# Medium 199, w: 2.7 mM stable Glutamine, w: 2.2 g/L NaHCO3, w: EBSS

820101a

Medium 199 is a versatile and widely used cell culture medium specially formulated for the cultivation of primary explants. This comprehensive medium combines essential vitamins, amino acids, and other factors to provide a fully defined nutrient source for a variety of cell types. It is particularly suitable for non-transformed cells, making it an invaluable tool for biological research.

Medium 199 offers a range of applications in the field. It can effectively maintain the cumulus-oocyte complex (COC) and support the in vitro maturation of oocytes. Additionally, it is employed in the rinsing of aspiration lines during ovum collection from German Holstein cows. Moreover, Medium 199 serves as an excellent medium for the culture of cardiac endothelial cells derived from rats. These applications demonstrate the versatility and adaptability of Medium 199 to various experimental needs.

History

The development of Medium 199 in the 1950s marked a significant advancement in tissue culture media. Prior to its introduction, many culture media relied on animal-derived products and tissue extracts. However, Morgan and colleagues revolutionized the field by formulating a completely defined nutritional source for cell cultures. Through their experiments involving different combinations of vitamins, amino acids, and other factors, they discovered the exceptional growth-promoting properties of Medium 199.

Quality control

pH = 7.2 +/- 0.02 at 20-25°C.

Each lot has been tested for sterility and absence of mycoplasma and bacteria.

Maintenance

Keep refrigerated at +2°C to +8°C in the dark. Freezing and warming up to +37° C minimize the quality of the product.

Do not heat the medium to more than 37° C or use uncontrollable sources of heat (e.g., microwave appliances).

If only a part of the medium is to be used, remove this amount from the bottle and warm it up at room temperature.

Shelf life for any medium except for the basic medium is 8 weeks from the date of manufacture.

Composition

Components

mg/L

Inorganic Salts

Calcium chloride x 2H2O

264,92

Iron (III) nitrate x 9H2O

0,72

Magnesium sulfate

97,67

Potassium chloride

400,00

Sodium acetat x 3H2O

82,95

Sodium chloride

6,800.00

Sodium dihydrogen phosphate x H2O

140,00

Other Components

Adenine sulfate

10,00

AMP

0,20

ATP

1,00

Cholesterol

0,20

2'-Deoxyribose

0,50

D(+)-Glucose anhydrous

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CEO / Geschäftsführer: Jonathan Steubing

Banking information
Sparkasse Heidelberg
IBAN: DE35 6725 0020 0009 2076 86
BIC: SOLADES1HDB

1,000.00
Glutathione (red.)
0,05
Guanine x HCl
0,30
Hypoxanthine
0,30
Phenol red
10,00
D-Ribose
0,50
Thymine
0,30
Tween 80
4,90
Uracil
0,30
Xanthine
0,30
NaHCO3
2,200.00
Amino Acids
L-Alanine
25,00
L-Arginine x HCl
70,00
L-Aspartic acid
30,00
L-Cysteine x HCl x H2O
0,10
L-Cystine
20,00
L-Glutamine stable
149,00
L-Glutamic acid
67,00
Glycine
50,00
L-Histidine x HCl x H2O
21,88
L-Hydroxyproline
10,00
L-Isoleucine
20,00
L-Leucine
60,00
L-Lysine x HCl
70,00
L-Methionine
15,00
L-Phenylalanine
25,00
L-Proline
40,00
L-Serine
25,00
L-Threonine
30,00
L-Tryptophan
10,00

L-Tyrosine
40,00
L-Valine
25,00
Vitamins
4-Amino benzoic acid
0,05
Ascorbic acid
0,05
D(+)-Biotin
0,01
Calciferol
0,10
D-Calcium pantothenate
0,01
Choline chloride
0,50
Folic acid
0,01
myo-Inositol
0,05
Menadione
0,01
Nicotinic acid
0.025
Nicotinamide
0.025
Pyridoxal x HCl
0.025
Pyridoxol x HCl
0.025
Riboflavin
0,01
DL-α-Tocopherol phosphate disodium salt
0,01
Thiamine x HCl
0,01
Vitamine A acetate
0,14

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