

PROCELTECH

Technologies for a better cell protection during storage

MATURATION

BENEFITS

- Optimised preservation
- Increased effectiveness
- Long-term storage without impact

KEY WORDS

- Stem cells
- Biological tissues
- Preservation
- Cryogenics

INTELLECTUAL PROPERTY

- 1 patent
- Specific know-how

LABORATORIES



MATURITY

- TRL 4
- Prototype available at LPSC - Modane

CONTACT

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PROTECTION AGAINST THE HARMFUL EFFECTS OF COSMIC RAYS ON CRYOGENISED CELLS



CONTEXTE

With advances in science, the need for medium- and long-term storage of biological tissues and in particular stem cells is increasing. Storage solutions are introduced to be able to make these tissues available for biological and medical purposes. The key issue is to ensure the integrity of the DNA molecule during storage and suitable protection of it.

TECHNOLOGY

The cryogenised storage solution developed includes protection against natural radioactivity and cosmic rays - major issues to ensure cell protection within a long term storage program. It is based on designing a cryostat that meets these criteria.

ADVANTAGES

- Ensure the integrity of the DNA molecule and protect it during storage.
- Increase cell efficiency at the moment of usage.

APPLICATIONS

Storage solutions for all biological tissues destined to be stored for a long time span at low temperatures.

STATE OF PROGRESS

A storage prototype has been designed and installed to begin tests on cells. A scale demonstrator is currently being developed and will be available at the mid 2019.