

# DermACELL®



## A Step Ahead...

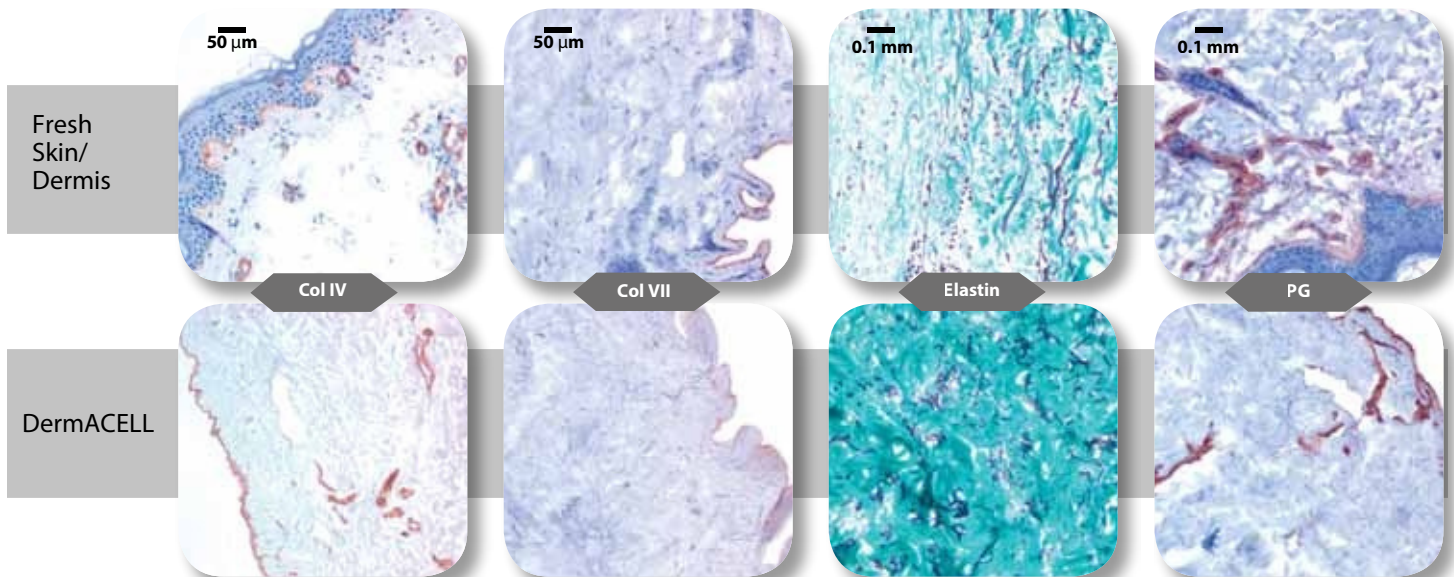
Advanced Decellularised Dermis for Diabetic Foot Ulcers and Chronic Wounds

### A STEP AHEAD...

DermACELL® is a technologically advanced Acellular Dermal Matrix (ADM) that is used to treat diabetic foot ulcers and chronic nonhealing wounds. Created from donated human tissue, it goes through a validated and patented process called MATRACELL™, which renders the DermACELL® graft acellular, without compromising the biomechanical or desired biochemical properties of the graft. This process is gentle, yet robust enough to ensure the native scaffold, vascular channels, growth factors, and proteins are preserved to assist in the healing of the wound.



### PRESERVED PROTEINS



Histology staining shows that MATRACELL processed fresh skin/dermis preserves collagen, elastin and proteoglycans within the matrix. (Images on file at LifeNet Health)



for



This patented and validated process renders allograft bio-implants acellular, without compromising the biomechanical or desired biochemical properties of an allograft bio-implant for its intended surgical application.

- Short processing time reduces the opportunity for water-mediated lysis of the natural collagen and elastin scaffold
- Utilises multiple disinfecting agents to provide for comprehensive tissue disinfection
- Does not utilise any animal-derived reagents
- Validated to ensure consistent and reproducible decellularisation

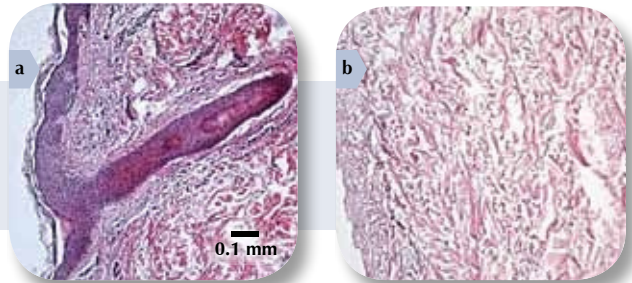
# FEATURES AND BENEFITS

Quick preparation time	• Ready to use
Room temperature storage	• Off the shelf convenience
Sterile (10 <sup>-6</sup> Sterility Assurance Level)	• Terminal sterilization for patient safety
Biocompatible	• >97% DNA removal rendering the graft acellular
Intact acellular framework	• Retains native growth factors, proteoglycans, hyaluronic acid, collagen, fibronectin and elastin
No animal by-products	• Patient safety

