Preservation and Storage Medium for Biological Materials

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The Wisconsin Alumni Research Foundation is seeking commercial partners interested in developing a medium for preserving and stabilizing biological materials.

OVERVIEW

Preserving the structure and function of biological materials is of fundamental importance to biology, biochemistry and medicine. Historically, several protective agents have been used to retain the activity of biological materials. However, the success of these efforts has been limited and compounds that have been used successfully, such as fish proteins, are only applicable in a limited number of systems.

THE INVENTION

UW-Madison researchers have developed a preservation medium composed of at least one polyhydroxy compound (monosaccharides and polysaccharides like trehalose, maltose, lactose and sucrose are preferred) and phosphate ions, all of which are approved for use in foods.

APPLICATIONS

• Preserving and stabilizing biological materials

KEY BENEFITS

• Can be used effectively for both freeze-drying and ambient-temperature drying
• Protectant mixture is less costly than those currently used.
• Allows the stable preservation of biological materials over extended periods of time, at elevated temperatures and at varying degrees of humidity
• A wide range of biological materials can be potentially preserved with the present invention including enzymes such as dehydrogenases, proteins such as insulin, vaccines, tissues, viruses such as adenovirus, blood (including platelets), foodstuffs, semen and nucleic acids.
ADDITIONAL INFORMATION

Tech Fields
Research Tools - Media

CONTACT INFORMATION

For current licensing status, please contact Emily Bauer at emily@warf.org or 608-960-9842.