

Small Molecules and Cytokines for Naïve Stem Cell Culture

REPROCELL's Stemgent™ Stemolecule™ and Stemfactor™ portfolios contain necessary small molecules to support many popular protocols for conversion to and maintenance of human naïve stem cells. The compounds and cytokines are part of REPROCELL's extensive collection of biotools to support stem cell research. Each lot of these biotools is stem cell tested to verify absence of toxicity.

Stemgent Stemolecule Small Molecules

	Jaenisch ¹	Hanna ²	Smith ³	Flynn (Fate) ⁴	Ware Baker ⁵	Chan ⁶	Heindryckx ⁷
GSK3bi	IM-12 Cat. No. 04-0081 (CHIR99021)	CHIR99021 Cat. No. 04-0004	CHIR99021 Cat. No. 04-0004	CHIR99021 Cat. No. 04-0004	CHIR99021 Cat. No. 04-0004	BIO Cat. No. 04-0003	CHIR99021 Cat. No. 04-0004
MEKi	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006	PD0325901 Cat. No. 04-0006
JNKi		SP600125					
PKCi		Go6983	Go6983				
ROCKi	Y-27632 Cat. No. 04-0012	Y-27632 Cat. No. 04-0012	Y-27632 Cat. No. 04-0012	Thiazovivin Cat. No. 04-0017			Y-27632 Cat. No. 04-0012
SRCi	WH-4-023 Cat. No. 04-0079						
BRAFi	SB590885 Cat. No. 04-0080				SAHA (Vorinostat), Sodium Butyrate Cat. No. 04-0005		Ascorbic Acid
HDACi							
BMP						Dorsomorphin Cat. No. 04-0024	
P38i		SB202190					
BIRB796							
FGFRi			PD173074 Cat. No. 04-0008				
PKA/cAMP a							Forskolin Cat. No. 04-0025

Stemgent Stemfactor Cytokines and Growth Factors

	Jaenisch ¹	Hanna ²	Smith ³	Flynn (Fate) ⁴	Ware Baker ⁵	Chan ⁶	Heindryckx ⁷
LIF	Cat. No. 03-0016	Cat. No. 03-0016	Cat. No. 03-0016	Cat. No. 03-0016		Cat. No. 03-0016	Cat. No. 03-0016
Activin A	Cat. No. 03-0001						
FGF		Cat. No. 03-0002		Cat. No. 03-0002	Cat. No. 03-0002		Cat. No. 03-0002
TGF-β1		✓					

References

- Theunissen T *et al.* "Systematic Identification of Culture Conditions for Induction and Maintenance of Naive Human Pluripotency". *Cell Stem Cell* 15:471 (2014).
- Gafni O *et al.* "Derivation of novel human ground state naive pluripotent stem cells". *Nature* 504:282 (2013).
- Takashima Y *et al.* "Resetting Transcription Factor Control Circuitry toward Ground-State Pluripotency in Human". *Cell* 158:1254 (2014).
- Valamehr B *et al.* "Platform for Induction and Maintenance of Transgene-free hiPSCs Resembling Ground State Pluripotent Stem Cells". *Stem Cell Rep* 2:366 (2014).
- Ware CB *et al.* "Derivation of naive human embryonic stem cells". *Proc Natl Acad Sci* 111:4484 (2014).
- Chan Y-S *et al.* "Induction of a Human Pluripotent State with Distinct Regulatory Circuitry that Resembles Preimplantation Epiblast". *Cell Stem Cell* 12:663 (2013).
- Duggal G *et al.* "Alternative Routes to Induce Naïve Pluripotency in Human Embryonic Stem Cells". *Stem Cells* 22:2686 (2015).