

BRAMANTE BIOLOGICS

PRODUCT INFORMATION

DMEM high-glucose

Product: MD-LIQ-DMEM-HIGH-GLUCOSE-1X-NAHCO₃

Reference revision v1. Updated 2026-09-22.

Product at a glance

D-Glucose: 4.5 g/L

L-Glutamine: 584 mg/L

Sodium pyruvate: 110 mg/L

Sodium bicarbonate: 3.7 g/L

Phenol red sodium salt: 15 mg/L

HEPES: Not included

Composition and intended use

The glucose concentration distinguishes this formulation from low-glucose DMEM. L-glutamine and pyruvate are already present; neither serum nor antibiotics are part of the formulation. The glutamine is the free amino acid, not a glutamine-containing dipeptide.

Bicarbonate buffering links medium pH to the surrounding carbon dioxide concentration. Use the gas conditions and supplementation specified for your cell model, and check pH after equilibration. Phenol red provides a visual indication of pH changes; it does not replace a pH measurement.

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, D-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): 30 mg/L

L-Arginine hydrochloride (Monohydrochloride): 84 mg/L

L-Cystine dihydrochloride (Dihydrochloride): 63 mg/L

L-Glutamine (Free amino acid): 584 mg/L

L-Histidine hydrochloride (Monohydrochloride monohydrate): 42 mg/L

L-Isoleucine (Free amino acid): 105 mg/L

L-Leucine (Free amino acid): 105 mg/L

L-Lysine hydrochloride (Monohydrochloride): 146 mg/L

L-Methionine (Free amino acid): 30 mg/L

L-Phenylalanine (Free amino acid): 66 mg/L

L-Serine (Free amino acid): 42 mg/L

L-Threonine (Free amino acid): 95 mg/L

L-Tryptophan (Free amino acid): 16 mg/L

L-Tyrosine disodium salt (Dihydrate): 104 mg/L

L-Valine (Free amino acid): 94 mg/L

Choline chloride (Anhydrous-basis material): 4 mg/L

D-Calcium pantothenate (Calcium salt; anhydrous-basis assay): 4 mg/L

Folic acid (Anhydrous): 4 mg/L

Niacinamide (nicotinamide) (Anhydrous): 4 mg/L

Pyridoxine hydrochloride (Hydrochloride): 4 mg/L

Riboflavin (Anhydrous): 400 µg/L

Thiamine hydrochloride (Hydrochloride): 4 mg/L

myo-Inositol (Anhydrous): 7.2 mg/L

Calcium chloride ($\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ dihydrate): 264.9 mg/L

Iron(III) nitrate ($\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$ nonahydrate): 100 µg/L

Magnesium sulfate ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ heptahydrate): 200 mg/L

Potassium chloride (KCl): 400 mg/L

Sodium bicarbonate (NaHCO_3): 3.7 g/L

Sodium chloride (NaCl): 6.4 g/L

Sodium phosphate monobasic (Anhydrous NaH_2PO_4): 108.7 mg/L

D-Glucose (Anhydrous): 4.5 g/L

Phenol red sodium salt (Monosodium salt): 15 mg/L

Sodium pyruvate (Anhydrous sodium salt): 110 mg/L

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