

Product Information

Dulbecco's Modified Eagle's Medium/ High Modified

with 4500 mg/L dextrose, with 4.0 mM L-glutamine, without sodium pyruvate

CATALOG NO. 51441C

Description

Dulbecco's Modified Eagle's Medium (DMEM) is a modification of Basal Medium Eagle (BME) that contains four-fold concentrations of the amino acids and vitamins. The original formulation contained 1000 mg/L of dextrose and was used to culture embryonic mouse cells. Since then, it has been modified in several ways to support primary cultures of mouse and chicken cells, as well as a variety of normal and transformed cells. Each of these media offers a different concentration of L-glutamine and sodium pyruvate. Additionally, the dextrose levels have been raised to 4500 mg/L, contributing to the name "DMEM/High."

Precautions

Use aseptic technique when handling or supplementing this medium. This product is for further manufacturing use. THIS PRODUCT IS NOT INTENDED FOR HUMAN OR THERAPEUTIC USE.

Storage

Store medium protected from light at 2 to 8 C. Do not freeze. Do not use after the expiration date.

Indications of Deterioration

Medium should be clear of particulates and flocculent material. Do not use if medium is cloudy or contains precipitate. Other evidence of deterioration may include color change or degradation of physical or performance characteristics.

Preparation Instructions

Supplements, such as antibiotics, can be added to the sterilized medium using aseptic technique. Storage conditions and shelf life of the supplemented product may be affected by the nature of the supplements. Sterile serum should not be refiltered before or after being added to sterile medium because growth promoting capacity may be reduced upon refiltration.

Formulation

Component (all components measured in mg/L)	
INORGANIC SALTS	
Calcium chloride anhydrous	200.000
Ferric nitrate nonahydrate	0.100
Magnesium sulfate anhydrous	97.670
Potassium chloride	400.000
Sodium bicarbonate	3700.000
Sodium chloride	6400.000
Sodium phosphate monobasic monohydrate	125.000
VITAMINS	
D-calcium pantothenate	4.000
Choline chloride	4.000
Folic acid	4.000
i-inositol	7.000
Niacinamide	4.000
Pyridoxine HCl	4.000
Riboflavin	0.400
Thiamine HCl	4.000
AMINO ACIDS	
L-arginine HCl	84.000
L-cystine 2HCl	62.570
L-glutamine	584.000
Glycine	30.000
L-histidine HCl monohydrate	42.000
L-isoleucine	104.800
L-leucine	104.800
L-lysine HCl	146.200
L-methionine	30.000
L-phenylalanine	66.000
L-serine	42.000
L-threonine	95.200
L-tryptophan	16.000
L-tyrosine 2Na dihydrate	103.790
L-valine	93.600
OTHER	
Dextrose anhydrous	4500.00
Phenol red sodium salt	15.930

United States

SAFC Biosciences, Inc.
13804 W. 107th Street
Lenexa, Kansas 66215
USA
Phone +1 913-469-5580
Toll free-USA 1 800-255-6032
Fax +1 913-469-5584
E-mail info-na@sial.com

Europe

SAFC Biosciences Ltd.
Smeaton Road, West Portway
Andover, Hampshire SP10 3LF
UNITED KINGDOM
Phone +44 (0)1264-333311
Fax +44 (0)1264-332412
E-mail info-eu@sial.com

Asia Pacific

SAFC Biosciences Pty. Ltd.
18-20 Export Drive
Brooklyn, Victoria 3025
AUSTRALIA
Phone +61 (0)3-9362-4500
Toll free-AUS 1 800-200-404
Fax +61 (0)3-9315-1656
E-mail info-ap@sial.com

www.safcbiosciences.com

Characteristics

Appearance

Clear orange-red solution

Endotoxin (LAL)

≤ 1.0 EU/mL

Osmolality (as supplied)

320 - 360 mOsm/kg H₂O

pH (as supplied)

7.0 - 7.4

Sterility

No microbial growth detected

References

1. Eagle, H., *Science* (1959) 130:432.
2. Dulbecco, R. and Freeman, G., *Virology* (1979) 8:396.
3. Smith, J. D., Freeman, G., Vogt, M., and Dulbecco, R., *Virology* (1960) 12:185.
4. Morton, H. J., *In Vitro* (1970) 6:89.

Warranty, Limitation of Remedies

SAFC Biosciences warrants to the purchaser for a period of one year from date of delivery that this product conforms to its specifications. Other terms and conditions of this warranty are contained in SAFC Biosciences' written warranty, a copy of which is available upon request. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED. In no case will SAFC Biosciences be liable for any special, incidental, or consequential damages arising out of this product or the use of this product by the customer or any third party based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory. SAFC Biosciences expressly disclaims any warranty against claims by any third party by way of infringement or the like. THIS PRODUCT IS INTENDED FOR PURPOSES DESCRIBED ONLY AND IS NOT INTENDED FOR ANY HUMAN OR THERAPEUTIC USE.

Additional Terms and Conditions are contained in the product Catalog, a copy of which is available upon request.

© 2006 SAFC Biosciences, Inc.

Issued December 2006 P51441
1203 0905 1005 0406 0906

United States

SAFC Biosciences, Inc.
13804 W. 107th Street
Lenexa, Kansas 66215
USA

Phone	+1 913-469-5580
Toll free-USA	1 800-255-6032
Fax	+1 913-469-5584
E-mail	info-na@sial.com

Europe

SAFC Biosciences Ltd.
Smeaton Road, West Portway
Andover, Hampshire SP10 3LF
UNITED KINGDOM

Phone	+44 (0)1264-333311
Fax	+44 (0)1264-332412
E-mail	info-eu@sial.com

Asia Pacific

SAFC Biosciences Pty. Ltd.
18-20 Export Drive
Brooklyn, Victoria 3025
AUSTRALIA

Phone	+61 (0)3-9362-4500
Toll free-AUS	1 800-200-404
Fax	+61 (0)3-9315-1656
E-mail	info-ap@sial.com

www.safcbiosciences.com