


DMEM (Dulbecco's Modified Eagle Medium)

Pub. No. MAN0018898 Rev. 4.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

Product description

Dulbecco's Modified Eagle Medium (DMEM) can be used to culture a variety of suspension and adherent mammalian cells, including primary fibroblasts, neurons, glial cells, HUVECs, and smooth muscle cells, as well as cell lines such as HeLa, 293, Cos-7, and PC-12. DMEM is unique from other media because it contains 4 times the concentration of amino acids and vitamins than the original Eagle's Minimal Essential Medium. DMEM was originally formulated with low glucose (1 g/L) and sodium pyruvate, but it is often used with higher glucose levels, with or without sodium pyruvate. DMEM contains no proteins, lipids, or growth factors. Therefore, DMEM requires supplementation, commonly with 10% fetal bovine serum (FBS). DMEM uses a sodium bicarbonate buffer system (3.7 g/L) and requires a 5–10% CO₂ environmental atmosphere to maintain physiological pH.

Contents and storage


All quality control testing results are reported on lot-specific Certificate of Analysis available on our website: [thermofisher.com](https://www.thermofisher.com).

Product	Cat. No.	Storage	Shelf life ^[1]
DMEM F12	10565018 ^[2]	2°C to 8°C Protect from light	12 months
DMEM F12	10565042 ^[2]		
DMEM (HIGH GLUCOSE) W/O L-GLUT	10938025 ^[3]		
DMEM NUTRIENT MIX F12	11320033 ^[4]		
D-MEM/F:12(1:1)	11320074 ^[3]		
DMEM NUTRIENT MIX F12	11320082 ^[4]		
DMEM NUTRIENT MIX F12	11330032 ^[2]		
DMEM NUTRIENT MIX F12	11330057 ^[2]		
DMEM NUTRIENT MIX F12	11330099 ^[4]		
DMEM NUTRIENT MIX F12	11330107 ^[4]		
DMEM W/O PR W/O L-GLUT	11880028 ^[3]	2°C to 8°C Protect from light	12 months
DMEM	21063029 ^[2]		
DMEM/F12 (1:1) W/O L-GLUT	21331020 ^[3]		
DMEM W/GLUTAMAX-I PYR,IG/L,GLU	21885025 ^[3]		
D-MEM(LG)W/NA PYR & HEPES	22320022 ^[3]		
DMEM:F12(1:1) W/HEPES	31330038 ^[3]		
DMEM/NUT.MIX F-12 W/GLUT-I	31331028 ^[3]		
D-MEM (LG)W/NA PYR.	31885023 ^[3]		
DMEM W/GLUTAMAX-I,PYR,4.5G GLU	31966021 ^[3]		
DMEM W/GLUT-I,HEPES,W/O PYR	32430027 ^[3]		
D-MEM (HG) W/O NA PYR	41965039 ^[3]		


Product	Cat. No.	Storage	Shelf life ^[1]
D-MEM (HG) W/O NA PYR (1X)	41965047 ^[3]	2°C to 8°C Protect from light	12 months
D-MEM (HG) W/NA PYR	41966029 ^[3]		
D-MEM (HG) W/NA PYR	41966161 ^[3]		
D-MEM (HG)W/O PYR W/HEPES	42430025 ^[3]		
DMEM HIGH W/GLUTAMAX - I	61965026 ^[3]		
DMEM HIGH W/GLUTAMAX - I	61965240 ^[3]		
DMEM, 0.11 G/L PYR w/o L-Glut	21969035 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, HEPES	10564011 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, HEPES	10564029 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, HEPES	10564037 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, HEPES	10564045 ^[4]	2°C to 8°C Protect from light	12 months
DMEM, high glucose, GlutaMAX™ Supplement	10566016 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement	10566024 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement	10566032 ^[4]		
DMEM, high glucose, no glutamine	11960044 ^[4]		
DMEM, high glucose, no glutamine	11960051 ^[4]		
DMEM, high glucose, no glutamine	11960069 ^[4]		
DMEM, high glucose, no glutamine	11960077 ^[4]		
DMEM (1X) - Manufactured in Inchinnan only	11960085 ^[4]		
DMEM, high glucose, pyruvate	11995040 ^[4]		
DMEM, high glucose, pyruvate	11995065 ^[4]	2°C to 8°C Protect from light	12 months
DMEM, high glucose, pyruvate	11995073 ^[4]		
DMEM, high glucose, pyruvate	11995081 ^[4]		
DMEM, high glucose, pyruvate	11995115 ^[4]		
DMEM, high glucose, pyruvate	11995123 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, pyruvate	10569010 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, pyruvate	10569044 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, pyruvate	10569069 ^[4]		
DMEM, high glucose, GlutaMAX™ Supplement, pyruvate	10569077 ^[4]		
DMEM, high glucose	11965084 ^[4]		
DMEM, high glucose	11965126 ^[4]	2°C to 8°C Protect from light	12 months
DMEM, low glucose, GlutaMAX™ Supplement, pyruvate	10567014 ^[4]		
DMEM, low glucose, GlutaMAX™ Supplement, pyruvate	10567022 ^[4]		
DMEM, low glucose, pyruvate	11885076 ^[4]		
DMEM, low glucose, pyruvate	11885084 ^[4]		
DMEM, low glucose, pyruvate	11885092 ^[4]		
DMEM	11885099 ^[4]		
DMEM, high glucose	11965092 ^[4]		
DMEM, high glucose	11965118 ^[4]		

