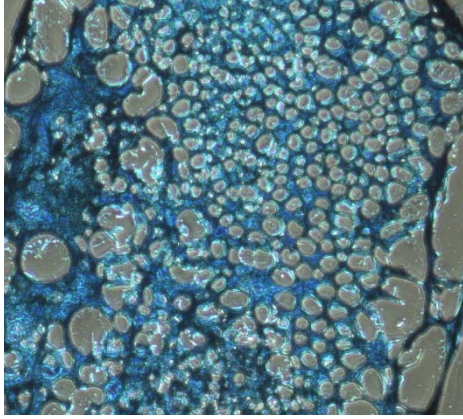
Safety Statement

These products are For Research Use Only. These products are not approved for human or veterinary use, or for use in *in vitro* diagnostics or clinical procedures. Please dispose of glutaraldehyde in accordance with local and federal regulations.

Product	Part No.	Volume	Storage	
Alcian Blue Staining Kit	LL-0051			
1.0 % Alcian Blue Stain Solution	CM-0052	100 mL	Room temp.	
4% Glutaraldehyde Fixative Solution	CM-0050	10 mL	2 - 8°C	
20% Sucrose Stabilizer	CM-0051	10 mL	Room temp.	
3% Acetic Acid Wash	CM-0053	100 mL	Room temp.	
Other Recommended Products	Part No.	Unit	Kit Components	Storage
Human Mesenchymal Stem Cells-Adult (HMSC-Ad)	FC-0034	10 ⁶ Cells	N/A	-150°C
StemLife™ MSC Medium Complete Kit	LL-0034	Kit	StemLife MSC Basal Medium; StemLife MSC LifeFactors® Kit	2-8°C when prepared
ChondroLife™ Complete Chondrogenesis Medium	LM-0022	100 mL	N/A	-20°C
Embedding Compound (such as OCT Compound), Absolute ethanol, Cryomolds, Dry ice/ethanol bath, Microtome, glass slides				

The Lifeline® Guarantee

Lifeline’s rigorous quality control ensures sterility and performance to standardized testing criteria. If Lifeline’s products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, Lifeline will provide lot-specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.



Lifeline's adult mesenchymal stem cells differentiated to chondrocytes and stained with Alcian Blue (100X).

Quick Steps for Fixation and Staining of Chondrogenic Microbeads for Sulfated Proteoglycan Deposits in 48-Well Plates

1. Always wear eye protection and gloves when working with staining reagents.
2. Remove medium completely from well(s).
3. Add 0.5 mL (48-well) 4% Glutaraldehyde Fixative Solution (CM-0050) and fix for 3 hours. Shield from light.
4. Remove fixative and add 0.5 mL of 20% Sucrose Stabilizer (CM-0051) per well.
5. Incubate overnight at room temperature.
6. Store at 4°C until ready to embed the Chondrogenic Microbeads in a material such as OCT (Optimal Cutting Temperature) Compound for slicing on a microtome or cryostat.
7. Transfer Chondrogenic Microbeads to a plastic cryomold.
8. Remove residual sucrose solution.
9. Layer OCT Compound over Chondrogenic Microbeads and allow the beads to settle to the bottom of the mold.
10. Snap freeze the cryomold in a dry ice/ethanol bath. Store at -80°C until ready to cut.
11. Cut 5 μ m sections from block and mount on glass slide.
12. Place slide in 3% Acetic Acid Wash (CM-0053) for 3 minutes.
13. Place in 1% Alcian Blue Stain Solution (CM-0052) for 30 minutes.
14. Wash in running tap water for 1 minute.
15. Dip briefly in alcohol to dehydrate and air dry.

For any question on cell handling, differentiation or staining, please contact technical service. We are here to help.

Call Lifeline Technical Service and Sales at [877.845.7787](tel:877.845.7787)
or visit lifelinecelltech.com for more information

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