S P I N E A R T



S U B S T A N C E <sup>T M</sup> B I O L O G I C S
S U B S T A N C E <sup>T M</sup> M A T R I X



SUBSTANCE™ MATRIX offers healthcare professionals a superior, biologically active bone grafting material. Its pure and potent bone growth factors ensure optimal clinical outcomes, enhancing patient recovery and success rates across various surgical procedures. The exceptional quality and efficacy of SUBSTANCE™ MATRIX make it an essential tool for advancing bone regeneration in orthopedic and spinal surgeries.

## SUBSTANCE™ MATRIX

SUBSTANCE™ MATRIX is meticulously engineered from 100% processed cortical bone fibers, representing the pinnacle of bone grafting technology. The absence of carriers ensures that the matrix delivers pure, unadulterated native bone growth proteins and growth factors, optimizing the biological environment for bone regeneration and healing.

This carrier-free composition is fundamental to the product's efficacy, as it preserves the integrity and activity of the bone growth proteins and growth factors. These critical components play a vital role in stimulating osteogenesis by promoting the differentiation of mesenchymal stem cells into osteoblasts—the cells responsible for new bone formation. The result is a matrix that supports robust and rapid bone tissue development.

SUBSTANCE™ MATRIX leverages the body's natural healing processes, creating an optimal environment for bone repair. Its unique formulation ensures that the essential proteins and growth factors are readily available to the host tissue, facilitating efficient integration and bone formation. This is particularly advantageous in complex surgical procedures such as spinal fusion, fracture repair, and other orthopedic interventions where successful bone regeneration is paramount.

The advanced processing techniques used to create SUBSTANCE™ MATRIX ensure that each lot maintains consistent quality and performance. Rigorous testing confirms the osteoinductive potential of every batch, providing clinicians with confidence in the product's ability to promote effective bone healing.

# SUBSTANCE™ MATRIX

### VERSATILITY OF HANDLING

SUBSTANCE™ MATRIX is designed for rapid hydration, allowing it to be quickly prepared for immediate implantation during surgical procedures. This feature ensures that the product is ready for use without any delays, providing convenience and efficiency in the operating room. Once hydrated, SUBSTANCE™ MATRIX can be placed directly into the fusion site. This straightforward application process facilitates seamless integration with the patient's existing bone, promoting effective and rapid bone regeneration.

# VERIFIED OSTEOINDUCTIVE AND OSTEOCUNDUCTIVE POTENTIAL

The tissue in SUBSTANCE™ MATRIX undergoes a proprietary process that exposes naturally occurring osteoinductive proteins and growth factors. This advanced technique ensures the essential components for bone growth and regeneration are fully available, maximizing the matrix's effectiveness in promoting new bone formation and supporting the body's natural healing processes.

### SOURCE

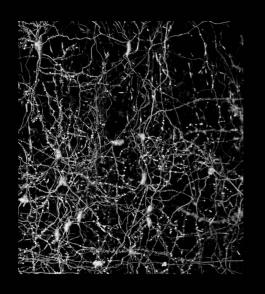
SUBSTANCE™ MATRIX is ethically sourced from human donors through AATB-accredited tissue banks, guaranteeing the highest standards of quality and ethical practices.

#### RESORPTION

The product's resorption rate is meticulously engineered to coincide with new bone formation, ensuring consistent support for bone growth without premature degradation.

### **SAFETY**

The highest safety standards are ensured through stringent safeguards, including rigorous quality control and terminal sterilization via gamma irradiation. These measures guarantee the product's sterility and safety for patient use.



# SUBSTANCE™ MATRIX

SUBSTANCE™ MATRIX is composed entirely of 100% proprietary processed cortical bone. Free from any carriers, this engineered matrix delivers pure native bone growth proteins and growth factors, creating an optimal environment for bone regeneration. This innovative formulation maximizes biological activity, enhancing bone repair and supporting superior patient outcomes across a variety of clinical applications.

# SUBSTANCE™ MATRIX

SUBSTANCE™ MATRIX, FIBER 10cc	SBF-01 00-S
SUBSTANCE™ MATRIX, FIBER 5cc	SBF-00 50-S
SUBSTANCE™ MATRIX, FIBER 2.5cc	SBF-00 25-S

