

SUPPLEMENTAL MATERIAL

Supplemental Figures

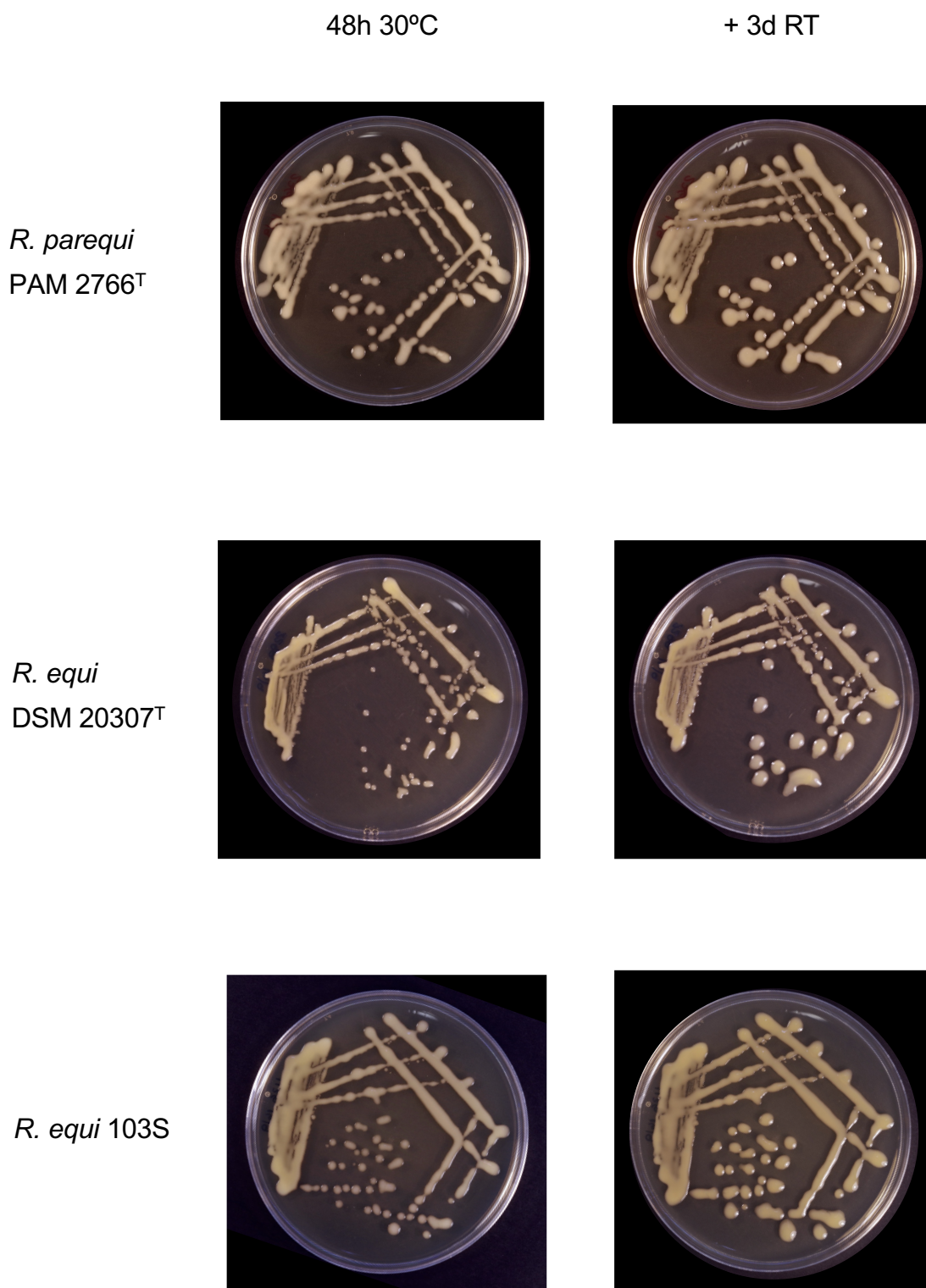


Fig. S1. Colony morphology of *R. parequi* PAM 2766^T compared to *R. equi* (type strain DSM 20307^T and reference genome strain 103S [PAM 1126], each belonging to one of the two main phylogenomic subdivisions of the species [29]). TSA plates were grown at 30 °C for 48 h (left) and then left three additional days at room temperature.

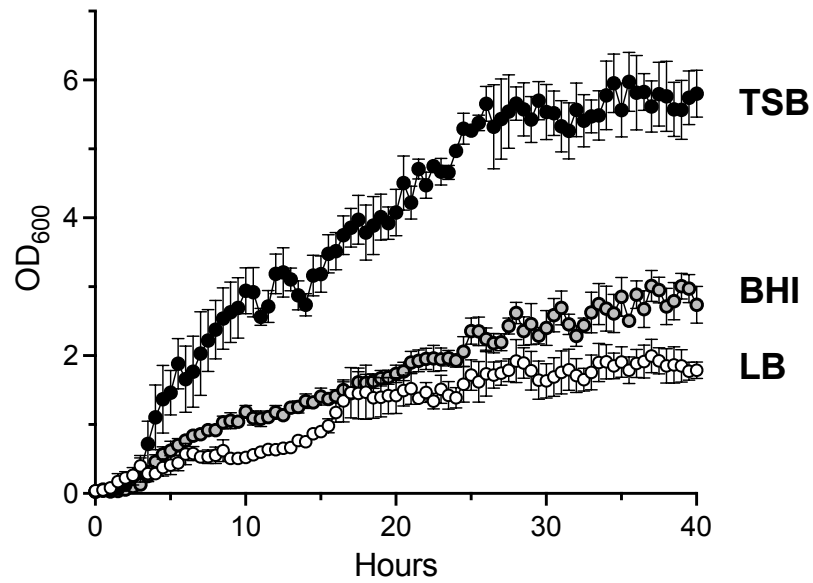


Fig. S2. Growth dynamics of PAM 2766^T in different culture media: tryptic soy broth (TSB), brain-heart infusion (BHI), and Luria-Bertani broth (LB). Growth was monitored in 48-well plates (Costar) by measuring the OD₆₀₀ every 30 min in an automated plate reader (Optima apparatus, BMG Labtech) during incubation at 30 °C with 400 rpm shaking. Bacterial cells were obtained from an overnight culture in BHI incubated at 30 °C, washed in PBS and resuspended in the appropriate medium to an optical density at 600nm (OD₆₀₀) $\approx$ 0.05. Wells were inoculated in duplicate using 400 μ l aliquots.

