

## William's E (without L-glutamine)

Cat#: CM3012, 500 mL

Store at 2-8°C, shading light

### **DESCRIPTION**

William's E medium was designed by William and Gunn. It is mainly used for the long-term culture of rat liver epithelial cells, and can also be used for the culture of other mammalian liver cells. L-glutamine is a necessary nutrient element in cell culture, but it is unstable in solution and will spontaneously degrade. The medium without L-glutamine can add fresh L-glutamine or its substitute arbitrarily according to research needs. William's medium contains many kinds of amino acids, vitamins, inorganic salts and other ingredients for cell culture, but does not contain protein, lipids or any growth factors. Therefore, the product should be used with serum or serum-free additives.

### **GENERAL INFORMATION**

<b>Product Form</b>	<b>Liquid</b>
<b>Concentration</b>	1X
<b>pH</b>	7.2-7.4
<b>D-Glucose</b>	2000 mg/L
<b>HEPES</b>	Negative
<b>L-glutamine</b>	Negative
<b>NaHCO<sub>3</sub></b>	2200 mg/L
<b>Phenol red</b>	10 mg/L
<b>Sodium pyruvate</b>	25 mg/L
<b>Storage</b>	2-8°C, shading light
<b>Shipping</b>	RT
<b>Expiration date</b>	12 months

### **PRODUCT USE LIMITATION**

These products are intended for research use only.

## **RELATED PRODUCTS**

<b>Cat#</b>	<b>Product Name</b>	<b>Size</b>	<b>Form</b>
<b>CM3011</b>	MCDB 131 (without L-glutamine)	<b>500 mL</b>	<b>Liquid</b>
<b>CM3012</b>	William's E (without L-glutamine)	<b>500 mL</b>	<b>Liquid</b>
<b>CM3013</b>	William's E (with L- alanyl -glutamine)	<b>500 mL</b>	<b>Liquid</b>
<b>CM3014</b>	Waymouth's MB 752/1	<b>500 mL</b>	<b>Liquid</b>