

PM1 MicroPlate™

Sinorhizobium meliloti

A1 Negative Control	A2 L-Arabinose +	A3 N-Acetyl-D-Glucosamine +	A4 D-Saccharic Acid	A5 Succinic Acid +	A6 D-Galactose +	A7 L-Aspartic Acid +	A8 L-Proline +	A9 D-Alanine	A10 D-Trehalose +	A11 D-Mannose +	A12 Dulcitol +
B1 D-Serine	B2 D-Sorbitol +	B3 Glycerol +	B4 L-Fucose +	B5 D-Glucuronic Acid	B6 D-Gluconic Acid	B7 D,L- α -Glycerol-Phosphate	B8 D-Xylose +	B9 L-Lactic Acid W	B10 Formic Acid W	B11 D-Mannitol +	B12 L-Glutamic Acid W
C1 Glucose-6-Phosphate	C2 D-Galactonic Acid- γ -Lactone	C3 D,L-Malic Acid +	C4 D-Ribose +	C5 Tween 20	C6 L-Rhamnose +	C7 D-Fructose +	C8 Acetic Acid W	C9 α -D-Glucose +	C10 Maltose +	C11 D-Melibiose	C12 Thymidine W
D-1 L-Asparagine	D2 D-Aspartic Acid	D3 D-Glucosaminic Acid	D4 1,2-Propanediol	D5 Tween 40	D6 α -Keto-Glutaric Acid	D7 α -Keto-Butyric Acid	D8 α -Methyl-D-Galactoside +	D9 α -D-Lactose +	D10 Lactulose +	D11 Sucrose +	D12 Uridine
E1 L-Glutamine +	E2 M-Tartaric Acid	E3 Glucose-1-Phosphate	E4 Fructose-6-Phosphate	E5 Tween 80	E6 α -Hydroxy Glutaric Acid- γ -Lactone	E7 α -Hydroxy Butyric Acid	E8 β -Methyl-D-Glucoside +	E9 Adonitol +	E10 Maltotriose	E11 2-Deoxy Adenosine	E12 Adenosine W
F1 Glycyl-L-Aspartic Acid	F2 Citric Acid	F3 M-Inositol +	F4 D-Threonine	F5 Fumaric Acid +	F6 Bromo Succinic Acid +	F7 Propionic Acid +	F8 Mucic Acid	F9 Glycolic Acid	F10 Glyoxylic Acid	F11 D-Cellobiose +	F12 Inosine
G1 Glycyl-L-Glutamic Acid	G2 Tricarballic Acid	G3 L-Serine W	G4 L-Threonine	G5 L-Alanine W	G6 L-Alanyl-Glycine W	G7 Acetoacetic Acid	G8 N-Acetyl- β -D-Mannosamine	G9 Mono Methyl Succinate +	G10 Methyl Pyruvate	G11 D-Malic Acid	G12 L-Malic Acid +
H1 Glycyl-L-Proline	H2 P-Hydroxy Phenyl Acetic Acid	H3 M-Hydroxy Phenyl Acetic Acid	H4 Tyramine	H5 D-Psicose +	H6 L-Lyxose	H7 Glucuronamide	H8 Pyruvic Acid	H9 L-Galactonic Acid- γ -Lactone	H10 D-Galacturonic Acid	H11 Phenylethyl-amine	H12 2-Aminoethanol