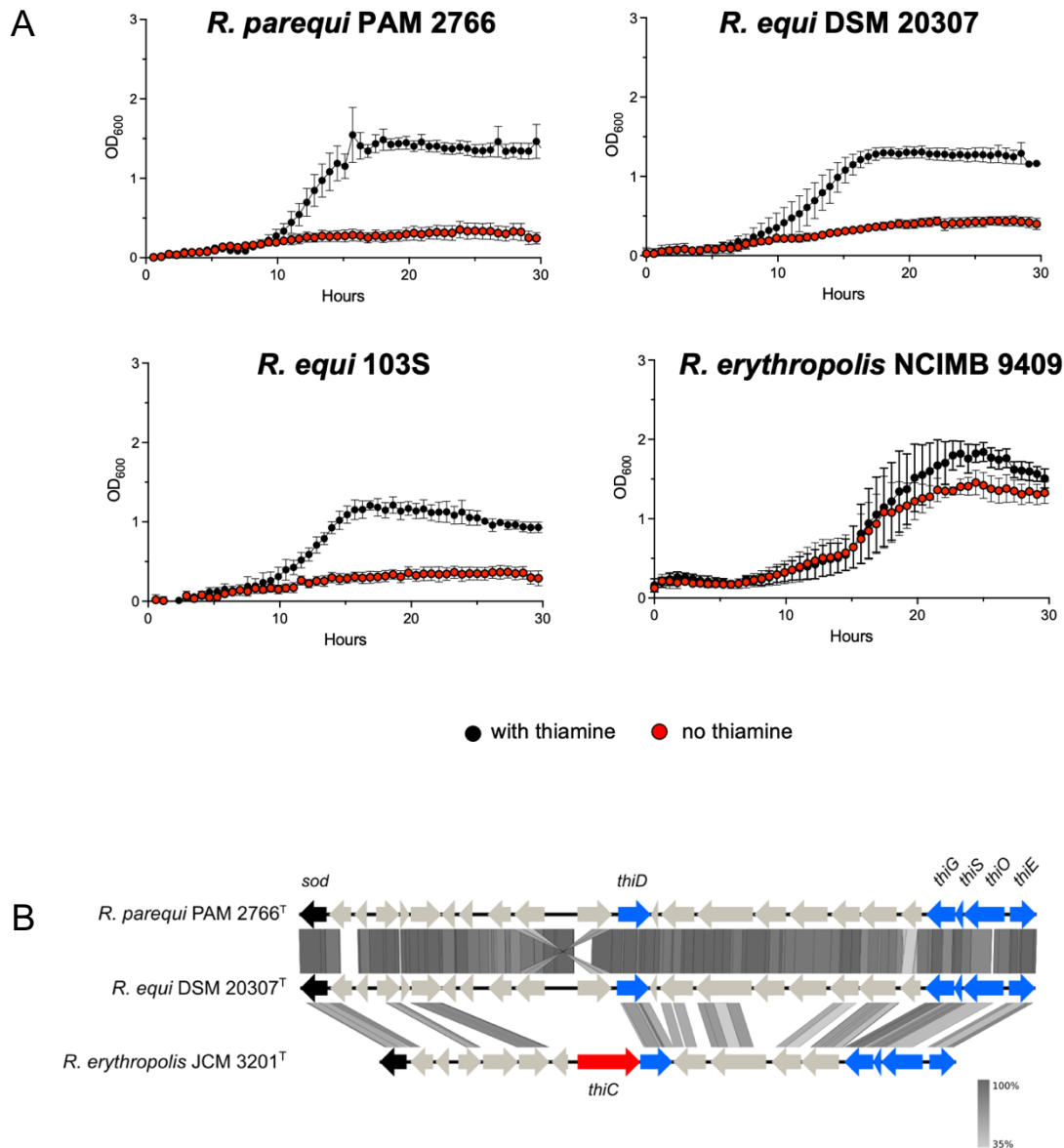


Fig. S3. Thiamine dependency of *R. parequi* PAM 2766^T. Determined in *R. equi* mineral medium [56] as modified in refs. [23, 29] (mReMM) supplemented with 20 mM lactate. (A) Growth curves with or without 0.1 mM thiamine supplementation of *R. parequi* PAM 2766^T, *R. equi* (two strains, one from each of the two main lineages of the species, DSM 20307^T and 103S) and a representative strain of *R. erythropolis*. Bacteria were grown overnight in TSB, collected by centrifugation, washed in PBS and resuspended in mReMM to OD₆₀₀ ≈ 0.05. Duplicate 400 μl aliquots of each bacterial suspension were distributed in 48-well plates (Costar). Growth at 30°C was monitored every 30 min in an automated plate reader (Omega, BMG Labtech) using double orbital shaking (400 rpm). Mean of at least three duplicate experiments ± SEM. Chemicals were purchased from Sigma. (B) TBlastX alignment of the chromosomal *thiCD-GSOE* thiamine biosynthesis locus of *R. equi* DSM 20307^T compared to that of *R. parequi* PAM 2766^T and *R. erythropolis* JCM 3201^T. Note that the genomic region is virtually identical in *R. equi* and *R. parequi*. Both species lack the *thiC* gene and are thiamine auxotrophs in contrast to *R. erythropolis* JCM 3201^T (as an example of a *Rhodococcus* sp. not requiring thiamine for efficient growth).

Table S1. Genome assemblies of type strains used in this study.

Species	Strain	NCBI assembly information					Accession number
		G+C content (%)	Size (Mbps)	No. of contigs/scaffolds	Completeness (%)	Contamination (%)	
<i>Rhodococcoides fascians</i>	NBRC 12155 ^T	64.5	5.8	36	99.5	1.46	GCF_001894785.1
<i>Rhodococcus aetherivorans</i>	DSM 44752 ^T	70.5	6.4	216	79.86	0.99	GCF_011058165.1
<i>Rhodococcus agglutinans</i>	CFHS 0262 ^T	69.0	5.4	22	99.5	1.12	GCF_004011865.1
<i>Rhodococcus antarcticus</i>	75 ^T	73.0	3.9	4	84.36	3.27	GCF_026153295.1
<i>Rhodococcus coprophilus</i>	NCTC 10994 ^T	67.0	4.6	1	96.8	1.04	GCF_900478115.1
<i>Rhodococcus defluvii</i>	Ca11 ^T	68.5	5.1	267	98.24	0.87	GCF_000738775.1
<i>Rhodococcus electrodiphilus</i>	LMG 29881 ^T	70.5	5.5	225	98.91	0	GCF_030509825.1
<i>Rhodococcus equi</i>	DMS 20307 ^T	69.0	5.2	37	98.33	0.99	GCF_002094305.1
<i>Rhodococcus erythropolis</i>	JCM 3201 ^T	62.5	6.7	3	94.82	4.28	GCF_003990875.1
<i>Rhodococcus globerulus</i>	NBRC 14531 ^T	61.5	6.7	30	99.19	0.78	GCF_001894805.1
<i>Rhodococcus gordoniae</i>	NCTC 13296 ^T	68.0	4.9	3	98.86	0.33	GCF_900455725.1
<i>Rhodococcus indonesiensis</i>	CSLK01-03 ^T	70.0	5.5	282	98.58	0	GCF_030360185.1
<i>Rhodococcus jostii</i>	DSM 44719 ^T	67.0	9.9	6	97.82	2.46	GCF_900105375.1
<i>Rhodococcus koreensis</i>	DSM 44498 ^T	67.5	10.3	9	99.35	4.95	GCF_900105905.1
<i>Rhodococcus maanshanensis</i>	DSM 44675 ^T	69.0	5.7	61	97.89	2.62	GCF_900109405.1
<i>Rhodococcus marinonascens</i>	NBRC 14363 ^T	64.5	4.9	156	95.52	1.1	GCF_001894885.1
<i>Rhodococcus opacus</i>	DSM 43205 ^T	67.0	9.0	38	99.5	3.59	GCF_910591545.1
<i>Rhodococcus oryzae</i>	NEAU-CX67 ^T	69.0	5.4	31	98.22	2.29	GCF_005049235.1
<i>Rhodococcus oxybenzonivorans</i>	S2-17 ^T	65.5	8.0	4	98.85	1.74	GCF_003130705.1
<i>Rhodococcus phenolicus</i>	DSM 44812 ^T	68.5	6.3	232	97.45	2.16	GCF_001646785.1
<i>Rhodococcus pseudokoreensis</i>	R79 ^T	67.5	9.9	6	99.35	3.24	GCF_017068395.1
<i>Rhodococcus pyridinivorans</i>	DSM 44555 ^T	68.0	5.3	3	96.81	2.53	GCF_900105195.1
<i>Rhodococcus rhodnii</i>	ATCC 35071 ^T	69.5	4.5	4	92.35	1.03	GCF_008011915.1
<i>Rhodococcus rhodochrous</i>	NCTC 10210 ^T	68.0	5.3	1	99.44	0.99	GCF_900187265.1
<i>Rhodococcus ruber</i>	NBRC 15591 ^T	70.5	5.3	56	99.27	0.37	GCF_001894945.1
<i>Rhodococcus soli</i>	DSM 46662 ^T ^a	68.8	5.4	20	98.71	0.68	JBDLNU000000000
<i>Rhodococcus spelaei</i>	C9-5 ^T	69.0	4.8	18	97.11	1.21	GCF_006704125.1
<i>Rhodococcus spongiicola</i>	LHW 50502 ^T	66.5	4.0	29	96.65	1.3	GCF_004011835.1

