

Curi Bio

3D Skeletal Muscle Metabolic Media



Fueling Functional Performance and
Metabolic Maturity in 3D Muscle Tissues



Precision Media for Translational Metabolic Research

Purpose-Built for 3D Engineered Muscle Tissues

Differentiation Formula

- Days 0–10
- 250 mL

Maintenance Formula

- Days 10+
- 250 mL

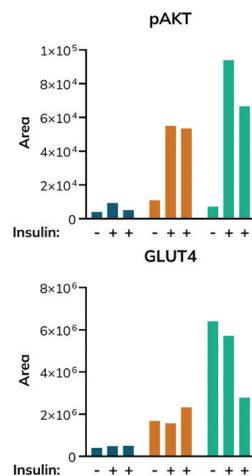
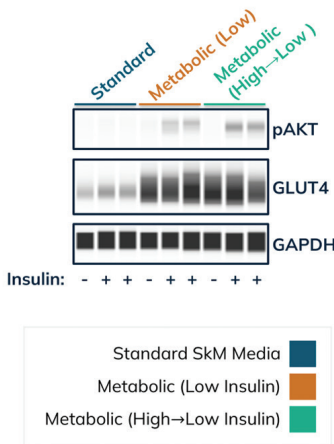
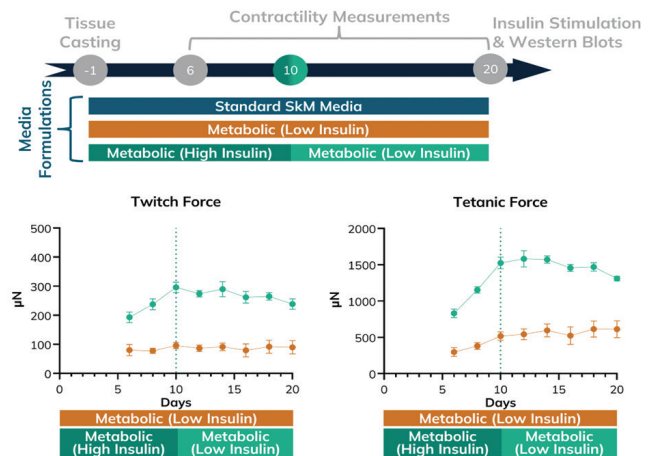
Insulin-Free Formula

- All days
- 250 mL



Sustained Contractile Strength

Culturing EMTs in Metabolic Media with a high-to-low insulin switch at Day 10 drives elevated contractile force, enabling longitudinal metabolic profiling and sustained, predictive data collection. This enhanced physiological relevance ensures models accurately recapitulate the complex metabolic transitions seen in chronic human disease states.



Improved Insulin Sensitivity

Metabolic Media drives pAKT and GLUT4 upregulation, establishing the signaling architecture and machinery 3D muscle models need for accurate metabolic responses. This transition from unregulated basal transport to dynamic insulin response positions models to deliver high-fidelity data for advanced metabolic research.

Validated Tissue Energetics

Tissues exhibit robust insulin stimulated 2-DG uptake via GLUT4 translocation, confirming the activation of the insulin signaling cascade. This ensures experiments measure physiological response rather than baseline survival, providing confidence when screening targeted metabolic therapeutics.

