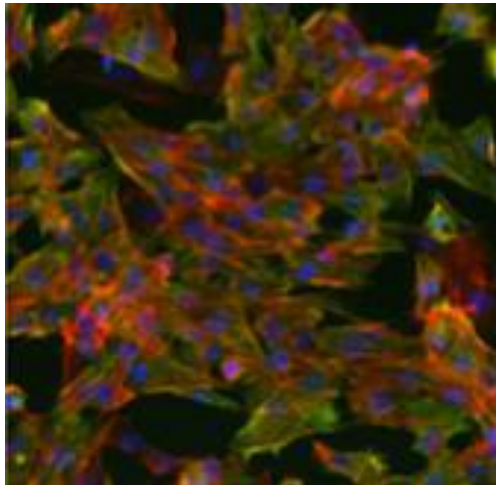




# Recovery and seeding of cardiomyocytes derived from human IPS cells



Legend: Cardiomyocytes after seeding (95% of purity)  
(Actin / alpha-Actinin / Hoetsch 33342)

## MARKET CHALLENGES

Currently, there are many companies that develop or sell cardiomyocytes derived from human induced pluripotent stem cells. Those cells are mature and need to be frozen or thawed to be conserved if there are not used instantly.

Protocols allowing to recover and seed cardiomyocytes that are frozen lack efficiency. Indeed, survival rate is low and the purity of cells is not high.

## INNOVATIVE SOLUTIONS

A research team from Sorbonne Université has developed a simple protocol allowing the recovery, the seeding and the conservation of cardiomyocytes derived from human induced pluripotent stem cells.

All the ingredients used are commercially available.

## SUGGESTED APPLICATIONS

- Recovered and seed cardiomyocytes

## DEVELOPMENT STATUS

Differentiated cardiomyocytes were recovered, at a specific time validated experimentally with the following recovery medium in order to enhance the recovery step exhibiting a purity of the cells close to 95%.

After recovering step, cells can be seeded on any support with cell attachment substrate and begin to contract 1 or 2 days after the seeding.

## COMPETITIVE ADVANTAGES

- Very simple method
- Better purity of cardiomyocytes compared to protocol described in the literature (95% VS 83%)
- High improvement of the survival rate, specially after freezing / thawing

## IP RIGHTS

Secret Know-How