^a The genome sequence of *R. soli* DSM 46662^T was unavailable at the time of the study and was determined *de novo*.

Table S1. (cont.)

Species	Strain	NCBI assembly information					Accession number
		G+C content (%)	Size (Mbps)	number of contigs/scaffolds	Completeness (%)	Contamination (%)	
<i>Rhodococcus subtropicus</i>	C9-28 ^T	69	4.4	67	98.2	0.65	GCF_005434945.1
<i>Rhodococcus triatomae</i>	DSM 44892 ^T	68.5	4.8	1	97.77	1.21	GCF_014217785.1
<i>Rhodococcus tukisamuensis</i>	JCM 11308 ^T	70.0	5.5	40	97.62	1.66	GCF_900101735.1
<i>Rhodococcus wratislaviensis</i>	NCTC 13229 ^T	67.5	7.8	29	99.19	1.24	GCF_900455735.1
<i>Rhodococcus xishaensis</i>	LHW51113 ^T	66.5	3.7	22	96.71	0.8	GCF_004011825.1
<i>Rhodococcus yananensis</i>	FBM 22-1 ^T	68.5	4.2	178	94.65	0.91	GCF_020515525.1
<i>Rhodococcus zopfii</i>	NBRC 100606 ^T	68	6.3	146	98.61	3.24	GCF_001895025.1

Table S2. Phenotype MicroArray data.

