

Abstract

MULTI-FUNCTIONAL CRYOGENIC STORAGE VESSEL

Systems and devices with enhanced stability to kinetic impact for the containment of cryogenically preserved material. A device comprising a vessel with increased surface to volume ratio when compared to cylindrical vessels of like capacity, and further comprising a material that remains resistant to shock and impact at cryogenic temperatures while providing a continuous barrier of a single material surrounding the vessel contents. The device further comprising a design that may be readily modified to include internalized sensors, enhanced interfacing to external instruments, provide optimized thaw rate, and post-thawing sample processing capabilities.

[Figure 1]