TC-100 Insect Medium
With Sodium bicarbonate
Without L-Glutamine
1X Liquid Insect Cell Culture Medium

Product Code: IML007

Product Description:
TC-100 is a modification done by Dr. Gardiner and Dr. Stockdale of the original formulation of Grace's insect medium. Sucrose, fructose and several Kreb's cycle intermediates were omitted from the original formula. The modification was done to optimize the production of Autographia californica NPV virions by cells from the fall armyworm, Spodoptera frugiperda.

IML007 is TC-100 Insect Medium a fully defined medium and does not require supplementation with insect hemolymph. Instead, tryptose broth and fetal bovine serum provide the necessary growth factors. This medium supports the growth of several lepidopteran cell lines including Spodoptera frugiperda. It is specifically used for production of baculoviruses in lepidopteran cell lines. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition:

Ingredients | mg/L
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**INORGANIC SALTS**
Calcium chloride dihydrate | 1319.820
Magnesium chloride anhydrous | 1068.200
Magnesium sulphate anhydrous | 1357.630
Potassium chloride | 2870.000
Sodium bicarbonate | 350.000
Sodium phosphate monobasic | 876.920
**AMINO ACIDS**
Glycine | 650.000
L-Alanine | 225.000
L-Arginine hydrochloride | 700.000
L-Asparagine | 350.000
L-Aspartic acid | 350.000
L-Cystine hydrochloride | 25.000
L-Glutamic acid | 600.000
L-Histidine hydrochloride | 3086.340
L-Isoleucine | 50.000
L-Leucine | 75.000
L-Lysine hydrochloride | 625.000
L-Methionine | 50.000
L-Phenylalanine | 150.000
L-Proline | 350.000
L-Serine | 550.000
L-Threonine | 175.000
L-Tryptophan | 100.000
L-Tyrosine disodium salt | 62.090
L-Valine | 100.000
**VITAMINS**
Choline chloride | 0.200
D-Biotin | 0.010
D-Pantothenic acid (hemicalcium) | 0.020
Folic acid | 0.020
Nicacin | 0.020
Pyridoxine hydrochloride | 0.020
Riboflavin | 0.020
Thiamine hydrochloride | 0.520
myo-Inositol | 0.020
p-Amino benzoic acid (PABA) | 0.020
**OTHERS**
D(+) Glucose | 1000.000
Tryptose Broth | 2600.000

Directions:
1. Add 20.55ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:
- L-Glutamine solution 200mM (TCL012)
- Fetal Bovine Serum (RM1112/ RM10432)

Quality Control:
Appearance
Yellow to pale yellow coloured clear solution
pH
5.90 - 6.50
Osmolality in mOsm/Kg H2O
330.00 -370.00

Sterility
No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response
The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through minimum three subcultures.

Endotoxin Content
NMT 5EU/ml

Storage and Shelf Life:
Store at 2 - 8°C away from bright light.
Shelf life is 18 months.
Use before expiry date given on the product label.

Revision : 1 / 2013

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