Plate	Well	Chemical	Mode of action	Maximum growth rate					
				PAM 2766		<i>R. equi</i> DSM 20307 ^T		<i>R. equi</i> 103S PAM 1126	
				Mean	SEM	Mean	SEM	Mean	SEM
PM1	A01	Negative Control	C-Source, negative contro	0.1650	0.0550	0.2350	0.0550	0.1700	0.0100
PM1	A02	L-Arabinose	C-Source, carbohydrate	1.3200	0.3800	1.3400	0.2400	0.9600	0.2800
PM1	A03	N-Acetyl-D-Glucosamine	C-Source, carbohydrate	0.2000	0.0800	0.2250	0.0050	0.3300	0.1800
PM1	A04	D-Saccharic acid	C-Source, carboxylic acid	0.1100	0.0700	0.1950	0.0650	0.2050	0.0250
PM1	A05	Succinic acid	C-Source, carboxylic acid	3.3000	1.1900	6.0750	0.3750	4.8950	4.7050
PM1	A06	D-Galactose	C-Source, carbohydrate	0.1350	0.0050	0.2350	0.0250	0.1950	0.0350
PM1	A07	L-Aspartic acid	C-Source, amino acid	0.3050	0.2750	1.1650	1.0650	0.6750	0.5850
PM1	A08	L-Proline	C-Source, amino acid	0.2050	0.1550	0.4450	0.3350	0.5250	0.4550
PM1	A09	D-Alanine	C-Source, amino acid	0.3350	0.3150	0.2900	0.1600	0.1300	0.0900
PM1	A10	D-Trehalose	C-Source, carbohydrate	0.1400	0.0400	0.4150	0.1250	0.1250	0.0050
PM1	A11	D-Mannose	C-Source, carbohydrate	0.1250	0.0650	0.3300	0.0000	0.1300	0.0300
PM1	A12	Dulcitol	C-Source, carbohydrate	0.0550	0.0650	0.1350	0.0150	0.5000	0.4100
PM1	B01	D-Serine	C-Source, amino acid	0.2200	0.0400	0.1750	0.0250	0.1800	0.0200
PM1	B02	D-Sorbitol	C-Source, carbohydrate	0.1200	0.0500	0.2050	0.0450	0.5800	0.3800
PM1	B03	Glycerol	C-Source, carbohydrate	0.0550	0.0150	0.2700	0.0300	0.3500	0.0200
PM1	B04	L-Fucose	C-Source, carbohydrate	0.1550	0.0050	0.4000	0.1300	0.2500	0.0600
PM1	B05	D-Gluconic acid	C-Source, carboxylic acid	0.2150	0.1550	0.2950	0.1450	0.1750	0.0450
PM1	B06	D-Gluconic acid	C-Source, carboxylic acid	0.1500	0.0900	0.2550	0.0450	0.1950	0.0750
PM1	B07	D,L- α -Glycerol Phosphate	C-Source, carbohydrate	0.1000	0.0300	0.1900	0.0300	0.1600	0.0500
PM1	B08	D-Xylose	C-Source, carbohydrate	2.5450	0.8550	2.1900	0.6700	2.7350	0.0450
PM1	B09	L-Lactic acid	C-Source, carboxylic acid	8.0100	0.6900	19.2250	2.0350	19.7850	0.3450
PM1	B10	Formic acid	C-Source, carboxylic acid	0.0900	0.0600	0.1750	0.0650	0.0850	0.0650
PM1	B11	D-Mannitol	C-Source, carbohydrate	0.1000	0.0600	0.1700	0.0500	0.1250	0.0650
PM1	B12	L-Glutamic acid	C-Source, amino acid	0.0150	0.0150	0.9200	0.2400	0.1550	0.0150
PM1	C01	D-Glucose-6-Phosphate	C-Source, carbohydrate	0.1400	0.0600	0.2150	0.0750	0.1600	0.0400
PM1	C02	D-Galactonic acid-g-Lactone	C-Source, carboxylic acid	0.0950	0.0150	0.1000	0.0100	0.0600	0.0000
PM1	C03	D,L-Malic acid	C-Source, carboxylic acid	5.1850	1.6850	9.7950	0.4550	6.7350	0.6450
PM1	C04	D-Ribose	C-Source, carbohydrate	8.5050	2.9750	14.7300	4.2700	5.7600	0.8700
PM1	C05	Tween 20	C-Source, fatty acid	0.7400	0.2100	16.4200	0.3000	14.6500	1.3500
PM1	C06	L-Rhamnose	C-Source, carbohydrate	0.4850	0.3250	0.4350	0.1850	0.2300	0.0200
PM1	C07	D-Fructose	C-Source, carbohydrate	0.1300	0.0100	0.3450	0.1550	0.3400	0.1700
PM1	C08	Acetic acid	C-Source, carboxylic acid	7.9200	0.0000	10.5500	0.1800	21.7300	0.2100
PM1	C09	a-D-Glucose	C-Source, carbohydrate	0.0800	0.0300	2.7850	0.3750	0.1700	0.0400
PM1	C10	Maltose	C-Source, carbohydrate	0.0650	0.0150	0.2050	0.0350	0.1300	0.0100
PM1	C11	D-Melibiose	C-Source, carbohydrate	0.0850	0.0150	0.2900	0.1500	0.1000	0.0100
PM1	C12	Thymidine	C-Source, carbohydrate	0.0950	0.0850	0.1800	0.0300	0.1150	0.0450
PM1	D01	L-Asparagine	C-Source, amino acid	0.1150	0.0350	0.1350	0.0050	0.1400	0.0100
PM1	D02	D-Aspartic acid	C-Source, amino acid	0.0750	0.0150	0.1350	0.0350	0.1400	0.0100
PM1	D03	D-Glucosaminic acid	C-Source, carboxylic acid	0.0550	0.0050	0.2650	0.1150	0.1350	0.0050
PM1	D04	1,2-Propanediol	C-Source, alcohol	0.0650	0.0450	0.4600	0.1100	0.3650	0.0450
PM1	D05	Tween 40	C-Source, fatty acid	21.2050	0.2250	17.2950	2.1050	30.7750	2.1250
PM1	D06	a-Ketoglutaric acid	C-Source, carboxylic acid	0.8200	0.1400	0.6050	0.1750	0.4600	0.1300
PM1	D07	a-Ketobutyric acid	C-Source, carboxylic acid	0.6150	0.0050	0.6600	0.0300	0.8550	0.0450
PM1	D08	a-Methyl-D-Galactoside	C-Source, carbohydrate	0.1350	0.0450	0.2950	0.1850	0.1500	0.0300
PM1	D09	a-D-Lactose	C-Source, carbohydrate	0.0850	0.0350	0.2100	0.0300	0.1200	0.0300
PM1	D10	Lactulose	C-Source, carbohydrate	0.0800	0.0400	0.2200	0.0400	0.1100	0.0300
PM1	D11	Sucrose	C-Source, carbohydrate	0.1200	0.0600	0.2650	0.0350	0.1700	0.0400
