

*With L-glutamine, HEPES, trace elements, Sodium Pyruvate, and phenol red*

Catalog	Unit Size
TBS8034	500 mL

### DESCRIPTION

MCDB media were developed for the culture of specific cell types without a serum supplement. MCDB 153 medium is a modification of Ham's nutrient mixture F-12 designed specifically for the growth of human epidermal keratinocyte culture, clonal growth of chicken embryo fibroblasts, or Chinese Hamster Ovary (CHO) cells.

MCDB 153 medium includes trace elements, L-glutamine, sodium pyruvate, and HEPES for more effective buffering capacity and energy sources. The details are listed in the formulation. The main modifications are below:

- L-Glutamine
- HEPES
- Sodium Pyruvate
- Phenol Red
- Sodium Bicarbonate
- Insulin, transferrin, and sodium selenite
- Glucose

### PACK SIZE

1x 500mL/bottle or 1x1 L/bottle, Store at 2-8°C in dark till use.

pH: 7.4 ± 0.2

### APPLICATION

- Human epidermal keratinocyte
- Chinese Hamster Ovary (CHO)

### RELATED PRODUCTS

MSC Medium (TBS8021)  
 DMEM Medium (TBS8061)  
 Chondrogenic Differentiation Medium (TBS8062)  
 RPMI16040 Medium (TBS8063)  
 Hybridoma Growth Medium (TBS8074)  
 DMEM-F12 Mixture (TBS8083)  
 F12K Medium (TBS8032K)  
 F12 Medium (TBS8032)  
 F10 Medium (TBS8033)  
 ESC/iPSC-qualified FBS (TBS8002)  
 Adipocyte Differentiation Cocktail (TBS8017)  
 0.1% Gelatin Solution (TBS8004)  
 2x HBS, pH7.05 (TBS5076)  
 Cell Culture Grad Water (TBS5050)  
 LB Medium (TBS8056)  
 SOB Medium (TBS8057)  
 SOC Broth Medium (TBS8058)  
 2xYT Broth Medium (TBS8059)

### MCDB153 Medium Formulation (TBS8034-500)

Components	Concentration (mg/L)		
		D-Pantothenic Acid (hemicalcium)	0.238
		Pyridoxine•HCl	0.06171
		Riboflavin	0.0376
		Thiamine•HCl	0.337
		Vitamin B-12	0.407
		Adenine•HCl	30.88
		D-Glucose	1081
		HEPES	6600
		Phenol Red•Na	1.242
		Putrescine•2HCl	0.161
		Pyruvic Acid•Na	55
		Thioctic Acid	0.206
		Thymidine	0.727
		Insulin	5.0
		Transferrin (Iron-free)	5.0
Ammonium Metavanadate	0.000585		
Calcium Chloride	3.33		
Cupric Sulfate•5H <sub>2</sub> O	0.00275		
Ferrous Sulfate•7H <sub>2</sub> O	1.39		
Magnesium Chloride	57.13		
Molybdic Acid•4H <sub>2</sub> O (ammonium)	0.00124		
Nickel Chloride•6H <sub>2</sub> O	0.00012		
Potassium Chloride	111.83		
Sodium Acetate (anhydrous)	301.53		
Sodium Chloride	7599		
Sodium Metasilicate•9H <sub>2</sub> O	0.142		
Sodium Phosphate Dibasic (anhydrous)	284.088		
Sodium Selenite	0.005		
Stannous Chloride•2H <sub>2</sub> O	0.000113		
Zinc Sulfate•7H <sub>2</sub> O	0.144		
L-Alanine	17.8		
L-Arginine•HCl	210.7		
L-Asparagine•H <sub>2</sub> O	30		
L-Aspartic Acid	17.29		
L-Cysteine •HCl•H <sub>2</sub> O	42.04		
L-Glutamic acid	29.4		
L-Glutamine	877.2		
Glycine	15		
L-Histidine•HCl•H <sub>2</sub> O	16.77		
L-Isoleucine	1.968		
L-Leucine	65.6		
L-Lysine•HCl	18.27		
L-Methionine	4.48		
L-Phenylalanine	4.96		
L-Proline	46.03		
L-Serine	73.56		
L-Threonine	11.91		
L-Tryptophan	3.06		
L-Tyrosine•2Na	3.41		
L-Valine	35.13		
D-Biotin	0.0146		
Choline Chloride	13.96		
Folic Acid	0.79		
Myo-Inositol	18.02		
Niacinamide	0.03663		