

BRAMANTE BIOLOGICS

PRODUCT INFORMATION

DMEM/F12

Product: MD-LIQ-DMEM-F12-1X-NAHCO₃

Reference revision v1. Updated 2026-09-22.

Product at a glance

D-Glucose: 3.151 g/L

L-Glutamine: 365 mg/L

Sodium pyruvate: 55 mg/L

Sodium bicarbonate: 2.438 g/L

Phenol red sodium salt: 8.1 mg/L

HEPES: Not included

Composition and intended use

This version contains free L-glutamine, pyruvate and phenol red. It contains no serum, antibiotics or added growth factors. Choose supplements for the cell model and experimental purpose; use the supplementation specified by the cell-culture protocol.

The bicarbonate buffer exchanges carbon dioxide with the surrounding gas. Establish the culture atmosphere and equilibration conditions for the intended application. A change in phenol-red color can indicate a pH change, but color is not a calibrated pH result.

Using and storing this product

2–8 °C, protected from light.

Use aseptic technique. Follow the storage conditions and expiry date on the lot label. Inspect the medium for unexpected cloudiness, precipitate or a marked color change before use.

Quality information

Quality control testing includes Appearance, Bacterial endotoxins (LAL), Mycoplasma, Osmolality, Sterility, Conductivity, Cell growth performance, pH, Glucose.

For research use only.

Lot-specific results are reported on the Certificate of Analysis. For research use only.

Nominal formulation

Nominal amounts are per final litre and rounded for display. Chemical forms define the amounts; water brings the solution to final volume.

Glycine (Free amino acid): 18.75 mg/L

L-Alanine (Free amino acid): 4.45 mg/L

L-Arginine hydrochloride (Monohydrochloride): 147.5 mg/L

L-Asparagine (Monohydrate): 7.5 mg/L
L-Aspartic acid (Free acid): 6.65 mg/L
L-Cysteine hydrochloride (Monohydrochloride monohydrate): 17.56 mg/L
L-Cystine dihydrochloride (Dihydrochloride): 31.29 mg/L
L-Glutamic acid (Free acid): 7.35 mg/L
L-Glutamine (Free amino acid): 365 mg/L
L-Histidine hydrochloride (Monohydrochloride monohydrate): 31.48 mg/L
L-Isoleucine (Free amino acid): 54.47 mg/L
L-Leucine (Free amino acid): 59.05 mg/L
L-Lysine hydrochloride (Monohydrochloride): 91.25 mg/L
L-Methionine (Free amino acid): 17.24 mg/L
L-Phenylalanine (Free amino acid): 35.48 mg/L
L-Proline (Free amino acid): 17.25 mg/L
L-Serine (Free amino acid): 26.25 mg/L
L-Threonine (Free amino acid): 53.45 mg/L
L-Tryptophan (Free amino acid): 9.02 mg/L
L-Tyrosine disodium salt (Dihydrate): 55.79 mg/L
L-Valine (Free amino acid): 52.85 mg/L
D-Biotin (Anhydrous): 3.5 µg/L
Choline chloride (Anhydrous-basis material): 8.98 mg/L
D-Calcium pantothenate (Calcium salt; anhydrous-basis assay): 2.24 mg/L
Folic acid (Anhydrous): 2.65 mg/L
Niacinamide (nicotinamide) (Anhydrous): 2.02 mg/L
Pyridoxine hydrochloride (Hydrochloride): 2.013 mg/L
Riboflavin (Anhydrous): 219 µg/L
Thiamine hydrochloride (Hydrochloride): 2.17 mg/L
Cyanocobalamin (vitamin B12) (Cyanocobalamin): 680 µg/L
myo-Inositol (Anhydrous): 12.6 mg/L
Calcium chloride (CaCl₂·2H₂O dihydrate): 154.5 mg/L
Copper(II) sulfate (CuSO₄·5H₂O pentahydrate): 1.3 µg/L
Iron(III) nitrate (Fe(NO₃)₃·9H₂O nonahydrate): 50 µg/L
Iron(II) sulfate (FeSO₄·7H₂O heptahydrate): 417 µg/L
Magnesium chloride (Anhydrous MgCl₂): 28.64 mg/L
Magnesium sulfate (MgSO₄·7H₂O heptahydrate): 100 mg/L

Potassium chloride (KCl): 311.8 mg/L

Sodium bicarbonate (NaHCO₃): 2.438 g/L

Sodium chloride (NaCl): 6.996 g/L

Sodium phosphate dibasic (Anhydrous Na₂HPO₄): 71.02 mg/L

Sodium phosphate monobasic (Anhydrous NaH₂PO₄): 54.34 mg/L

Zinc sulfate (ZnSO₄·7H₂O heptahydrate): 432 µg/L

D-Glucose (Anhydrous): 3.151 g/L

Hypoxanthine monosodium salt (Anhydrous monosodium salt): 2.39 mg/L

Linoleic acid (Free acid (liquid)): 42 µg/L

DL-α-Lipoic acid (Racemic free acid): 105 µg/L

Phenol red sodium salt (Monosodium salt): 8.1 mg/L

Putrescine dihydrochloride (Dihydrochloride): 81 µg/L

Sodium pyruvate (Anhydrous sodium salt): 55 mg/L

Thymidine (Anhydrous): 365 µg/L

For lot-specific quality-control results, see the Certificate of Analysis.