

## William's Medium E

### Description

The William's medium E is used for long-term cultivation of adult rat liver epithelial cells.

### Liquid Media

William's Medium E<sub>(1)</sub>  
without L-Glutamine  
with 2.24 g/L NaHCO<sub>3</sub>    500 ml P04-29050

William's Medium E<sub>(1)</sub>  
with L-Glutamine  
with 2.24 g/L NaHCO<sub>3</sub>    500 ml P04-29500

William's Medium E<sub>(1)</sub>  
with stab. Glutamine  
with 2.24 g/L NaHCO<sub>3</sub>    500 ml P04-29150

William's Medium E<sub>(1)</sub>  
without L-Glutamine  
without Phenol red  
with 2.24 g/L NaHCO<sub>3</sub>    500 ml P04-29510

### Powder Media

William's Medium E<sub>(1)</sub>  
with L-Glutamine  
with 25 mM Hepes        10 L    P03-4810  
without NaHCO<sub>3</sub>        50 L    P03-4850

### Special Media

William's Medium E<sub>(2)</sub>  
without L-Glutamine  
without Glucose  
with 2.24 g/L NaHCO<sub>3</sub>    500 ml P04-29050S1

### Powder Media

William's Medium E<sub>(1)</sub>  
with L-Glutamine  
with 25 mM Hepes        10 L    P03-4810  
without NaHCO<sub>3</sub>        50 L    P03-4850

(1) usually on stock, (2) minimum order 10 l, (3) available on request

### Composition

	Components	mg/L
<b>Inorganic Salts</b>	Calcium chloride x 2H <sub>2</sub> O	264.92
	Iron(III)-nitrat x 9H <sub>2</sub> O	0.0001
	Potassium chloride	400.00
	Copper(II)-sulfate x 5H <sub>2</sub> O	0.0001
	Magnesium sulfate dried	139.57
	Manganese chloride x 4H <sub>2</sub> O	0.0001
	Sodium chloride	6,800.00
	Sodium dihydrogen phosphate x H <sub>2</sub> O	140.00
	Zinc sulfate x 7H <sub>2</sub> O	0.0002
	<b>Other Components</b>	D(+)-Glucose anhydrous
Hepes		5,958.00
Glutathion (red.)		0.05
Methylinoleat		0.03
Sodium pyruvate		25.00
Phenol red		10.00
<b>Amino acids</b>	L-Alanine	90.00
	L-Arginine free base	50.00
	L-Asparagine x H <sub>2</sub> O	20.00
	L-Aspartic acid	30.00
	L-Cysteine	40.00
	L-Cystine	20.00
	L-Glutamine	292.00
	L-Glutamic acid	50.00
	Glycine	50.00
	L-Histidine Base	15.00
	L-Isoleucine	50.00
	L-Leucine	75.00
	L-Lysine x HCl	87.50
	L-Methionine	15.00
	L-Phenylalanine	25.00
	L-Proline	30.00
L-Serine	10.00	
L-Threonine	40.00	
L-Tryptophan	10.00	
L-Tyrosine	35.00	
L-Valine	50.00	
<b>Vitamins</b>	L-Ascorbic acid	2.00
	D(+)-Biotin	0.50
	Calciferol	0.10
	D-Calcium pantothenate	1.00
	Choline chloride	1.50
	Folic acid	1.00
	myo-Inositol	2.00
	Menadion sodium bisulfite	0.01
	Nikotinamid	1.00
	Pyridoxal x HCl	1.00
	Riboflavin	0.10
	Thiamine x HCl	1.00
	DL-α-Tocopherol phosphate-Na <sub>2</sub>	0.01
	Vitamin A acetate	0.20
	Vitamin B12	

When 5,958.00 mg/L HEPES is included there is only 6,300.00 mg/L sodium chloride.