University of California, San Francisco
Cell Culture Facility

Media Production Formulations

Dulbecco's Modified Eagle's Medium
DME H-21 (4.5g/Liter Glucose)

CCF Product Code Number: CCFAA005 (Old code AA400)

Component	Formula	mg/L
Part A: Inorganic Salts		
Calcium chloride (Anhydrous)	$CaCl_2$	200.00
Ferric nitrate·9H_20	$Fe(NO_3)_3 \cdot 9H_20$	0.10
Magnesium sulfate·7H_20	$MgSO_4 \cdot 7H_20$	200.00
Potassium chloride	KCl	400.00
Sodium bicarbonate	$NaHCO_3$	3700.00
Sodium chloride	NaCl	6400.00
Sodium phosphate	$NaH_2PO_4 \cdot H_20$	125.00
Part B: Other components		
D-Glucose	$C_6H_{12}O_6$	4500.00
Phenol Red Sodium Salt	$C_{19}H_{13}O_5$ NaS	15.00

pH: 7.0 Osmolarity: 340-353 mOsm

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Component	Formula	mg/L
Part C: Amino Acids		
L-Arginine hydrochloride	$C_6H_{14}N_4O_2 \cdot HCl$	84.00
L-Cystine	$C_6H_{12}N_2O_4S_2$	48.00
L-Glutamine	$C_5H_{10}N_2O_3$	584.00
Glycine	$C_2H_5NO_2$	30.00
L-Histidine hydrochloride·H_20	$C_6H_9N_3O_2 \cdot HCl \cdot H_20$	42.00
L-Isoleucine	$C_6H_{13}NO_2$	105.00
L-Leucine	$C_6H_{13}NO_2$	105.00
L-Lysine·HCl	$C_6H_{14}N_2O_2 \cdot HCl$	146.00
L-Methionine	$C_5H_{11}NO_2S$	30.00
L-Phenylalanine	$C_9H_{11}NO_2$	66.00
L-Serine	$C_3H_7NO_3$	42.00
L-Threonine	$C_4H_9NO_3$	95.00
L-Tryptophan	$C_{11}H_{12}N_2O_2$	16.00
L-Tyrosine	$C_9H_{11}NO_3$	72.00
L-Valine	$C_5H_{11}NO_2$	94.00

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Component	Formula	mg/L
Part D: Vitamins		
Choline chloride	$C_5H_{14}ClNO$	4.00
D-Calcium pantothenate	$C_{18}H_{32}CaN_2O_{10}$	4.00
Folic acid	$C_{19}H_{19}N_7O_6$	4.00
myo-Inositol	$C_6H_{12}O_6$	7.20
Nicotinic acid	$C_6H_5NO_2$	4.00
Pyridoxine hydrochloride	$C_8H_{11}NO_3 \cdot HCl$	4.00
Riboflavin	$C_{17}H_{20}N_4O_6$	0.40
Thiamine hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	4.00

pH: 7.0 Osmolarity: 340-353 mOsm