

## Sourcing, growing, and differentiating human skeletal muscle cells.

AMSBIO offers a wide range of products to support skeletal muscle cell culture enabling you to streamline your modelling process *in vitro*.

#### **Skeletal muscle**

accounts for 30-40% of the weight in a healthy individual. However, it is also a key site for insulinstimulated glucose disposal and often where insulin resistance in obesity arises. Human primary cultured skeletal myoblasts can directly reflect a patient's metabolic phenotype because many of the signaling pathways are maintained intact. Therefore, modelling human skeletal muscle *in vitro* is a vital research need to better understand muscle function and for preclinical investigations into musclerelated diseases and drug discovery.



Image captions: A: Human skeletal myotubes in culture.

## AMSBIO has established

a comprehensive portfolio of human primary skeletal myoblasts from a variety of male and female donors, including obese donors with Type 2 diabetes. Large lots of pooled cells are available for screening approaches and to decrease issues with patient-to-patient variability. Supplied cryopreserved and ready-to-use – AMSBIO offers skeletal muscle myoblasts and iPSC cell lines for differentiation to mature myotubes for modelling *in vitro*.

## For skeletal muscle culture

– AMSBIO has formulated a range of top-quality induction and maturation media optimized for the various stages of skeletal muscle growth. For long term maintenance of mature cells – a new skeletal muscle cell growth medium is now available.

## A range of differentiation kits

to direct iPSCs to form highly pure populations of mature skeletal muscle cells is also available. The Skeletal Muscle Differentiation kit enables researchers to differentiate human pluripotent stem cells using a simple 3-step process of media changes and cell passaging without the need for transfection.



To learn more about these exciting skeletal muscle cell culture products please visit <u>Skeletal Muscle</u> <u>AMSBIO</u> or contact AMSBIO on +31-72-8080244 / +44-1235-828200 / +1-617-945-5033 / info@amsbio.com.



**Image captions**: B: Skeletal muscle precursor cells (stage II and III) produced with the Skeletal Muscle Differentiation Kit (courtesy: Douglas Smith - Doles Lab).

## AMS Biotechnology (AMSBIO

Founded in 1987, AMS Biotechnology (AMSBIO) is recognized today as a leading transatlantic company contributing to the acceleration of discovery through the provision of cutting-edge life science technology, products, and services for R&D in the medical, nutrition, cosmetics, and energy industries. AMSBIO has in-depth expertise in extracellular matrices to provide elegant solutions for studying cell motility, migration, invasion, and proliferation. This expertise in cell culture and the ECM allows AMSBIO to partner with clients in tailoring cell systems to enhance organoid and spheroid screening outcomes using a variety of 3D culture systems, including organ-on-a-chip microfluidics. For drug discovery research, AMSBIO offers assays, recombinant proteins, and cell lines. Drawing upon a huge and comprehensive biorepository, AMSBIO is widely recognized as a leading provider of high-quality tissue specimens (including custom procurement) from both human and animal tissues. The company provides unique clinical grade products for stem cells and cell therapy applications. This includes GMP cryopreservation technology, and high-quality solutions for viral delivery.

# Worldwide HQ

#### AMS Biotechnology (AMSBIO)

184 Milton Park Abingdon Oxon OX14 4SE UK Tel: +44-1235-828200 Fax: +44-1235-820482



Email: info@amsbio.com Web www.amsbio.com