

CultureBoost-R

Cat# NB-11-0067

Introduction

CSC CultureBoost-R, 10mL (50X) contains only Human Recombinant Growth Factors. Vial activates 500mL CSC Medium.

CultureBoost-R is the recombinant growth factor in CSC Complete Defined Medium (NB-11-0048) and CSC Medium without Serum (NB-11-0053). CultureBoost-R contains defined growth factors and Porcine heparin.

CSC CultureBoost-R is produced by bacterial fermentation of E. coli. The product's working concentration is 10ng/mL. Biological activity is adjusted to 110% of maximum using NB-11-0040 (Human Venous Endothelial) cells and NB-11-0004 (Primary Retinal microvascular Endothelial) cells and NB-11-0016 (Primary Brain Microvascular Endothelial) cells.

CSC CultureBoost-R is qualified for use with CSC media and can dramatically improve the performance of most classical media, even approaching performance levels of CSC Complete Media (NB-11-0048).

CSC CellBoost is qualified for use when initiating, thawing, expanding or passaging cultures of all mesenchymal-derived cells, and is included in the CSC Complete Medium Kit (packaged as a separate vial).

Use of CellBoost can result in as much as 25% increase in recovery from freezing, an increase of 10 - 20% in cell count per passage, and a one day decrease in time to confluence. The effects of CellBoost are most pronounced with extremely fastidious cells."

Available Formats

This product is included (10mL vial) in various CSC media kits and in "The System". Each vial supplements 500mL media. Individual 10mL vials are also available.

Appropriate Use:

CultureBoost-R has two main uses.

1. Application as a growth supplement to medium:

- CSC Complete Medium Kit (NB-11-0048) includes a 10mL vial of CultureBoost-R (NB-11-0067).
- CSC Medium Kit Without Serum (NB-11-0053) includes a 10mL vial of CultureBoost in the kit. This medium is formulated without serum and differs from complete medium only by the absence of serum and can be made complete by the addition of 10-20% of serum.
- CSC Medium Kit Formulated With Serum and Without Growth Factor (NB-11-0050) differs from complete medium only by the absence of growth factors and can be made complete defined medium by the addition of CultureBoost-R (NB-11-0067).

2. Application in the vial thaw procedure:

Cells are at their most fragile when in recovery from thawing or passage. CultureBoost-R stabilizes the plasma membrane and provides a concentrated dose of factors that have been shown to aid the cell in attachment, activation, and achievement of polarity.

CultureBoost-R can be beneficially used any time cells are "loosened" from the pellet prior to resuspension in CSC Media in preparation for plating. The best results of using CultureBoost-R are evident when 50 - 100 microliters (or one drop) are added to the loosened cell pellet just prior to resuspension in media. Please refer to the instructions for CSC NB-11-0076 Passage Reagent Group. CultureBoost-R should be added following step 11.

Handling and Storage

This product is delivered at ambient temperature, is filter-sterilized and isotonic. If the entire unit will not be used within 30 days, aliquot and freeze. Shelf Life is 30 days at +4°C. **Do not warm product before use**, as the relevant protocols specify that the cells be at ice-water (triple-point) temperature.

Additional Information

The Cell System specified in the ACBRI and CSC Cell Certificates consists of Certified cells, CSC complete media (serum-containing or serum-free, Animal or Human Recombinant) Attachment Factor, Passage Reagent Group and Cell Freezing medium. CSC kits are ready to activate and use upon delivery.