PM1	D12	Uridine	C-Source, carbohydrate	0.0650	0.0250	0.1200	0.0200	0.1000	0.0200
PM1	E01	L-Glutamine	C-Source, amino acid	0.2100	0.0800	0.2600	0.0200	0.1600	0.0300
PM1	E02	m-Tartaric acid	C-Source, carboxylic acid	0.0800	0.0300	0.1350	0.0550	0.1250	0.0150
PM1	E03	D-Glucose-1-Phosphate	C-Source, carbohydrate	0.0900	0.0400	0.1500	0.0200	0.1150	0.0150
PM1	E04	D-Fructose-6-Phosphate	C-Source, carbohydrate	0.1550	0.0050	0.2700	0.0100	0.2050	0.0050
PM1	E05	Tween 80	C-Source, fatty acid	21.7700	0.4200	21.4750	0.4750	26.9400	0.3200
PM1	E06	a-Hydroxyglutaric acid-g-Lactone	C-Source, carboxylic acid	0.0700	0.0100	0.1700	0.0400	0.1300	0.0100
PM1	E07	a-Hydroxybutyric acid	C-Source, carboxylic acid	0.3550	0.0450	0.2050	0.0450	1.2600	0.0100
PM1	E08	b-Methyl-D-Glucoside	C-Source, carbohydrate	0.2850	0.2450	0.3000	0.1600	0.5400	0.3900
PM1	E09	Adonitol	C-Source, carbohydrate	0.0750	0.0250	0.2000	0.0200	0.1300	0.0100
PM1	E10	Maltotriose	C-Source, carbohydrate	0.0200	0.0400	0.7500	0.0400	0.2100	0.0200
PM1	E11	2'-Deoxyadenosine	C-Source, carbohydrate	0.0500	0.0300	-0.0500	0.0300	0.0500	0.0300
PM1	E12	Adenosine	C-Source, carbohydrate	0.0650	0.0850	0.0450	0.0350	0.1300	0.0600
PM1	F01	Gly-Asp	C-Source, amino acid	0.0800	0.0300	0.2250	0.0550	0.1300	0.0100
PM1	F02	Citric acid	C-Source, carboxylic acid	0.0700	0.0200	0.1000	0.0000	0.1100	0.0200
PM1	F03	m-Inositol	C-Source, carbohydrate	0.0650	0.0150	0.1800	0.0200	0.1400	0.0100
PM1	F04	D-Threonine	C-Source, amino acid	0.0500	0.0000	0.1550	0.0150	0.1300	0.0300
PM1	F05	Fumaric acid	C-Source, carboxylic acid	5.8000	0.6400	7.2900	0.8100	5.1150	0.6350
PM1	F06	Bromosuccinic acid	C-Source, carboxylic acid	4.5050	0.1650	6.8000	0.2500	6.0900	0.4900
PM1	F07	Propionic acid	C-Source, carboxylic acid	6.0350	0.6050	9.6400	0.5000	16.2150	2.1150
PM1	F08	Mucic acid	C-Source, carboxylic acid	0.0500	0.0000	0.1350	0.0050	0.1700	0.0300
PM1	F09	Glycolic acid	C-Source, carboxylic acid	0.0350	0.0150	0.0700	0.0200	0.0400	0.0200
PM1	F10	Glyoxylic acid	C-Source, carboxylic acid	0.2250	0.0050	0.2400	0.0400	0.2450	0.0250
PM1	F11	D-Cellobiose	C-Source, carbohydrate	0.0600	0.0100	0.1850	0.0050	0.1400	0.0000
PM1	F12	Inosine	C-Source, carbohydrate	0.0200	0.0100	0.1400	0.0200	0.1250	0.0150
PM1	G01	Gly-Glu	C-Source, amino acid	0.1250	0.0350	0.1750	0.0750	0.1200	0.0300
PM1	G02	Tricarballic acid	C-Source, carboxylic acid	0.1050	0.0150	0.1950	0.0250	0.1100	0.0500
PM1	G03	L-Serine	C-Source, amino acid	0.0650	0.0150	0.0750	0.0250	0.0600	0.0300
PM1	G04	L-Threonine	C-Source, amino acid	0.0650	0.0050	0.0950	0.0050	0.1250	0.0050
PM1	G05	L-Alanine	C-Source, amino acid	0.0250	0.0250	0.0550	0.0150	0.0650	0.0050
PM1	G06	Ala-Gly	C-Source, amino acid	0.0750	0.0350	0.1000	0.0500	0.3400	0.2000
PM1	G07	Acetoacetic acid	C-Source, carboxylic acid	1.6750	1.6050	1.1550	0.0050	1.3700	0.2300
PM1	G08	N-Acetyl-D-Mannosamine	C-Source, carbohydrate	0.0700	0.0200	0.1650	0.0250	0.1200	0.0400
PM1	G09	Mono-Methylsuccinate	C-Source, carboxylic acid	3.6650	0.1150	4.8800	0.1700	2.5500	2.3100
PM1	G10	Methylpyruvate	C-Source, ester	3.2650	0.0850	15.7250	0.6350	7.5700	3.1900
PM1	G11	D-Malic acid	C-Source, carboxylic acid	0.2050	0.0350	0.1850	0.0250	0.2350	0.0350
PM1	G12	L-Malic acid	C-Source, carboxylic acid	6.2450	0.2450	9.6000	0.0700	8.4300	0.1300
PM1	H01	Gly-Pro	C-Source, amino acid	0.0450	0.0050	0.1150	0.0550	0.0300	0.0100
PM1	H02	p-Hydroxyphenyl Acetic acid	C-Source, carboxylic acid	0.0900	0.0100	0.1150	0.0450	0.0900	0.0100
PM1	H03	m-Hydroxyphenyl Acetic acid	C-Source, carboxylic acid	6.1000	0.3800	9.1100	0.2000	10.8300	0.2900
PM1	H04	Tyramine	C-Source, amine	0.0500	0.0300	0.0400	0.0300	0.0500	0.0000
PM1	H05	D- Psicose	C-Source, carbohydrate	0.1700	0.0100	0.1750	0.0050	0.1750	0.0350
PM1	H06	L-Lyxose	C-Source, carbohydrate	17.4900	3.5000	17.9650	2.1450	13.2100	0.6500
PM1	H07	Glucuronamide	C-Source, amide	0.2200	0.0000	0.4350	0.1150	0.2350	0.0150
PM1	H08	Pyruvic acid	C-Source, carboxylic acid	2.5850	0.6950	16.9650	0.4950	9.6050	3.3950
PM1	H09	L-Galactonic acid-g-Lactone	C-Source, carboxylic acid	0.0850	0.0350	0.1650	0.0750	0.1950	0.0150
PM1	H10	D-Galacturonic acid	C-Source, carboxylic acid	0.0700	0.0300	0.1550	0.0350	0.1450	0.0350
PM1	H11	Phenylethylamine	C-Source, amine	-0.0150	0.0450	0.1350	0.0050	0.0700	0.0000
PM1	H12	2-Aminoethanol	C-Source, alcohol	0.0500	0.0100	0.0800	0.0300	0.0750	0.0350

