# Synth-a-Freeze® Defined, Protein-Free Cryopreservation Medium

Catalog Number: R-005-50 50 ml

#### Instructions for Storage and Use

#### **Product Description**

Synth-a-Freeze is a sterile, defined, liquid cryopreservation medium containing 10% dimethylsulfoxide (DMSO). Synth-a-Freeze does not contain antibiotics, antimycotics, hormones, growth factors, serum, or proteins. This medium is HEPES and bicarbonate buffered.

### **Intended Use**

Synth-a-Freeze is intended for freezing and storing a variety of mammalian cell types. *This product is for research use only. Not for use in animals, humans, or diagnostic procedures.* 

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.

## Storage and Stability

Synth-a-Freeze is stored at -20° C in our facility and is shipped on dry ice. We recommend storing the product at -20° C in a freezer that is <u>not</u> self-defrosting. When stored at -20° C, the product is stable until the expiration date shown on the label. Once thawed, the product should be stored at 4° C and should <u>not</u> be refrozen. When stored at 4° C, Synth-a-Freeze is stable for 6 months or until the expiration date shown on the label, whichever comes first. **Protect from light.** Several components of this freezing medium are light-labile, and we recommend that the medium not be exposed to light for lengthy periods of time.

Synth-a-Freeze is a Registered Trademark of Cascade Biologics, Inc.

#### Instructions for Use

Synth-a-Freeze can be used with any standard freezing protocol. In our tests, Synth-a-Freeze performs as well as our standard, serum-containing cryopreservation medium for cryopreserving a variety of cell types\*. To prepare Synth-a-Freeze for use, thaw in a 37° C water bath or overnight at 4° C. If thawed in a water bath, do not exceed 37° C and do not leave the product at 37° C for an extended period of time. Synth-a-Freeze should be equilibrated to 4° C prior to use. For optimal results, the use of a controlled-rate freezer is recommended. The following is an example of a standard cryopreservation protocol.

- If enzymatic agents are used to remove the cells from a culture surface, resuspend the cells in a solution that will neutralize the effects of the enzyme. Pellet the cells by centrifugation. After removing the supernatant, resuspend the cell pellet in cold Synth-a-Freeze medium at a concentration of 5 x 10<sup>5</sup> to 3 x 10<sup>6</sup> cells/ml.
- Distribute the cell suspension in an appropriate number of cryopreservation vials.
- 3. Cool the vials of cells to 4° C as quickly as possible.
- 4. Freeze the material by reducing the temperature 1° C per minute until the temperature reaches -40° C. Then reduce the temperature at a rate of 2° C per minute until the temperature reaches approximately -90° C.
- Transfer the vials to the vapor phase of a liquid nitrogen storage facility.

#### Terms and Conditions of Sale

Cascade Biologics, Inc. (hereinafter, CBI) warrants that its products will perform according to the information provided in various publications that it distributes, and as described herein for the intended shelf life of the product when stored under the conditions prescribed by CBI. If any product does not perform according to the published information provided by us, CBI will replace the product free of charge to the original customer. The remedy of product replacement shall be the customers' sole and exclusive remedy for defective product, unless CBI is unable to deliver replacement product, in which case CBI shall reimburse the customer for the purchase price of the defective product. Customer understands that the foregoing limited warranty is in lieu of all other warranties and CBI hereby disclaims all other warranties including, but not limited to, implied warranty of merchantability or fitness for adequacy for any particular purpose or use. CBI shall not be liable to customer or to any party claiming through customer for any incidental or consequential damages, including, but not limited to any lost profits, lost savings, or lost business, whether arising out of contract, tort, or otherwise. Customer acknowledges that products are intended for research use only and are not to be used in animals, humans, or diagnostic procedures.

<sup>\*</sup>Not recommended for cryopreservation of human epidermal melanocytes.