

Doc. No.	Rev	Effective Date
PI11	05	10 Dec 2025

Chick Embryo Extract (CEE)

Product Description

Chick Embryo Extract (CEE) is a cell culture medium component, used in the supplementation of certain growth media formulations. Save time and money by purchasing a quality-assured product that can be supplied in one of two formulations – lyophilised or frozen liquid.

Applications

Successful *in vitro* cultivation of rat neural crest stem cells (NCSC) and other neural explants requires a specific neural crest stem cell medium (NCSCM). Supplementation with CEE provides a source of essential growth factors.

In addition, CEE has successfully been used in the expansion of many specific stem cell types and has demonstrated the ability to facilitate DNA demethylation. Further examples of how CEE has been used in research applications can be found under 'Literature'.

Preparation

CEE is produced from chick embryos, species Bovans Goldline. Eggs are collected from registered flocks found to be free from clinical signs of notifiable disease. The material is then processed, filtered to 0.2 micron and aseptically filled into bottles. This product is typically prepared with the addition of antibiotics – Penicillin, Streptomycin and Amphoterecin.

Specifications

Country of Origin	UK
Sterility	Tested to be negative for bacteria, yeast and fungi
Growth promotion	Extracts are tested by assaying the growth and the differentiation of mouse muscle cells (cells were derived from H-2K ^b -tsA58 transgenic mouse, see ref 13 for details)
Filtration	0.2 µm

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Life Science Production

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Product Information

Product Code	Product Description	Pack Size
MD-004A-UK	Chick Embryo Extract - Frozen	500 mL
MD-004D-UK	Chick Embryo Extract - Frozen	20 mL
MDL-004E-UK	Chick Embryo Extract - Lyophilised	10 mL
MD-004B-UF-UK	Chick Embryo Extract - Ultrafiltrate	100 mL
MD-004D-UF-UK	Chick Embryo Extract - Ultrafiltrate	20 mL
MD-004D-GI-UK	Chick Embryo Extract – UK – Gamma Irradiated	20 mL
MD-004B-UK	Chick Embryo Extract – UK	100 mL
MD-004E-UK	Chick Embryo Extract – UK	10 mL
MDL-004E-GI-UK	Chick Embryo Extract – UK – Gamma Irradiated, Lyophilised*	10 mL

* Please note that during the lyophilisation process the material is uncapped so sterility cannot be assured. It is advised that lyophilised product be filtered through a 0.2 micron filter after reconstitution to maintain sterility. If required, additional antibiotic/antimycotic should be added post filtration.

Batch testing

LSP offer samples of CEE for testing prior to selection of a suitable batch. Typical sample size is 10 mL and reservations are held for a period of four weeks, pending evaluation.

Quality

CEE undergoes stringent Quality Assurance Tested to ensure that the product is negative for bacteria, yeast and fungi. Extracts are tested by assaying the growth and the differentiation of mouse muscle cells. Complete results are reported on the Certificate of Analysis supplied with each batch.

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Additional Treatment

CEE is also available as an ultra-filtrate or may be supplied without the addition of antibiotic/antimycotic.

Shelf life

CEE has a shelf-life of 5 years from the date of manufacture.

Storage & Handling

Recommended storage is -20°C or below. Lyophilised product may be stored at +4°C.

Storage and reconstitution of frozen product

Recommended storage is -20°C or below. It is recommended that frozen product be aliquoted into working volumes and frozen for long term storage to avoid multiple freeze/thaw cycles.

Protein precipitate may be observed on thawing. To remove this it is recommended to centrifuge at 3,000g for 10 minutes.

Storage and reconstitution of lyophilised product

Please reconstitute lyophilised product to the original volume of 10 mL using sterile tissue culture grade water. Agitate to mix. If a precipitate appears, continue to agitate under cool conditions for several hours/overnight or sonicate briefly using a sonicating water bath. Centrifuge at 3,000g for 10 minutes and remove pellet.

* Please note that during the lyophilisation process the material is uncapped so sterility cannot be assured. It is advised that lyophilised product be filtered through a 0.2 micron filter after reconstitution to maintain sterility. If required, additional antibiotic/antimycotic should be added post filtration.

Once reconstituted please store at 4°C for immediate use, or aliquot into working volumes and freeze for long term storage to avoid multiple freeze/thaw cycles.

Formulations

Frozen material is a ready-to-use product. Simply defrost and use. However, the product must be stored as recommended to retain efficacy. Lyophilisation imparts a broader temperature tolerance and longer shelf-life to the product. As a result, lyophilised product can be shipped and stored at 4°C without

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affecting the products integrity or efficacy until it is reconstituted. Once reconstituted, it must be filtered to retain sterility, and stored appropriately.

Shipping

Lyophilised product ships on blue ice.

Frozen product ships on dry ice

Literature

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Support

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