

Table S1. Sugar assimilation test of *R. gnavus* N53, *R. gnavus* ATCC 29149^T, *R. gnavus*, and *Ruminococcus* sp. PO1-3 with API 20A.

	<i>R. gnavus</i> N53	<i>R. gnavus</i> ATCC 29149 ^T	<i>R. gnavus</i> ^b	<i>Ruminococcus</i> sp. PO1-3 ^c
Indole	-	-	/	-
Urease	-	-	/	/
Glucose	+	+	+	+
Mannitol	-	-	-	-
Lactose	-	-	-,+	-
Saccharose ^a	+	-	+,-	+
Maltose	+	+	+	+
Salicin	+	+	+	+
Xylose	+	+	+	+
Arabinose	+	+	+	+
Gelatin liquefaction	-	-	/	-
Esculin	/	/	(+)	(+)
Glycerol	-	-	/	-
Cellobiose	-	-	-	-
Mannose ^a	-	-	-	+
Melezitose	-	-	/	-
Raffinose	+	+	+	+
Sorbitol	-	-	-	-
Rhamnose	+	+	+	+
Trehalose	-	-	-	-
Catalase	-	-	/	/

^aAssimilation of saccharose differs between *R. gnavus* N53 and *R. gnavus* ATCC 29149^T.

Assimilation of mannose differs between *R. gnavus* N53 and *Ruminococcus* PO1-3.

^bData from Moore, W. E. C. *et al.*, 1976. *Int. J. Syst. Evol. Microbiol.* **26**: 238-252.

^cData from Hattori, M. *et al.*, 1985. *Chem. Pharm. Bull.* **33**: 210-217.

Symbols: -, negative reaction; (+), weak reaction; +, positive reaction; /, not reported. Where two symbols are shown, the first was more frequent, and the second was observed less frequently.

Table S2. Sugar assimilation test of *R. gnavus* strains N53 and ATCC 29149^T using API rapid ID 32A.

	<i>R. gnavus</i> N53	<i>R. gnavus</i> ATCC 29149 ^T
Arginine dihydrolase	+	+
α -Galactosidase	+	+
β -Galactosidase	+	+
6-Phospho- β -galactosidase	-	-
α -Glucosidase	+	+
β -Glucosidase	+	+
α -Arabinosidase	-	-
β -Glucuronidase	-	-
<i>N</i> -Acetyl- β -glucosaminidase	-	-
Mannose	-	-
Raffinose	-	-
Glutamic acid decarboxylase	-	-
α -Fucosidase ^a	+, -	-
Nitrates reduction	-	-
Indole	-	-
Alkaline phosphatase	+	+
Arginine arylamidase	+	+
Proline arylamidase	+	+
Leucyl glycine arylamidase	+	+
Phenyl alanine arylamidase	+	+
Leucine arylamidase ^a	+	-
Pyroglutamic acid arylamidase ^a	+	-
Tyrosine arylamidase	+	+
Alanine arylamidase ^a	+	-
Glycine arylamidase	+	+
Histidine arylamidase	+	+
Glutamyl glutamic acid arylamidase	+	+
Serine arylamidase	+	+

^aSugar assimilation of *R. gnavus* N53 differs from ATCC 29149^T using α -fucosidase, leucine arylamidase, pyroglutamic acid arylamidase, and alanine arylamidase.

Symbols: -, negative reaction; +, positive reaction. Where two symbols are shown, the first was more frequent, and the second was observed less frequently.