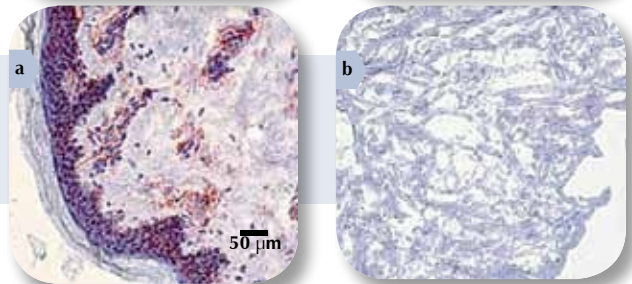
# SAFETY

MATRACELL™ effectively removes donor DNA from the dermal matrix, ensuring a biocompatible scaffold to facilitate repair.

**Figure 1:** Human skin pre (a) and post (b) decellularization (Hematoxylin and Eosin staining) *Decellularization is evidenced by lack of blue nuclei in panel (b).*



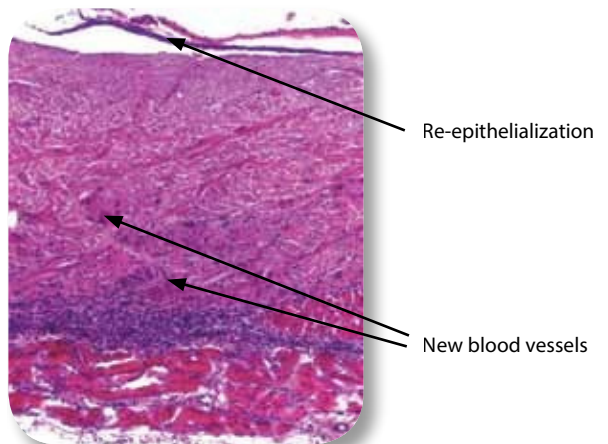
**Figure 2:** Human skin pre (a) and post (b) decellularization (Major Histocompatibility Complex 1 staining) *Decellularization is evidenced by lack of red brick staining in panel (b).*



(Histology images on file at LifeNet Health)

# PERFORMANCE

DermACELL® was tested using a nude mouse skin excisional model. In this study, a portion of skin was excised from the back of a nude mouse and replaced with human DermACELL® and covered with a dressing. After 16 days, the material was removed and examined histologically. The biocompatibility of the matrix is demonstrated in the image to the right by in-growth of new blood vessels, as well as the appearance of a new cellular layer on the surface of the graft.



Nude mouse explant. Sixteen days post-op. H & E staining.

Item No.	Item Description
DCELL100	DermACELL®: 2 x 2cm (thickness 0.2-1.0mm)
DCELL101	DermACELL®: 4 x 4cm (thickness 0.2-1.0mm)
DCELL104	DermACELL®: 4 x 8cm (thickness 0.2-1.0mm)
DCELL102	DermACELL®: 5 x 7cm (thickness 0.2-1.0mm)
DCELL103	DermACELL®: 6 x 7cm (thickness 0.2-1.0mm)
DCELL112	DermACELL®: 4 x 4cm (thickness 0.5-1.0mm)
DCELL155	DermACELL®: 5 x 9cm (thickness 0.5-1.0mm)
DCELL154	DermACELL®: Meshed 4 x 8cm (thickness 0.2-1.0mm)
DCELL152	DermACELL®: Meshed 5 x 7cm (thickness 0.2-1.0mm)
DCELL153	DermACELL®: Meshed 6 x 7cm (thickness 0.2-1.0mm)
DCELL200	DermACELL®: 4 x 12cm (thickness 0.75-1.5mm)
DCELL201	DermACELL®: 6 x 12cm (thickness 0.75-1.5mm)
DCELL202	DermACELL®: 4 x 16cm (thickness 0.75-1.5mm)
DCELL203	DermACELL®: 5 x 16cm (thickness 0.75-1.5mm)
DCELL204	DermACELL®: 6 x 16cm (thickness 0.75-1.5mm)
DCELL205	DermACELL®: 8 x 16cm (thickness 0.75-1.5mm)
DCELL250	DermACELL®: 4 x 12cm (thickness 1.25-2.0mm)
DCELL251	DermACELL®: 6 x 12cm (thickness 1.25-2.0mm)
DCELL252	DermACELL®: 4 x 16cm (thickness 1.25-2.0mm)
DCELL253	DermACELL®: 5 x 16cm (thickness 1.25-2.0mm)
DCELL254	DermACELL®: 6 x 16cm (thickness 1.25-2.0mm)
DCELL255	DermACELL®: 8 x 16cm (thickness 1.25-2.0mm)
DCELL256	DermACELL®: 8 x 20cm (thickness 1.25-2.0mm)

Speak to your local Business Development Manager for further information or contact us using the details below:

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