

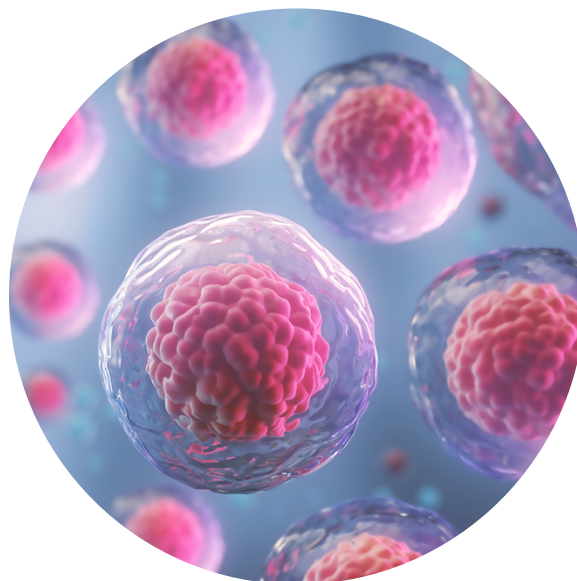
Specifications and
Instruction Quick Steps

Alcian Blue Staining Kit

LL-0051

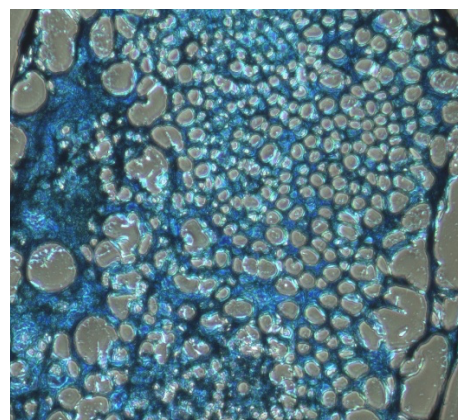


This product is for Research Use Only.
This product is not approved for human or
veterinary use or for use in in vitro
diagnostics or clinical procedures.



LIFELINE[®]
CELL TECHNOLOGY

Better Solutions for
Breakthrough Results



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

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 use and dispose of paraformaldehyde, and reagents in accordance with local and federal regulations.

The Lifeline Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. 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.

| Product | Part No. | Volume | Storage |
|---------------------------------------|-------------------------|--------|------------|
| Alcian Blue Staining Kit | LL-0051 | | |
| 20% Sucrose Stabilizer | CM-0051 | 10 mL | Room temp. |
| 1% Alcian Blue Stain Solution | CM-0052 | 100 mL | Room temp. |
| 3% Acetic Acid Wash | CM-0053 | 100 mL | Room temp. |
| 4% Paraformaldehyde Fixative Solution | CM-0055 | 100 mL | -20°C |



Call Lifeline Technical Service and Sales at 877.845.7787

Or visit lifelinecelltech.com for more information

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Additional Materials Recommended but Not Provided by Lifeline Cell Technology

- Embedding compound (such as OCT™ Compound)
- Cryomolds
- Microtome
- Absolute ethanol
- Dry ice/isopropanol bath
- Glass slides

(OTC is a trademark of Tissue-Tek®, Andwin Scientific)

Quick Steps for Fixation and Staining of Sulfated Proteoglycan Deposits in Chondrogenic Microbeads (Cultured in a 48-Well Plate Format)

1. **Always wash hands before and after working with cell cultures.**
2. **Always wear eye protection and gloves when working with cell cultures.**
3. **When working with cells or medium, always use a certified biological safety cabinet.**
4. **Use 4% Paraformaldehyde Fixative Solution in a chemical fume hood.**
5. Remove medium completely from well(s).
6. Add 0.5 mL 4% Paraformaldehyde Fixative Solution (CM-0055) per well.
7. Fix Microbeads for 3 hours at Room Temperature. Shield from light.
8. Remove fixative and add 0.5 mL of 20% Sucrose Stabilizer (CM-0051) per well.
9. Incubate overnight at room temperature. Shield from light.
10. Transfer Chondrogenic Microbeads to a plastic cryomold to embed them in a suitable material (such as OCT™ Compound, or equivalent) for slicing on a microtome or cryostat.
11. Remove residual sucrose solution.
12. Gently layer the embedding material over the Chondrogenic Microbeads so as to maintain separation of the individual Microbeads and maintain their location towards the bottom of the cryomold.
13. Snap freeze the cryomold in a dry ice/isopropanol bath. Store at -80°C until ready to cut.
14. Cut 5 µm sections from block and mount on glass slide.
15. Place slide in 3% Acetic Acid Wash (CM-0053) for 3 minutes.
16. Place in 1% Alcian Blue Stain Solution (CM-0052) for 30 minutes.
17. Wash in running tap water for 1 minute.
18. Dip briefly in absolute ethanol to dehydrate and air dry.
19. Staining is complete.



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For any question on cell staining, please contact technical service at 877.845.7787. We are here to help.

| Other Recommended Products | Part No. | Unit | Components | Storage |
|---|-------------------------|-----------------------------|--|----------------------|
| Human Mesenchymal Stem Cells-Wharton's Jelly (HMSC-WJ) | FC-0020 | 0.5 x 10 ⁶ Cells | | -150°C |
| Human Mesenchymal Stem Cells-Adipose (HMSC-Ad) | FC-0034 | 10 ⁶ Cells | | -150°C |
| StemLife™ MSC Medium Complete Kit | LL-0034 | Kit | StemLife Basal Medium StemLife MSC LifeFactors™ Kit | 2-8°C when prepared |
| Human Mesenchymal Stem Cells-Bone Marrow (HMSC-BM) | FC-0057 | 10 ⁶ Cells | | -150°C |
| StemLife MSC-BM Medium Complete Kit | LL-0062 | Kit | StemLife Basal Medium StemLife MSC-BM LifeFactors Kit | 2-8°C when prepared |
| Human Pre-Adipocytes, Adult (HMSC-Pre-Adipocyte) | FC-0062 | 10 ⁶ Cells | | -150°C |
| FibroLife™ S2 Medium Complete Kit | LL-0011 | Kit | FibroLife Basal Medium FibroLife S2 LifeFactors Kit | 2-8°C when prepared |
| ChondroLife™ Complete Chondrogenesis Medium | LM-0022 | 100 mL | | -20°C |
| TrypKit™ | LL-0013 | Kit | PBS 0.05% Trypsin/0.02% EDTA Trypsin Neutralizing Solution | RT -20°C -20°C |
| Optional Supplements | Part No. | Volume | Concentrations of Supplement | Storage |
| Phenol Red Supplement | LS-1009 | 1 mL | 33 mM | RT |
| Antimicrobial Supplement: Gentamicin and Amphotericin B (Provided with purchase of LL-0011, LL-0034, or LL-0062) | LS-1104 | 0.5 mL | Gentamicin 30 mg/mL Amphotericin B 15 µg/mL | -20°C |



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