GMP Small Molecules for Stem Cell Therapy

TOCRIS a bio-techne brand

GMP Compounds for Stem Cell Therapy Coming Soon!

Tocris Bioscience is your trusted and exclusive supplier of GMP small molecules for stem cell therapy development. Our highly qualified team has full control over the GMP manufacturing process, ensuring a quality assured manufacturing system, guaranteed batch-to-batch consistency, and traceability from starting materials to final product. Partner with the market leader for stem cell compounds today, and let Tocris help you develop the next stem cell therapy.

GMP Compound Key Features

Our highly qualified team has full control over the GMP process, following the relevant ICH guidelines, meaning we can ensure:

- A quality assured manufacturing system
- Guaranteed batch-to-batch consistency
- Traceability from starting materials to final product
- Bioburden and endotoxin tested compounds
- Animal-free production
- Consistency of supply from a trusted supplier

Is it time to go GMP?

If you are working on the development of stem cell therapies and require complete transparent control of your ancillary materials, is it time to use GMP small molecules?

Reduce the risk associated with changing to GMP at a later stage and enable easy transition from research to clinical application by using GMP small molecules in your research.

GMP Compounds Coming Soon

CHIR 99021

GSK-3 Inhibitor; WNT Pathway Activator

Enables reprogramming of embryonic fibroblasts into iPSCs

SB 431542

TGF-β1, ALK4 and ALK7 Inhibitor

Replaces SOX2 in reprogramming of fibroblasts to iPSCs

DAPT

γ-Secretase Inhibitor; NOTCH Pathway Inhibitor

Causes stem cells to commit to neuronal differentiation

Y-27632

Selective ROCK Inhibitor

Increases survival of ESCs and iPSCs undergoing cryopreservation

Find out more!

To find out more or to place your pre-order, please contact Paul.Dougall@bio-techne.com

For a complete list of available products, please visit **tocris.com**

Five Reasons to use Small Molecules in Stem Cell Research

- **Small molecules are cost effective, quick and convenient:** Compared to exogenous gene expression methods, small molecules are extremely cost effective, act within hours and can reduce the time associated with reprogramming and differentiation.

- **Small molecules are chemically synthesized to the highest quality:** Their chemical production ensures small molecules have a high level of purity and low batch-to-batch variation, compared to biologically produced materials. Our small molecules are typically over 98% pure by HPLC, with extended QC testing performed.

- **Small molecules are cell-permeable and tunable:** Small molecules can target intracellular signaling pathways and have concentration-dependent actions, so can be used in multiple protocols with different outcomes.

- **Small molecules have good temporal control:** The effects of small molecules are rapid and reversible and so can target a protein (or mutiple proteins) with high temporal control.

- **Small molecules are safe:** Exogenous gene expression with viral vectors has the potential to introduce unwanted genetic material, but small molecules are devoid of this problem.

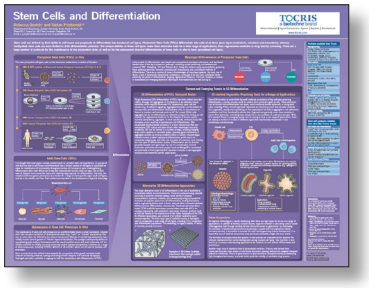
Stem Cell Resources from Tocris

Tocris provides a wide range of scientific literature, including the following titles for stem cells:

Literature Review

This review summarizes the use of small molecules in controlling stem cell growth and differentiation. Key signaling pathways are highlighted, and the regulation of ESC self-renewal and somatic cell reprogramming is discussed. Research grade compounds available from Tocris are listed.

Scientific Poster



Written by R.Quelch and S.Przyborski of Durham University, this poster describes the isolation of PSCs, their culture, differentiation and the generation and uses of organoids. Research grade compounds available from Tocris are listed.

Stem Cell Protocols

Stem cell protocol snapshots highlight how Tocris small molecules can be used in cell culture, reprogramming and differentiation. For more information visit www.tocris.com/resources/protocols

For a complete selection of Tocris literature please visit www.tocris.com/literature

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