FIGURE 1. Carbon Sources in PM1 MicroPlate

PM2 MicroPlate™

Sinorhizobium meliloti

A1 Negative Control	A2 Chondroitin Sulfate C	A3 α -Cyclodextrin	A4 β -Cyclodextrin	A5 γ -Cyclodextrin	A6 Dextrin W	A7 Gelatin	A8 Glycogen	A9 Inulin	A10 Laminarin	A11 Mannan	A12 Pectin
B1 N-Acetyl-D-Galactosamine W	B2 N-Acetyl-Neuraminic Acid	B3 β -D-Allose	B4 Amygdalin	B5 D-Arabinose +	B6 D-Arabitol +	B7 L-Arabitol +	B8 Arbutin W	B9 2-Deoxy-D-Ribose	B10 l-Erythritol +	B11 D-Fucose W	B12 3-O- β -D-Galactopyranosyl-D-Arabinose +
C1 Gentiobiose +	C2 L-Glucose	C3 Lactitol	C4 D-Lyxose +	C5 Maltitol +	C6 α -Methyl-D-Galactoside +	C7 β -Methyl-D-Galactoside +	C8 3-Methyl Glucose W	C9 β -Methyl-D-Glucuronic Acid	C10 α -Methyl-D-Mannoside	C11 β -Methyl-D-Xyloside +	C12 Palatinose +
D1 D-Raffinose +	D2 Salicin +	D3 Sedoheptulosan	D4 L-Sorbose W	D5 Stachyose	D6 D-Tagatose +	D7 Turanose +	D8 Xylitol	D9 L-Xylose	D10 γ -Amino Butyric Acid W	D11 D-Amino Valeric Acid	D12 Butyric Acid
E1 Capric Acid	E2 Caproic Acid	E3 Citraconic Acid	E4 Citramalic Acid	E5 Dihydroxy Fumaric Acid	E6 2-Hydroxy Benzoic Acid	E7 4-Hydroxy Benzoic Acid	E8 β -Hydroxy Butyric Acid	E9 γ -Hydroxy Butyric Acid	E10 β -Hydroxy Pyruvic Acid	E11 Itaconic Acid	E12 5-Keto-D-Gluconic Acid
F1 D-Lactic Acid Methyl Ester	F2 Malonic Acid	F3 Melibionnic Acid	F4 Oxalic Acid	F5 Oxalomalic Acid	F6 Quinic Acid	F7 D-Ribono-1,4-Lactone	F8 Sebacic Acid	F9 Sorbic Acid	F10 Succinamic Acid	F11 D-Tartaric Acid	F12 L-Tartaric Acid
G1 Acetamide	G2 L-Alaninamide W	G3 N-Acetyl-L-Glutamic Acid	G4 L-Arginine W	G5 Glycine	G6 L-Histidine W	G7 L-Homoserine	G8 Hydroxy-L-Proline +	G9 L-Isoleucine	G10 L-Leucine W	G11 L-Lysine +	G12 L-Methionine
H1 L-Ornithine +	H2 L-Phenylalanine	H3 L-Pyroglytamic Acid	H4 L-Valine	H5 D,L-Carnitine +	H6 Sec-Butylamine	H7 D,L-Octopamine	H8 Putrescine	H9 Dihydroxy Acetone	H10 2,3-Butanediol	H11 2,3-Butanone	H12 3-Hydroxy 2-Butanone

FIGURE 2. Carbon Sources in PM2 MicroPlate

PM3 MicroPlate™

Sinorhizobium meliloti

A1 Negative Control	A2 Ammonia	A3 Nitrite	A4 Nitrate	A5 Urea	A6 Biuret	A7 L-Alanine	A8 L-Arginine	A9 L-Asparagine	A10 L-Aspartic Acid	A11 L-Cysteine	A12 L-Glutamic Acid
+	+	+	+	+	+	+	+	+	+	+	+
B1 L-Glutamine	B2 Glycine	B3 L-Histidine	B4 L-Isoleucine	B5 L-Leucine	B6 L-Lysine	B7 L-Methionine	B8 L-Phenylalanine	B9 L-Proline	B10 L-Serine	B11 L-Threonine	B12 L-Tryptophan
+	+	+	W	+	+	W	W	+	+		
C1 L-Tyrosine	C2 L-Valine	C3 D-Alanine	C4 D-Asparagine	C5 D-Aspartic Acid	C6 D-Glutamic Acid	C7 D-Lysine	C8 D-Serine	C9 D-Valine	C10 L-Citrulline	C11 L-Homoserine	C12 L-Ornithine
W	+	+	+			+	W		+		+
D-1 N-Acetyl-D,L- Glutamic Acid	D2 N-Phthaloyl-L- Glutamic Acid	D3 L-Pyrroglutamic Acid	D4 Hyroxylamine	D5 Methylamine	D6 N-Amylamine	D7 N-Butylamine	D8 Ethylamine	D9 Ethanolamine	D10 Ethylenediamine	D11 Putrescine	D12 Agmatine
				+			+	+		+	+
E1 Histamine	E2 β-Phenylethyl- amine	E3 Tyramine	E4 Acetamide	E5 Formamide	E6 Glucuronamide	E7 D,L-Lactamide	E8 D-Glucosamine	E9 D-Galactosamine	E10 D-Mannosamine	E11 N-Acetyl-D- Glucosamine	E12 N-Acetyl-D- Galactosamine
					W	+	+		+	+	+
F1 N-Acetyl-D- Mannosamine	F2 Adenine	F3 Adenosine	F4 Cytidine	F5 Cytosine	F6 Guanine	F7 Guanosine	F8 Thymine	F9 Thymidine	F10 Uracil	F11 Uridine	F12 Inosine
	+	+	+	+		+	+	+	W	+	+
G1 Xanthine	G2 Xanthosine	G3 Uric Acid	G4 Alloxan	G5 Allantoin	G6 Parabanic Acid	G7 D,L-α-Amino-N- Butyric Acid	G8 γ-Amino-N- Butyric Acid	G9 ε-Amino-N- Caproic Acid	G10 D,L-α-Amino- Caprylic Acid	G11 D-Amino-N- Valeric Acid	G12 2-Amino-N- Valeric Acid
+	+			+	+		+			W	W
H1 Ala-Asp	H2 Ala-Gln	H3 Ala-Glu	H4 Ala-Gly	H5 Ala-His	H6 Ala-Leu	H7 Ala-Thr	H8 Gly-Asn	H9 Gly-Gln	H10 Gly-Glu	H11 Gly-Met	H12 Met-Ala
+	+	+	+	+	+	+	+	+	+	+	+

