

Cell-permeable small molecules for regenerative medicine and cancer research

AMSBIO offers a wide range of small molecules

to provide scientists with targeted tools to direct cell fates, making them crucial in areas including regenerative medicine and cancer research.



Small molecules

are cell-permeable organic compounds with low molecular weights, which are chemically produced, in contrast to larger molecules such as proteins which are often produced via biological means. Small molecules are crucial components of an affordable cell culture toolkit that can be used to maintain, reprogram, and differentiate cells.

Typically, small molecules

are cost-effective: rapid and convenient to manufacture with a high level of purity and low batch to batch variation, ensuring consistent activity and reproducible results. Producing larger molecules by biological means such as using viral vectors has the potential to introduce unwanted genetic material. By comparison animal-free small molecules are inherently safe, eliminating this possibility.

Used as tools

to manipulate cell fates via the targeting of signaling pathways, small molecules are increasingly being cited in regenerative medicine research: to direct cells down a certain developmental pathway to a desired cell type, to reprogram somatic cells into pluripotent cells and to maintain cells in culture. In cancer research, a wide range of small molecules are being used in targeted cancer therapy, to target the specific genes and proteins in cancer cells that enable them to survive and grow.

AMSBIO offer

an extensive portfolio of high purity small molecules ranging from A83-01, Cyclopamine and Forskolin right through to XAV1938 and Y27632, which can be used to target a variety of signaling pathways, with numerous applications in regenerative medicine and cancer research. For further information please visit <https://www.amsbio.com/small-molecules/> or contact AMSBIO on +31-72-8080244 / +44-1235-828200 / +1-617-945-5033 / info@amsbio.com.



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 research and development 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 cell 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