



This week in techniques

Long-term monolayer culture protocol of human stem cells using human recombinant laminin-511 A protocol for culturing monolayers of human stem cells using laminin-511 could help generate a variety of stem cell-based therapies. Unlike standard stem cell use of laminin-511 for stem cell use of laminin-511 for stem cell use of laminin-511 for stem cell use of laminin-511 animal proteins or feeder cell lines. In the presence of laminin-511, 3 human embryonic stem cell (hESC) lines proliferated and maintained their self-renewal capacity through at least 20 passages or 4 months. In mice, a graft of the resulting hESCs led to formation of teratomas containing cells derived from all three embryonic germ tissue layers, confirming that the new protocol increased the differentiation gaminin isoforms in differentiation pathways for human stem cells. SciBX 3(23); doi:10.1038/scibx.2010.716	Approach	Summary	Licensing status	Publication and contact information
culture protocol of human stem cells using human recombinant laminin-511 generate a variety of stem cell-based therapies. Unlike standard stem cell generation protocols, the new protocol does not require potentially immunogenic animal proteins or feeder cell lines. In the presence of laminin-511, 3 human embryonic stem cell (hESC) lines proliferated and maintained their self-renewal capacity through at least 20 passages or 4 months. In mice, a graft of the resulting hESCs led to formation of teratomas containing cells derived from all three embryonic germ tissue layers, confirming that the new protocol increased the differentiation capacity of the hESCs. Next steps include evaluating the use of the other 14 human laminin isoforms in differentiation pathways for human stem cells. SciBX 3(23); doi:10.1038/scibx.2010.716	Drug platforms			
	culture protocol of human stem cells using human	help generate a variety of stem cell-based therapies. Unlike standard stem cell generation protocols, the new protocol does not require potentially immunogenic animal proteins or feeder cell lines. In the presence of laminin-511, 3 human embryonic stem cell (hESC) lines proliferated and maintained their self-renewal capacity through at least 20 passages or 4 months. In mice, a graft of the resulting hESCs led to formation of teratomas containing cells derived from all three embryonic germ tissue layers, confirming that the new protocol increased the differentiation capacity of the hESCs. Next steps include evaluating the use of the other 14 human laminin isoforms in differentiation pathways for human stem cells.	use of laminin-511 for stem cell applications covered by patents assigned to BioLamina AB; licensing enquiries should be directed to	published online May 30, 2010; doi:10.1038/nbt.1620 Contact: Karl Tryggvason, Karolinska Institute, Stockholm, Sweden e-mail: