

BRAMANTE BIOLOGICS

PRODUCT INFORMATION

RPMI-1640

Product: MD-LIQ-RPMI-1640-1X-NAHCO3

Reference revision v1. Updated 2026-09-22.

Product at a glance

D-Glucose: 2 g/L

L-Glutamine: 300 mg/L

Sodium pyruvate: Not included

Sodium bicarbonate: 2 g/L

Phenol red sodium salt: 5 mg/L

HEPES: Not included

Composition and intended use

The medium contains free L-glutamine, reduced glutathione and phenol red. Serum and antibiotics are not included. Choose supplements for the cell model and experiment; this basal formulation does not provide a complete culture system for every cell type.

Bicarbonate buffering makes pH responsive to carbon dioxide. Set the culture atmosphere according to the cell protocol and verify pH under those conditions. Phenol red helps reveal a change in pH but does not measure its value.

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): 10 mg/L

L-Arginine (Free base): 200 mg/L

L-Asparagine (Monohydrate): 56.82 mg/L

L-Aspartic acid (Free acid): 20 mg/L

L-Cystine dihydrochloride (Dihydrochloride): 65 mg/L

L-Glutamic acid (Free acid): 20 mg/L

L-Glutamine (Free amino acid): 300 mg/L

L-Histidine (Free base): 15 mg/L

trans-4-Hydroxy-L-proline (Free amino acid): 20 mg/L

L-Isoleucine (Free amino acid): 50 mg/L

L-Leucine (Free amino acid): 50 mg/L

L-Lysine hydrochloride (Monohydrochloride): 40 mg/L

L-Methionine (Free amino acid): 15 mg/L

L-Phenylalanine (Free amino acid): 15 mg/L

L-Proline (Free amino acid): 20 mg/L

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

L-Threonine (Free amino acid): 20 mg/L

L-Tryptophan (Free amino acid): 5 mg/L

L-Tyrosine disodium salt (Dihydrate): 29 mg/L

L-Valine (Free amino acid): 20 mg/L

D-Biotin (Anhydrous): 200 µg/L

Choline chloride (Anhydrous-basis material): 3 mg/L

D-Calcium pantothenate (Calcium salt; anhydrous-basis assay): 250 µg/L

Folic acid (Anhydrous): 1 mg/L

Niacinamide (nicotinamide) (Anhydrous): 1 mg/L

p-Aminobenzoic acid (Free acid): 1 mg/L

Pyridoxine hydrochloride (Hydrochloride): 1 mg/L

Riboflavin (Anhydrous): 200 µg/L

Thiamine hydrochloride (Hydrochloride): 1 mg/L

Cyanocobalamin (vitamin B12) (Cyanocobalamin): 5 µg/L

myo-Inositol (Anhydrous): 35 mg/L

Calcium nitrate ($\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$ tetrahydrate): 100 mg/L

Magnesium sulfate ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ heptahydrate): 100 mg/L

Potassium chloride (KCl): 400 mg/L

Sodium bicarbonate (NaHCO_3): 2 g/L

Sodium chloride (NaCl): 6 g/L

Sodium phosphate dibasic (Anhydrous Na_2HPO_4): 800 mg/L

D-Glucose (Anhydrous): 2 g/L

Glutathione (Reduced): 1 mg/L

Phenol red sodium salt (Monosodium salt): 5 mg/L

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