

# CTS-446 Cardiac and Skeletal Myogenesis Muscle Regeneration

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The Cardiac and Skeletal Myogenesis: Muscle Regeneration research group is engaged in analyzing the molecular processes that govern the formation of the skeletal and cardiac muscle and which are also involved in muscle regeneration processes. The group is developing new patents that can serve for generating drugs.

## **Research lines**

- Analysis of the role of the Pitx2 transcription factor in cardiac development and arrhythmogenic diseases
- Molecular study of ion channels in cardiac development and disease
- Obtainment of cardiac cells derived from embryonic stem cells
- Plasticity of adult and embryonic stem cells in myocardial regeneration
- Gene expression analyses in experimental cardiac hypertrophy
- Myogenesis and muscle regeneration
- Non coding RNA function in skeletal muscle myogenesis and regeneration
- Non coding RNA function in cardiac development and disease

## **Related services and products**

- [Use of catecholamine for differentiating stem cells from cardiomyocytes](#)
- [MicroRNA used in treating arrhythmogenic channelopathies](#)
- [Modified microRNA](#)
- [Method for activating the Pitx2 gene expression to promote muscle regeneration](#)
- [Method for promoting muscle regeneration](#)

**Spanish website:** <https://bit.ly/2EK3Iuk>