Plate	Well	Chemical	Mode of action	Maximimun growth rate					
				PAM 2766		R. equi DSM 20307 ⁷		R. equi 103S PAM 1126	
				Mean	SEM	Mean	SEM	Mean	SEM
PM2A	A01	Negative Control	C-Source, negative contro	0.1200	0.0300	0.1900	0.0300	0.2000	0.0100
PM2A	A02	Chondroitin Sulfate C	C-Source, polymer	0.1250	0.0550	0.2100	0.1300	0.1900	0.0000
PM2A	A03	a-Cyclodextrin	C-Source, polymer	0.1850	0.0350	0.7450	0.2850	0.9650	0.2350
PM2A	A04	b-Cyclodextrin	C-Source, polymer	0.1150	0.0350	0.4450	0.1450	0.2600	0.0300
PM2A	A05	g-Cyclodextrin	C-Source, polymer	0.2950	0.0550	0.7100	0.1100	0.8950	0.0550
PM2A	A06	Dextrin	C-Source, polymer	0.2950	0.1150	0.7450	0.0950	0.2550	0.0150
PM2A	A07	Gelatin	C-Source, polymer	0.1150	0.0450	0.7050	0.2150	0.1450	0.0450
PM2A	A08	Glycogen	C-Source, polymer	0.0150	0.0350	0.4150	0.2550	0.1850	0.0550
PM2A	A09	Inulin	C-Source, polymer	0.0550	0.0350	0.4550	0.3750	0.1700	0.1000
PM2A	A10	Laminarin	C-Source, polymer	0.0900	0.0000	0.6550	0.2250	0.1350	0.0250
PM2A	A11	Mannan	C-Source, polymer	0.0600	0.0000	0.2650	0.1350	0.1800	0.0200
PM2A	A12	Pectin	C-Source, polymer	0.0600	0.0000	0.4200	0.0600	0.1300	0.0100
PM2A	B01	N-Acetyl-D-Galactosamine	C-Source, carbohydrate	0.1000	0.0200	0.2800	0.0600	0.1850	0.0650
PM2A	B02	N-Acetyl-D-Galactosamine acid	C-Source, carboxylic acid	0.0250	0.0150	0.1250	0.0450	0.0600	0.0000
PM2A	B03	b-D-Allose	C-Source, carbohydrate	0.0950	0.0050	0.1450	0.0150	0.2000	0.0300
PM2A	B04	Amygdalin	C-Source, carbohydrate	0.0300	0.0100	0.2700	0.1200	0.1250	0.0850
PM2A	B05	D-Arabinose	C-Source, carbohydrate	0.6100	0.1600	1.3200	0.1700	1.2150	0.0150
PM2A	B06	D-Arabitol	C-Source, carbohydrate	0.0550	0.0350	0.2950	0.1750	0.2450	0.1350
PM2A	B07	L-Arabitol	C-Source, carbohydrate	0.0100	0.0200	0.2250	0.0850	0.1750	0.0750
PM2A	B08	Arbutin	C-Source, carbohydrate	0.0300	0.0100	0.2500	0.1500	0.1300	0.0500
PM2A	B09	2-Deoxy-D-Ribose	C-Source, carbohydrate	8.6250	0.2050	11.9850	2.6350	9.0300	0.1400
PM2A	B10	i-Erythritol	C-Source, carbohydrate	0.0150	0.0150	0.2500	0.1300	0.1400	0.0500
PM2A	B11	D-Fucose	C-Source, carbohydrate	0.0550	0.0250	0.2800	0.1800	0.1450	0.0550
PM2A	B12	3-O-b-D-Galactopyranosyl-D	C-Source, carbohydrate	0.0350	0.0050	0.1250	0.1250	0.0450	0.0050
PM2A	C01	Genitobiose	C-Source, carbohydrate	0.0900	0.0200	0.3250	0.0550	0.2200	0.0300
PM2A	C02	L-Glucose	C-Source, carbohydrate	0.0300	0.0100	0.2800	0.1500	0.1150	0.0450
PM2A	C03	D-Lactitol	C-Source, carbohydrate	0.0100	0.0000	0.1600	0.0100	0.0950	0.0650
PM2A	C04	D-Melezitose	C-Source, carbohydrate	0.0550	0.0050	0.5500	0.3200	0.2950	0.0950
PM2A	C05	Maltitol	C-Source, carbohydrate	0.0100	0.0100	0.3050	0.1550	0.1400	0.0100
PM2A	C06	a-Methyl-D-Glucoside	C-Source, carbohydrate	0.0400	0.0000	0.2750	0.1250	0.1150	0.0250
PM2A	C07	b-Methyl-D-Galactoside	C-Source, carbohydrate	0.0250	0.0050	0.2650	0.1450	0.1250	0.0250
PM2A	C08	3-Methylglucose	C-Source, carbohydrate	0.0350	0.0050	0.1450	0.1250	0.1400	0.0300
PM2A	C09	b-Methyl-D-Glucuronic acid	C-Source, carboxylic acid	0.0450	0.0150	0.1000	0.0100	0.0750	0.0150
PM2A	C10	a-Methyl-D-Mannoside	C-Source, carbohydrate	0.0350	0.0150	0.1850	0.0650	0.1000	0.0100
PM2A	C11	b-Methyl-D-Xyloside	C-Source, carbohydrate	0.0250	0.0150	0.1900	0.1500	0.0600	0.0200
PM2A	C12	Palatinose	C-Source, carbohydrate	0.1700	0.0000	0.3250	0.1050	0.2350	0.0050
PM2A	D01	D-Raffinose	C-Source, carbohydrate	0.1000	0.0100	0.1700	0.0100	0.2200	0.0200
PM2A	D02	Salicin	C-Source, carbohydrate	0.0150	0.0150	0.1500	0.0500	0.0450	0.0450
PM2A	D03	Sedoheptulosan	C-Source, carbohydrate	0.0600	0.0500	0.1600	0.0100	0.1050	0.0050
PM2A	D04	L-Sorbose	C-Source, carbohydrate	0.0750	0.0150	0.1200	0.0100	0.4100	0.3000
PM2A	D05	Stachyose	C-Source, carbohydrate	0.0400	0.0000	0.2000	0.0700	0.1800	0.0500
PM2A	D06	D-Tagatose	C-Source, carbohydrate	0.2150	0.0150	0.3350	0.1250	0.2700	0.0600
PM2A	D07	Turanose	C-Source, carbohydrate	0.0650	0.0050	0.5350	0.1450	0.3250	0.0350
PM2A	D08	Xylitol	C-Source, carbohydrate	0.0200	0.0100	0.1550	0.0450	0.1300	0.0100
PM2A	D09	N-Acetyl-D-Glucosaminitol	C-Source, carbohydrate	0.1200	0.0500	0.3100	0.1300	0.0950	0.0450
PM2A	D10	g-Amino-N-Butyric acid	C-Source, carboxylic acid	0.0300	0.0000	0.2200	0.1600	0.0650	0.0050
PM2A	D11	d-Amino Valeric acid	C-Source, carboxylic acid	0.0150	0.0050	0.1750	0.1250	0.0700	0.0400
PM2A	D12	Butyric acid	C-Source, carboxylic acid	7.3450	0.1750	17.6150	0.1350	17.5300	1.3800
