



## Material Safety Data Sheet

Date Updated: 05/11

Version: 1

MSDS # 17

### Section 1- Product and Company Information

<b>Product Name</b>	CRYOPRESERVED HUMAN RENAL PROXIMAL CONVOLUTED TUBULE EPITHELIAL CELLS
<b>Product Number</b>	RPCT-F
<b>Company</b>	ZenBio, Inc
<b>Street Address</b>	3200 East NC Highway 54 Suite 100
<b>City, State, Zip, Country</b>	Research Triangle Park, NC 27709 US
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### Section 2- Composition/Information on Ingredients

Human renal proximal convoluted tubule epithelial cells isolated from donated healthy kidneys. Frozen cultures may contain 0-10% fetal bovine serum and 5-20% dimethylsulfoxide (DMSO) CAS #67-68-5 (see MSDS for DMSO).

### Section 3 Hazards Identification

Each donor is tested and found non-reactive to viral DNA from HIV-1, HIV-2, HTLV I, HTLV II, hepatitis B, syphilis, CMV and hepatitis C. However, no known test can offer complete assurance that the viruses that cause HIV-1, HIV-2, HTLV I, HTLV II, hepatitis B and hepatitis C are not present. Proper precautions and biological containment should be taken when handling cells of human origin, due to their potential biohazardous nature. All human based products should be handled at a BSL-2 (Biosafety Level 2) or higher.

Frozen cultures may contain 5-20% DMSO and/or 0-10% fetal bovine serum (FBS). Fetal bovine serum is considered non-hazardous per 21 CFR 1910.1200. Since workers differ in sensitivity to animal derived materials, Zen-Bio recommends that Good Laboratory Practices be exercised when using these products, including the use of gloves, eye protection, and a lab coat.

Dimethylsulfoxide (DMSO) See MSDS for DMSO

### Section 4 First Aid Measures

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### Section 5 Fire Fighting Measures

**Extinguishing Media:** Any media suitable for surrounding fire. No unusual fire or explosion hazards.

### Section 6 Accidental Release Measures

Contain the spill immediately and decontaminate using a strong solution of sodium hypochlorite (bleach). Volume of bleach should not be less than 10% of the spill volume. Allow at least 10 minutes for neutralization. Absorb spill using suitable absorbent materials.

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**Section 7 Handling and Storage**

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Store appropriately in liquid nitrogen upon arrival.

Storage pressure:	Ambient
Handling:	Keep tightly closed when not in use.
Storage procedures:	Suitable for most general chemical storage areas.

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**Section 8 Exposure Controls/Personal Protective Equipment**

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Safety shower and eye bath. Mechanical exhaust required. No respiratory protection will be needed under normal Good Laboratory Practices operating conditions. Use supplied-air respiratory equipment as required by law. Compatible chemical resistant gloves should be the minimum hand protection. Chemical safety goggles/glasses should be the minimum eye protection. Wash hands and other exposed areas thoroughly with mild soap and water before eating, drinking and when leaving the laboratory. Wash contaminated clothing before reuse.

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**Section 9 Physical and Chemical Properties**

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Physical state is clear to yellowish-brown liquid or clear to reddish liquid.

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**Section 10 Stability and Reactivity**

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Stable.

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**Section 11 Toxicological Information**

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Not applicable.

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**Section 12 Ecological Information**

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Data not yet available.

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**Section 13 Disposal Considerations**

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Observe all federal, state and local environmental regulations.

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**Section 14 Transport Information**

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This substance is considered to be non-hazardous for ground or air transport.

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**Section 15 Regulatory Information**

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Not applicable

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**Section 16 Other Information**

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