



# Scaffolds for controlled release of cartilage growth factors

Submitted by Marie-Claire Venier on Tue, 06/07/2016 - 12:05

Titre	Scaffolds for controlled release of cartilage growth factors
Type de publication	Article de revue
Auteur	Morille, Marie [1], Venier-Julienne, Marie-Claire [2], Montero-Menei, Claudia [3]
Pays	Etats-Unis
Editeur	Springer
Ville	New York
Type	Article scientifique dans une revue à comité de lecture
Année	2015
Langue	Anglais
Pagination	171-180
Volume	1340
Titre de la revue	Methods in molecular biology
ISSN	1064-3745
Mots-clés	Chondrogenic differentiation [4], Mesenchymal Stem Cells [5], Pharmacologically active microcarriers [6], Protein encapsulation [7], Transforming growth factor [8]  In recent years, cell-based therapies using adult stem cells have attracted considerable interest in regenerative medicine. A tissue-engineered construct for cartilage repair should provide a support for the cell and allow sustained in situ delivery of bioactive factors capable of inducing cell differentiation into chondrocytes. Pharmacologically active microcarriers (PAMs), made of biodegradable and biocompatible poly (d,L-lactide-co-glycolide acid) (PLGA), are a unique system which combines these properties in an adaptable and simple microdevice. This device relies on nanoprecipitation of proteins encapsulated in polymeric microspheres with a solid in oil in water emulsion-solvent evaporation process, and their subsequent coating with extracellular matrix protein molecules. Here, we describe their preparation process, and some of their characterization methods for an application in cartilage tissue engineering.
Résumé en anglais	<p>URL de la notice</p> <p><a href="http://okina.univ-angers.fr/publications/ua14680">http://okina.univ-angers.fr/publications/ua14680</a> [9]</p> <p>DOI</p> <p>10.1007/978-1-4939-2938-2_12 [10]</p> <p>Lien vers le document</p> <p><a href="http://link.springer.com/protocol/10.1007/978-1-4939-2938-2_12">http://link.springer.com/protocol/10.1007/978-1-4939-2938-2_12</a> [11]</p>

---

## Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=5843](http://okina.univ-angers.fr/publications?f[author]=5843)
- [2] <http://okina.univ-angers.fr/ma.venier/publications>
- [3] <http://okina.univ-angers.fr/c.menei/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[keyword\]=21064](http://okina.univ-angers.fr/publications?f[keyword]=21064)
- [5] [http://okina.univ-angers.fr/publications?f\[keyword\]=7989](http://okina.univ-angers.fr/publications?f[keyword]=7989)

- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=8395](http://okina.univ-angers.fr/publications?f[keyword]=8395)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=10753](http://okina.univ-angers.fr/publications?f[keyword]=10753)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=21063](http://okina.univ-angers.fr/publications?f[keyword]=21063)
- [9] <http://okina.univ-angers.fr/publications/ua14680>
- [10] [http://dx.doi.org/10.1007/978-1-4939-2938-2\\_12](http://dx.doi.org/10.1007/978-1-4939-2938-2_12)
- [11] [http://link.springer.com/protocol/10.1007/978-1-4939-2938-2\\_12](http://link.springer.com/protocol/10.1007/978-1-4939-2938-2_12)

Publié sur *Okina* (<http://okina.univ-angers.fr>)