PM2A	E01	Capric acid	C-Source, carboxylic acid	0.0850	0.0350	0.0750	0.0150	0.0500	0.0400
PM2A	E02	Caproic acid	C-Source, carboxylic acid	2.2750	0.1950	18.7750	0.6750	15.6150	2.8350
PM2A	E03	Citraconic acid	C-Source, carboxylic acid	0.0400	0.0300	0.1150	0.0350	0.1050	0.0450
PM2A	E04	D,L-Citramalic acid	C-Source, carboxylic acid	0.0350	0.0050	0.1250	0.0150	0.1400	0.0300
PM2A	E05	D-Glucosamine	C-Source, carbohydrate	0.8050	0.0050	0.8100	0.0100	0.7500	0.0300
PM2A	E06	2-Hydroxybenzoic acid	C-Source, carboxylic acid	0.0050	0.0150	0.0100	0.0400	0.0850	0.0350
PM2A	E07	4-Hydroxybenzoic acid	C-Source, carboxylic acid	0.0450	0.0150	6.9500	0.4100	6.8750	1.1850
PM2A	E08	b-Hydroxybutyric acid	C-Source, carboxylic acid	0.5050	0.0150	5.3450	0.0650	5.2900	0.3000
PM2A	E09	g-Hydroxybutyric acid	C-Source, carboxylic acid	0.0150	0.0050	0.0950	0.0350	-0.0050	0.0150
PM2A	E10	g-Keto-Valeric acid	C-Source, carboxylic acid	1.3400	0.0100	3.0900	0.6200	1.8100	0.6900
PM2A	E11	Itaconic acid	C-Source, carboxylic acid	0.0050	0.0150	0.2050	0.1450	0.0500	0.0200
PM2A	E12	5-Keto-D-Gluconic acid	C-Source, carboxylic acid	1.0700	0.1700	1.2550	0.0350	1.3500	0.1600
PM2A	F01	D-Lactic acid Methyl Ester	C-Source, ester	1.0850	0.2650	5.7400	0.8800	0.1850	0.0950
PM2A	F02	Malonic acid	C-Source, carboxylic acid	0.0500	0.0300	0.1350	0.0050	0.1050	0.0550
PM2A	F03	Melibionic acid	C-Source, carbohydrate	0.0400	0.0400	0.0550	0.1050	0.1250	0.0250
PM2A	F04	Oxalic acid	C-Source, carboxylic acid	0.0300	0.0000	0.1100	0.0300	0.1300	0.0000
PM2A	F05	Oxalomalic acid	C-Source, carboxylic acid	0.9200	0.2500	1.2450	0.0550	1.3050	0.1050
PM2A	F06	Quinic acid	C-Source, carboxylic acid	0.0700	0.0200	0.2550	0.1250	0.1550	0.0050
PM2A	F07	D-Ribono-1,4-Lactone	C-Source, carboxylic acid	0.0800	0.0100	0.0900	0.0100	0.1050	0.0050
PM2A	F08	Sebacic acid	C-Source, carboxylic acid	3.3450	0.3050	0.4950	0.0650	0.5100	0.0300
PM2A	F09	Sorbic acid	C-Source, carboxylic acid	2.2300	0.2300	3.1400	1.0500	3.4700	1.0100
PM2A	F10	Succinamic acid	C-Source, carboxylic acid	0.2000	0.0800	2.7000	0.2400	0.1250	0.0050
PM2A	F11	D-Tartaric acid	C-Source, carboxylic acid	0.0450	0.0150	0.0800	0.0200	0.0950	0.0250
PM2A	F12	L-Tartaric acid	C-Source, carboxylic acid	0.0000	0.0300	0.1400	0.0100	0.0950	0.0050
PM2A	G01	Acetamide	C-Source, amide	0.0850	0.0450	0.1350	0.0750	6.7900	6.6500
PM2A	G02	L-Alaninamide	C-Source, amide	0.0150	0.0250	0.0450	0.0250	0.0700	0.0300
PM2A	G03	N-Acetyl-L-Glutamic acid	C-Source, amino acid	0.0250	0.0050	0.1200	0.0500	0.1150	0.0150
PM2A	G04	L-Arginine	C-Source, amino acid	0.0150	0.0050	0.0850	0.0050	0.0850	0.0050
PM2A	G05	Glycine	C-Source, amino acid	0.0350	0.0150	0.0550	0.0050	0.0800	0.0000
PM2A	G06	L-Histidine	C-Source, amino acid	4.7400	0.1200	1.7250	1.4650	4.0450	0.2750
PM2A	G07	L-Homoserine	C-Source, amino acid	0.0200	0.0000	0.1000	0.0300	0.0950	0.0050
PM2A	G08	Hydroxy-L-Proline	C-Source, amino acid	0.0450	0.0350	0.1300	0.0100	0.1200	0.0100
PM2A	G09	L-Isoleucine	C-Source, amino acid	1.5050	1.4750	0.1400	0.0200	0.1700	0.0800
PM2A	G10	L-Leucine	C-Source, amino acid	3.1350	3.0150	0.2000	0.0300	0.0950	0.0050
PM2A	G11	L-Lysine	C-Source, amino acid	0.0050	0.0050	0.1550	0.0950	0.0250	0.0050
PM2A	G12	L-Methionine	C-Source, amino acid	0.0450	0.0550	0.0950	0.0150	0.1350	0.0950
PM2A	H01	L-Ornithine	C-Source, amino acid	0.0550	0.0450	0.0950	0.0050	0.0800	0.0500
PM2A	H02	L-Phenylalanine	C-Source, amino acid	0.0700	0.0100	0.0700	0.0100	0.0800	0.0500
PM2A	H03	L-Pyrogutamic acid	C-Source, amino acid	0.0150	0.0250	0.1650	0.0250	0.1150	0.0150
PM2A	H04	L-Valine	C-Source, amino acid	0.0650	0.0150	0.0900	0.0400	0.1150	0.0250
PM2A	H05	D,L-Carnitine	C-Source, carboxylic acid	0.0550	0.0450	0.0950	0.0250	0.0850	0.0050
PM2A	H06	sec-Butylamine	C-Source, amine	0.0450	0.0350	0.1050	0.0150	0.0850	0.0150
PM2A	H07	D,L-Octopamine	C-Source, amine	0.0550	0.0350	0.1400	0.0000	0.1100	0.0000
PM2A	H08	Putrescine	C-Source, amine	0.0550	0.0050	0.0850	0.0150	0.0600	0.0100
PM2A	H09	Dihydroxyacetone	C-Source, alcohol	3.8400	0.1000	9.0450	5.3250	3.6750	0.0150
PM2A	H10	2,3-Butanediol	C-Source, alcohol	0.0300	0.0100	0.1100	0.0100	0.0750	0.0150
PM2A	H11	2,3-Butanone	C-Source, alcohol	0.5300	0.0600	0.5400	0.0000	0.9150	0.1250
PM2A	H12	3-Hydroxy-2-butanone	C-Source, alcohol	0.0300	0.0400	0.0600	0.0100	0.0300	0.0100