FIGURE 3. Nitrogen Sources in PM3 MicroPlate

PM4 MicroPlate™

Sinorhizobium meliloti

A1 Negative Control	A2 Phosphate	A3 Pyrophosphate	A4 Trimeta- phosphate	A5 Tripoly- phosphate	A6 Triethyl Phosphate	A7 Hypophosphite	A8 Adenosine- 2'- monophosphate	A9 Adenosine- 3'- monophosphate	A10 Adenosine- 5'- monophosphate	A11 Adenosine- 2',3'- cyclic monophosphate	A12 Adenosine- 3',5'- cyclic monophosphate
	+	W	+	+	W	W	W	+	+	+	+
B1 Thiophosphate	B2 Dithiophosphate	B3 D,L-α-Glycerol Phosphate	B4 β-Glycerol Phosphate	B5 L-α - Phosphatidyl- D,L-Glycerol	B6 D-2-Phospho- Glyceric Acid	B7 D-3-Phospho- Glyceric Acid	B8 Guanosine- 2'- monophosphate	B9 Guanosine- 3'- monophosphate	B10 Guanosine- 5'- monophosphate	B11 Guanosine- 2',3'- cyclic monophosphate	B12 Guanosine- 3',5'- cyclic monophosphate
+	+	+	+	W	+	+	+	+	+	+	+
C1 Phosphoenol Pyruvate	C2 Phospho- Glycolic Acid	C3 D-Glucose-1- Phosphate	C4 D-Glucose-6- Phosphate	C5 2-Deoxy-D- Glucose 6- Phosphate	C6 D-Glucosamine- 6-Phosphate	C7 6-Phospho- Gluconic Acid	C8 Cytidine- 2'- monophosphate	C9 Cytidine- 3'- monophosphate	C10 Cytidine- 5'- monophosphate	C11 Cytidine- 2',3'- cyclic monophosphate	C12 Cytidine- 3',5'- cyclic monophosphate
+	+	+	+	+	+	+	+	+	+	+	+
D1 D-Mannose-1- Phosphate	D2 D-Mannose-6- Phosphate	D3 Cysteamine-S- Phosphate	D4 Phospho-L- Arginine	D5 O-Phospho-D- Serine	D6 O-Phospho-L- Serine	D7 O-Phospho-L- Threonine	D8 Uridine- 2'- monophosphate	D9 Uridine- 3'- monophosphate	D10 Uridine- 5'- monophosphate	D11 Uridine- 2',3'- cyclic monophosphate	D12 Uridine- 3',5'- cyclic monophosphate
+	+	+	+	+	+	+	+	+	+	+	W
E1 O-Phospho-D- Tyrosine	E2 O-Phospho-L- Tyrosine	E3 Phosphocreatine	E4 Phosphoryl Choline	E5 O-Phosphoryl- Ethanolamine	E6 Phosphono Acetic Acid	E7 2-Aminoethyl Phosphonic Acid	E8 Methylene Diphosphonic Acid	E9 Thymidine- 3'- Monophosphate	E10 Thymidine- 5'- Monophosphate	E11 Inositol Hexaphosphate	E12 Thymidine 3',5'- cyclic monophosphate
+	+	+	+	+	+	+	+	+	+		W
F1 Negative Control	F2 Sulfate	F3 Thiosulfate	F4 Tetrathionate	F5 Thiophosphate	F6 Dithiophosphate	F7 L-Cysteine	F8 D-Cysteine	F9 L-Cysteiny- Glycine	F10 L-Cysteic Acid	F11 Cysteamine	F12 L-Cysteine Sulfonic Acid
	+	+	+	+	+	+	+		W	W	+
G1 N-Acetyl-L- Cysteine	G2 S-Methyl-L- Cysteine	G3 Cystathionine	G4 Lanthionine	G5 Glutathione	G6 D,L-Ethionine	G7 L-Methionine	G8 D-Methionine	G9 Glycyl-L- Methionine	G10 N-Acetyl-D,L- Methionine	G11 L- Methionine Sulfoxide	G12 L-Methionine Sulfone
W	+	+	+	+		+	+	+	+	+	
H1 L-Djenkolic Acid	H2 Thiourea	H3 1-Thio-β-D- Glucose	H4 D,L-Lipoamide	H5 Taurocholic Acid	H6 Taurine	H7 Hypotaaurine	H8 P-Amino Benzene Sulfonic Acid	H9 Butane Sulfonic Acid	H10 2-Hydroxyethane Sulfonic Acid	H11 Methane Sulfonic Acid	H12 Tetramethylene Sulfone
+	+	+	W	W	+	+	W	+	+	W	

FIGURE 4. Phosphorus & Sulfur Sources in PM4 MicroPlate