

### Technical Information

#### MicSera Nutrient Mixture F-10 Ham

With Sodium bicarbonate Without L-Glutamine

1X Liquid Cell Culture Medium requiring reduced serum supplementation

**Product Code: RSL1009**

**Application:-** MicSera media are based on the classical formulations supplemented with insulin, transferrin and other advanced nutrients. The additional nutrients help in reducing the percentage of serum required to grow most of the common cell lines. The percentage of serum reduction may vary with type of cell line used. For nonfastidious cell lines serum can be reduced from 10% to as low as 1%. For fastidious cell lines serum usage can be reduced from 10% to 2.5%. MicSera medium can be used without prior adaptation and sub cultured using normal procedures. Reduced serum supplementation improves the reproducibility of experimental results by decreasing the variability caused due to undefined serum constituents. It also facilitates down regulation process in bioassays and in purification process of culture products. RSL1009 is MicSera Nutrient Mixture F-10 Ham medium with Sodium bicarbonate. It does not contain L-glutamine. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

#### Composition\*\*

Ingredients	mg/Litre
<b>INORGANIC SALTS</b>	
Calcium chloride dihydrate	44.100
Copper sulphate pentahydrate	0.0025
Ferric sulphate heptahydrate	0.834
Magnesium sulphate anhydrous	74.730
Potassium chloride	285.000
Potassium dihydrogen phosphate	83.000
Sodium bicarbonate	1200.000
Sodium chloride	7400.000
Sodium phosphate dibasic anhydrous	153.700
Zinc sulphate heptahydrate	0.0288
<b>AMINO ACIDS</b>	
Glycine	7.510
L-Alanine	8.910
L-Arginine hydrochloride	211.000
L-Asparagine anhydrous	15.010
L-Aspartic acid	13.300
L-Cysteine dihydrochloride	35.130
L-Glutamic acid	14.700
L-Histidine hydrochloride monohydrate	21.000
L-Isoleucine	2.600
L-Leucine	13.100
L-Lysine hydrochloride	29.300
L-Methionine	4.480
L-Phenylalanine	4.960
L-Proline	11.500
L-Serine	10.500
L-Threonine	3.570
L-Tryptophan	0.600

L-Tyrosine disodium salt	2.610
L-Valine	3.500
<b>VITAMINS</b>	
Biotin	0.024
Choline chloride	0.698
D-Ca-Pantothenate	0.715
Folic acid	1.320
Nicotinamide	0.615
Pyridoxine hydrochloride	0.206
Riboflavin	0.376
Thiamine hydrochloride	1.000
Vitamin B12	1.360
i-Inositol	0.541
<b>OTHERS</b>	
D-Glucose	1100.000
Growth Supplement mix	Proprietary
Hypoxanthine sodium salt	4.080
Lipoic acid	0.210
Phenol red sodium salt	1.300
Sodium pyruvate	110.000
Thymidine	0.730

## Methodology

1. Add 20ml of 200mM L-glutamine (TCL1012) or MiGlutaXL supplement (TCL1030) for 1 litre of medium.

### Recommendations for use with Micsera Media:

1. MicSera media have been optimized at 2.5% serum concentration for a broad range of cell culture applications. Recommended concentrations of serum using MicSera media ranges from 1-5%. However the concentration of serum used may need to be adjusted for specific cell types or applications to achieve optimal results. Titration of FBS concentration is recommended to determine maximum serum reduction.
2. MicSera media are provided as 1X solutions and need to be supplemented with 4mM Glutamine and required amount of reduced serum.
3. In case of antibiotics being used to control contamination, it is recommended to reduce the amount of antibiotics in proportion to the amount of serum reduced.

## Material required but not provided

L-Glutamine solution 200mM (TCL1012)  
 MiGlutaXL Supplement (TCL1030)  
 Fetal Bovine Serum (BA2112/BA12432)

## Quality control

### Appearance

Orangish red colored, clear solution.

### pH

7.00 -7.60

### Osmolality in mOsm/Kg H2O

285.00 -325.00

### Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

### Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through minimum three subcultures.

### Endotoxin Content

NMT 5EU/ml

### Storage and Shelf Life

- Store at 2-8°C away from bright light.
- Shelf life is 12 months.
- Use before expiry date given on the product label.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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