Product	Cat. No.	Storage	Shelf life ^[1]
DMEM, high glucose	11965167 ^[4]	2°C to 8°C Protect from light	12 months
DMEM, high glucose	11965175 ^[4]		
DMEM, low glucose, pyruvate, HEPES	12320032 ^[4]		
DMEM	12320098 ^[4]		
DMEM, high glucose, pyruvate, no glutamine	10313021 ^[4]		
DMEM, high glucose, pyruvate, no glutamine	10313039 ^[4]		
DMEM, high glucose, HEPES	12430047 ^[4]		
DMEM, high glucose, HEPES	12430054 ^[4]		
DMEM, high glucose, HEPES	12430062 ^[4]		
DMEM, high glucose, HEPES	12430104 ^[4]		

^[1] Shelf life is determined from Date of Manufacture. Do not use beyond the labeled expiration date.

^[2]  Dual manufactured.

^[3]  Manufacturer: Life Technologies™ Ltd. | 3 Fountain Drive, Inchinnan Business Park | Paisley PA49RF, Scotland, United Kingdom | Tel: +44 (0)141 81416305

^[4]  Manufacturer: Life Technologies Corporation | 3175 Staley Road | Grand Island, New York 14072 USA

Guidelines for use

Ready-to-use commercial cell culture media undergoes strict quality control to ensure sterility, but may become contaminated while handling. Follow these guidelines for sterile handling to avoid contamination.

- Always wipe your gloved hands and work area with 70% ethanol.
- Wipe the outside of the containers, flasks, plates, and dishes with 70% ethanol before placing them in the cell culture hood.
- Use sterile pipette tips and pipettes to work with liquids, and use each pipette tip only once to avoid cross-contamination. Do not unwrap sterile pipettes until they are ready to be used. Keep pipettes and tips within the clean work area.
- Do not talk while performing sterile procedures and perform your cell culture as efficiently and carefully as possible to minimize contamination.

Quality control

Standard evaluations for cell culture media are pH, osmolality, endotoxins and sterility testing for liquid products. All quality control testing results are reported on lot specific Certificate of Analysis available on our website: thermofisher.com.

Related products

Unless otherwise indicated, all materials are available through thermofisher.com.

Item	Source
Gentamicin (50 mg/mL)	15750078
Amphotericin B	15290018
Penicillin-Streptomycin (10,000 U/mL)	15140122
PBS, pH 7.4	10010031
Fetal Bovine Serum (FBS)	16000044

Labeling symbols

For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



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Manufacturer:
Dual manufactured products

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Revision history: Pub. No. MAN0018898

Revision 5	Date	Description
4.0	14 March 2022	<ul style="list-style-type: none"> The regulatory label was changed to "For Research Use or Further Manufacturing. Not for diagnostic use or direct administration into humans or animals." The content required by previous IVD label was deleted or updated. The document type was changed to Product Information Sheet to reflect changed scope of the document.
3.0	02 October 2020	DMEM skus were added to contents and storage table.
2.0	01 September 2020	DMEM skus were added to contents and storage table.
1.0	12 November 2019	New document for DMEM (Dulbecco's Modified Eagle Medium).

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