MCDB 131 Medium
With Trace elements, L-Glutamine and Sodium bicarbonate
1X Liquid Cell Culture Medium

Product Code: AL133A

Product Description:
MCDB media were developed for the culture of specific cell types without a serum supplement. The media were supplemented with growth factors, hormones, trace elements, or low levels of dialyzed fetal bovine serum protein (FBSP). Each MCDB medium was formulated for a specific cell type. MCDB 105 and 110 were formulated for rapid clonal growth of normal human diploid cells. MCDB 131 medium was originally developed for the clonal growth of human micro-vascular endothelial cells (HMVEC). MCDB 151, 201 and 302 were originally developed for human keratinocytes, clonal growth of chick embryo fibroblasts and CHO cells.

AL133A is MCDB 131 with trace elements, sodium bicarbonate and L-glutamine. 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

INORGANIC SALTS
Ammonium metavanadate     0.0006
Ammonium molybdate tetrahydrate 0.0037
Calcium chloride dihydrate 235.200
Cupric sulphate pentahydrate 0.0012
Disodium hydrogen phosphate anhydrous 71.000
Ferrous sulphate heptahydrate 0.278
Magnesium sulphate anhydrous 1204.000
Manganese sulphate          0.00015
Molybdic acid tetrahydrate (ammonium) 0.0037
Nickel chloride hexahydrate 0.000071
Potassium chloride           298.200
Sodium bicarbonate          1180.000
Sodium chloride             6428.400
Sodium metasilicate nonahydrate 2.842
Sodium selenite             0.0052
Zinc sulphate heptahydrate  0.0003

AMINO ACIDS
Glycine                   2.250
L-Alanine                  2.670
L-Arginine hydrochloride  63.210
L-Asparagine monohydrate  15.010
L-Aspartic acid            13.310
L-Cysteine hydrochloride dihydrate 35.120
L-Glutamic acid            44.130
L-Glutamine                1461.000
L-Histidine hydrochloride monohydrate 41.920
L-Isoleucine               65.600
L-Leucine                  131.200
L-Lysine hydrochloride     182.600
L-Methionine               14.920
L-Phenylalanine            33.040
L-Proline                  11.510
L-Serine                   31.530
L-Threonine                11.910
L-Tryptophan               4.080
L-Tyrosine disodium salt dihydrate 22.520
L-Valine                   117.100

VITAMINS
Choline chloride           13.960
D-Biotin                   0.0073
D-Ca-Pantothenate          11.915
Folinic acid (Calcium)     0.5115
Nicotinamide               6.105
Pyridoxine hydrochloride   2.056
Riboflavin                 0.0038
Thiamine hydrochloride     3.373
Vitamin B12                0.0136
myo-Inositol               7.208

OTHERS
Adenine hydrochloride      0.1716
D-Glucose                  1000.000
Phenol red sodium salt     12.421
Putrescine dihydrochloride 0.0002
Sodium pyruvate            110.000
Thiolic Acid               0.0021
Thymidine                  0.0242

Please refer disclaimer overleaf
Quality Control:

Appearance
Orangish red colored, clear solution.

pH
7.00 - 7.60

Osmolality in mOsm/Kg H2O
280.00 - 320.00

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 12 months.
Use before expiry date given on the product label.

Revision: 1/2012