Plate	Well	Chemical	Mode of action	Maximimun growth rate					
				PAM 2766		<i>R. equi</i> DSM 20307 ⁷		<i>R. equi</i> 103S PAM 1126	
				Mean	SEM	Mean	SEM	Mean	SEM
PM3B	A01	Negative Control	N-Source, Negative contrc	1.1900	0.0141	0.9050	0.1485	1.4350	0.0495
PM3B	A02	Ammonia	N-Source, inorganic	9.4900	0.0707	12.4950	1.7466	21.5500	2.0365
PM3B	A03	Nitrite	N-Source, inorganic	6.2150	0.2333	8.0900	0.4525	13.7350	0.0071
PM3B	A04	Nitrate	N-Source, inorganic	5.8650	0.2192	6.9650	0.0778	13.3800	0.0849
PM3B	A05	Urea	N-Source, other	7.7400	0.1980	8.1550	0.4031	16.2800	2.1496
PM3B	A06	Biuret	N-Source, other	1.7950	0.1768	0.6600	0.0141	1.8500	0.0424
PM3B	A07	L-Alanine	N-Source, amino acid	1.9450	0.0919	2.1700	0.0424	2.2350	0.0636
PM3B	A08	L-Arginine	N-Source, amino acid	1.4600	0.0707	0.7050	0.1344	1.5550	0.2475
PM3B	A09	L-Asparagine	N-Source, amino acid	5.3200	0.0000	10.9250	0.6435	12.0250	0.2475
PM3B	A10	L-Aspartic acid	N-Source, amino acid	6.1350	1.3364	7.1200	0.4667	7.0700	0.4950
PM3B	A11	L-Cysteine	N-Source, amino acid	0.7050	0.0778	4.6500	0.3536	5.6750	0.1626
PM3B	A12	L-Glutamic acid	N-Source, amino acid	5.2800	0.6223	9.9650	0.2333	7.3800	0.7495
PM3B	B01	L-Glutamine	N-Source, amino acid	9.5900	0.3111	14.7000	0.6081	21.5650	0.3748
PM3B	B02	Glycine	N-Source, amino acid	1.7350	0.2192	2.1850	0.0212	3.1250	0.0354
PM3B	B03	L-Histidine	N-Source, amino acid	10.9450	0.3465	13.3550	0.4455	18.6800	1.3435
PM3B	B04	L-Isoleucine	N-Source, amino acid	2.9600	0.3960	1.3850	0.0354	3.6600	0.4808
PM3B	B05	L-Leucine	N-Source, amino acid	4.3900	0.1414	9.6950	0.4172	9.9050	0.1909
PM3B	B06	L-Lysine	N-Source, amino acid	0.9650	0.3041	8.8200	0.7495	10.7550	0.0919
PM3B	B07	L-Methionine	N-Source, amino acid	0.8600	0.2970	0.5750	0.1202	1.2750	0.2192
PM3B	B08	L-Phenylalanine	N-Source, amino acid	4.3300	0.0849	7.6600	1.0465	9.1750	0.2051
PM3B	B09	L-Proline	N-Source, amino acid	1.2050	0.0495	0.8900	0.4950	1.2250	0.0212
PM3B	B10	L-Serine	N-Source, amino acid	0.4350	0.0778	0.5400	0.0707	0.9850	0.0212
PM3B	B11	L-Threonine	N-Source, amino acid	0.9850	0.0636	0.5000	0.1131	1.8400	0.4384
PM3B	B12	L-Tryptophan	N-Source, amino acid	3.9550	0.9546	9.6800	0.2263	9.7400	0.3111
PM3B	C01	L-Tyrosine	N-Source, amino acid	2.0050	0.1485	6.7450	1.1809	8.1800	0.1556
PM3B	C02	L-Valine	N-Source, amino acid	2.6800	0.1273	1.6400	0.3818	3.2050	0.0354
PM3B	C03	D-Alanine	N-Source, amino acid	2.3150	0.1202	2.5050	0.0071	3.0550	0.1485
PM3B	C04	D-Asparagine	N-Source, amino acid	2.3050	0.2051	1.1150	0.2475	2.6500	0.0283
PM3B	C05	D-Aspartic acid	N-Source, amino acid	2.5650	0.3606	1.0350	0.3041	2.6050	0.1626
PM3B	C06	D-Glutamic acid	N-Source, amino acid	1.4700	0.0263	0.7500	0.0263	1.7850	0.3869
PM3B	C07	D-Lysine	N-Source, amino acid	4.1800	0.0990	7.9000	0.5798	13.2550	0.3869
PM3B	C08	D-Serine	N-Source, amino acid	1.5300	0.0849	1.0200	0.3253	1.5950	0.0495
PM3B	C09	D-Valine	N-Source, amino acid	1.4350	0.2758	0.6200	0.0283	1.5050	0.0636
PM3B	C10	L-Citrulline	N-Source, amino acid	1.9800	0.4950	8.8800	0.1980	6.6850	0.1626
PM3B	C11	L-Homoserine	N-Source, amino acid	1.7900	0.0990	1.2300	0.2404	2.5250	0.2051
PM3B	C12	L-Omithine	N-Source, amino acid	0.9500	0.0424	6.2250	0.1202	10.7650	0.0495
PM3B	D01	N-Acetyl-L-Glutamic acid	N-Source, amino acid	1.0500	0.1414	0.7550	0.1626	1.3500	0.1131
PM3B	D02	N-Phthaloyl-L-Glutamic acid	N-Source, amino acid	1.3250	0.0495	0.5600	0.0849	1.5850	0.0636
PM3B	D03	L-Pyrogutamic acid	N-Source, amino acid	1.8600	0.2828	0.8550	0.0212	2.4800	0.0141
PM3B	D04	Hydroxylamine	N-Source, other	0.2100	0.0424	0.1600	0.0000	0.5500	0.5657
PM3B	D05	Methylamine	N-Source, other	2.4250	0.1485	5.5700	0.1838	12.8100	1.1031
PM3B	D06	N-Amylamine	N-Source, other	5.3100	0.3536	3.2650	0.2192	8.5700	0.2263
PM3B	D07	N-Butylamine	N-Source, other	5.3600	0.1697	6.0150	0.5869	9.3600	0.0990
PM3B	D08	Ethylamine	N-Source, other	4.4850	0.4031	5.9900	0.3818	10.4950	0.0212
PM3B	D09	Ethanolamine	N-Source, other	4.5300	0.0990	5.6150	0.2192	9.8300	0.2121
PM3B	D10	Ethylenediamine	N-Source, other	0.3300	0.0566	0.3600	0.0566	0.8700	0.6788
PM3B	D11	Putrescine	N-Source, other	6.7200	0.5940	9.6900	0.1697	11.2250	0.3889
PM3B	D12	Agmatine	N-Source, other	2.1900	0.7637	4.2900	0.0707	2.7500	0.0424
PM3B	E01	Histamine	N-Source, other	4.8000	0.2687	6.3500	0.0424	13.4200	0.1414
PM3B	E02	b-Phenylethylamine	N-Source, other	3.3050	0.9405	0.8400	0.1697	8.1300	0.0424
PM3B	E03	Tyramine	N-Source, other	3.9900	1.0465	4.5700	1.1738	5.5400	0.2970
PM3B	E04	Acetamide	N-Source, other	4.3950	0.0636	9.4250	0.1485	21.0850	1.0677
PM3B	E05	Formamide	N-Source, other	9.4750	0.4313	9.3900	0.0707	17.8400	1.3718
PM3B	E06	Glucuronamide	N-Source, other	8.0950	0.2758	7.1550	0.4313	17.3200	0.0424
PM3B	E07	D,L-Lactamide	N-Source, other	8.1400	1.3718	7.6200	0.3677	8.4600	0.4384
PM3B	E08	D-Glucosamine	N-Source, other	0.3850	0.0495	0.3250	0.0212	2.2050	2.7365
PM3B	E09	D-Galactosamine	N-Source, other	9.1050	0.1061	4.4950	0.0495	12.7250	0.0071
PM3B	E10	D-Mannosamine	N-Source, other	1.6450	0.0919	1.0500	0.0141	13.6450	0.8839
PM3B	E11	N-Acetyl-D-Glucosamine	N-Source, other	1.2050	0.1202	0.5250	0.1626	1.2000	0.1697
PM3B	E12	N-Acetyl-D-Galactosamine	N-Source, other	0.9150	0.1909	0.4200	0.0707	0.8800	0.1131
PM3B	F01	N-Acetyl-D-Mannosamine	N-Source, other	0.9850	0.0071	0.5400	0.0283	1.2250	0.0071
PM3B	F02	Adenine	N-Source, other	7.2600	0.3111	5.7950	0.5869	8.7800	0.8627
PM3B	F03	Adenosine	N-Source, other	4.4650	0.9405	0.1850	0.0212	3.1050	1.2092
PM3B	F04	Cytidine	N-Source, other	2.0350	0.2192	1.1250	0.1909	2.9900	0.4525
PM3B	F05	Cytosine	N-Source, other	7.6550	0.0071	7.9050	0.2475	10.1500	0.8061
PM3B	F06	Guanine	N-Source, other	4.0500	4.3841	0.9450	0.0495	12.0400	14.7502
PM3B	F07	Guanosine	N-Source, other	0.5950	0.0071	0.5700	0.0141	1.0900	0.0849
PM3B	F08	Thymine	N-Source, other	2.1250	0.1909	8.6300	0.8344	14.3700	0.2687
PM3B	F09	Thymidine	N-Source, other	1.3400	0.0283	0.6600	0.1556	1.5200	0.0283
PM3B	F10	Uracil	N-Source, other	1.3700	0.0424	0.7050	0.0495	1.6450	0.4596
PM3B	F11	Uridine	N-Source, other	0.8950	0.0071	0.3950	0.0778	1.1150	0.0919
PM3B	F12	Inosine	N-Source, other	1.0400	0.1131	0.3800	0.0283	0.9550	0.0071
PM3B	G01	Xanthine	N-Source, other	0.0550	0.0354	0.2900	0.2687	1.2800	0.4525
PM3B	G02	Xanthosine	N-Source, other	1.2350	0.0354	0.6550	0.0636	1.4050	0.0354
PM3B	G03	Uric acid	N-Source, other	7.1300	0.5657	6.7900	0.4101	7.0650	0.3606
PM3B	G04	Alloxan	N-Source, other	3.9900	0.0849	3.5300	0.1980	3.7700	0.1273
PM3B	G05	Allantoin	N-Source, other	5.3550	0.2475	3.5600	0.6647	5.2950	0.1909
PM3B	G06	Parabanic acid	N-Source, other	6.5200	0.0707	7.9300	0.2121	12.3300	0.0283
PM3B	G07	D,L-a-Amino-N-Butyric acid	N-Source, other	4.5600	0.8910	1.3400	0.7495	5.2150	0.1485
PM3B	G08	g-Amino-N-Butyric acid	N-Source, other	1.1550	0.1061	1.2450	0.0071	1.7500	0.3818
PM3B	G09	e-Amino-N-Caproic acid	N-Source, other	1.2150	0.0212	6.0100	0.4525	11.7900	0.2546
PM3B	G10	D,L-a-Amino-Caprylic acid	N-Source, other	0.5150	0.0636	0.2700	0.0990	0.5450	0.5445
PM3B	G11	d-Amino-N-Valeric acid	N-Source, other	0.8500	0.0566	6.0950	0.6435	9.7800	0.8627
PM3B	G12	a-Amino-N-Valeric acid	N-Source, other	3.1050	1.0112	6.7900	0.4384	6.3300	0.6930
PM3B	H01	Ala-Asp	N-Source, peptide	1.6900	0.1414	0.3950	0.0212	0.8300	0.0141
PM3B	H02	Ala-Gln	N-Source, peptide	8.0350	0.1061	10.0550	0.9970	6.1300	0.0990
PM3B	H03	Ala-Glu	N-Source, peptide	3.7000	0.0000	0.8500	0.0566	1.2850	0.1909
PM3B	H04	Ala-Gly	N-Source, peptide	2.4300	0.0707	3.5850	0.3465	2.4900	0.1980
PM3B	H05	Ala-His	N-Source, peptide	6.5650	0.6435	6.8850	0.7990	4.2550	0.5586
PM3B	H06	Ala-Leu	N-Source, peptide	4.1450	0.1202	4.2900	0.3536	3.9400	0.4525
PM3B	H07	Ala-Thr	N-Source, peptide	1.4750	0.1202	0.3850	0.0495	3.2350	0.1626
PM3B	H08	Gly-Asn	N-Source, peptide	2.4750	0.0071	0.9700	0.0990	1.7600	0.2404
PM3B	H09	Gly-Gln	N-Source, peptide	4.2250	0.0495	5.5100	0.4101	2.7350	0.1768
PM3B	H10	Gly-Glu	N-Source, peptide	2.0700	0.0566	0.4400	0.0000	0.7150	0.0495
PM3B	H11	Gly-Met	N-Source, peptide	2.4350	0.3323	3.6400	0.1838	3.9150	0.0212
PM3B	H12	Met-Ala	N-Source, peptide	1.9150	0.0354	3.0350	0.1626	3.6700	0.0707