

CultureBoost

Cat# NB-11-0066

Introduction

CSC CultureBoost, 10mL (50X). Vial activates 500mL CSC Medium.

CultureBoost is the broad-spectrum mitogen in CSC Complete Medium (NB-11-0046) and CSC Medium Without Serum (NB-11-0051). CultureBoost contains CSC bovine Growth Factor and Porcine heparin.

CultureBoost is purified from bovine pituitary or hypothalamus and is 100% traceable to cattle processed in the USA at USDA inspected facilities. The product's working concentration is 50µg/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 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.

CSC CultureBoost 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). CultureBoost (NB-11-0066) is also available in individual 10mL vials.

Use of CultureBoost 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 CultureBoost 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 has two main uses.

1. Application as a growth supplement to medium:

CSC Complete Medium Kit (NB-11-0046) includes a 10mL vial of CultureBoost.

CSC Medium Kit Without Serum (NB-11-0051) includes a 10mL vial of CultureBoost.

CSC Medium Kit Formulated Without Growth Factor (NB-11-0050) differs from complete medium only by the absence of growth factors and can be activated and made complete by the addition of CultureBoost (NB-11-0066).

CSC Medium Kit Formulated Without Serum and Without Growth Factors (NB-11-0054) differs from complete medium by the absence of serum and growth factors and can be made complete by the addition of 10-20% of serum, and CultureBoost (NB-11-0066).

2. Application in the vial thaw procedure:

Cells are at their most fragile when in recovery from thawing or passage. CultureBoost 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 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 are evident when 50 - 100 microliters (or one drop) are added to the loosened cell pellet just prior to re-suspension in media. Please refer to the instructions for NB-11-0076 Passage Reagent Group. CultureBoost 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.