MCDB 153 Medium

With Trace elements, L- Glutamine, 28mM HEPES buffer and Sodium bicarbonate

Product Code: AL135A

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 normal of 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.

AL135A is MCDB 153 with trace elements, L-glutamine and 28mM HEPES buffer. HEPES, a zwitterionic buffer having a pKa of 7.3 at 37ºC prevents the initial rise in pH that tends to occur at the initiation of a culture and increases the buffering capacity of the medium. 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	0.000585
Calcium chloride dihydrate	4.411
Cupric sulphate pentahydrate	0.00275
Disodium hydrogen phosphate anhydrous	284.088
Ferrous sulphate heptahydrate	1.390
Magnesium chloride hexahydrate	122.000
Manganese sulphate	0.000151
Molybdic acid ammonium tetrahydrate	0.00124
Nickel chloride	0.00012
Potassium chloride	111.830
Sodium bicarbonate	1176.00
Sodium acetate anhydrous	301.530
Sodium chloride	7599.000
Sodium metasillicate nonahydrate	0.1421
Sodium selenite	0.0038
Stannous chloride monohydrate	0.000113

Ingredients	mg/L
Zinc sulphate heptahydrate	0.144
AMINO ACIDS	
Glycine	7.510
L-Alanine	8.910
L-Arginine hydrochloride	210.700
L-Asparagine monohydrate	15.000
L-Aspartic acid	3.990
L-Cysteine hydrochloride monohydrate	42.040
L-Glutamic acid	14.710
L-Glutamine	877.200
L-Histidine hydrochloride monohydrate	16.770
L-Isoleucine	1.968
L-Leucine	65.600
L-Lysine hydrochloride	18.270
L-Methionine	4.480
L-Phenylalanine	4.960
L-Proline	34.530
L-Serine	63.060
L-Threonine	11.910
L-Tryptophan	3.060
L-Tyrosine disodium salt dihydrate	3.410
L-Valine	35.130
VITAMINS	
Choline chloride	13.960
D-Biotin	0.0146
D-Pantothenic acid (hemicalcium)	0.238
Folic acid	0.790
Niacinamide	0.03663
Pyridoxine hydrochloride	0.06171
Riboflavin	0.0376
Thiamine hydrochloride	0.337
Vitamin B12	0.407
myo-Inositol	18.020
OTHERS	
Adenine hydrochloride	30.880
D-Glucose	1081.000
HEPES buffer	6600.000
Phenol red sodium salt	1.242
Putrescine dihydrochloride	0.161
Sodium pyruvate	55.000

| Thioctic acid | 0.206 |
| Thymidine | 0.727 |

Quality Control:
Appearance
Light pink coloued, clear solution
pH
7.0-7.6
Osmolality
310.0 -350.00
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.
Endotoxin Content
NMT 1EU/ml

Storage and Shelf Life:
Store at 2-8^{0}C away from bright light.
Shelf life is 12 months.
Use before expiry date given on the product label.