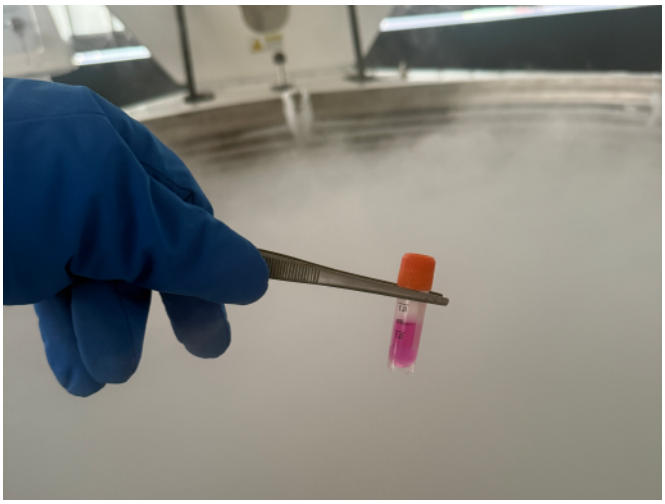
PROJECT NUMBER

21499

CryoOx non-toxic intracellular cryoprotectant for cell cryopreservation and lyophilisation

CryoOx is a chemically modified saccharide-based cryoprotectant that enables intracellular delivery of protective sugars to improve cryopreservation and lyophilisation. Designed as a DMSO-free alternative, it supports cell viability, membrane integrity and cellular functionality across multiple cell types while simplifying cryopreservation workflows.

Applications: Cell cryopreservation and lyophilisation



Features	Benefits
Chemically modified saccharide technology enabling intracellular uptake	Enables intracellular protection by delivering saccharides into cells
DMSO-free cryoprotectant platform designed to reduce toxicity concerns	Reduces post-thaw processing by removing the need for cryoprotectant removal
Suitable for both cryopreservation and lyophilisation applications	Eliminates the need for conventional toxic cryoprotectants such as DMSO in intended workflows

Features	Benefits
Preserves cell viability, membrane integrity and differentiation potential	Maintains critical cellular function following preservation
Demonstrated across multiple human and animal cell types	Broad platform potential for research, regenerative medicine and advanced cell therapy manufacturing
	Compatible with straightforward, user-friendly cryopreservation protocols

Patented and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

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