

### Strain identifier

<b>BacDive ID:</b>	16695	<b>DOI:</b>	10.13145/bacdive16695.20190402.4
<b>Type strain:</b>	yes	<b>Designation:</b>	TGB-C1
<b>Culture col. no.:</b>	DSM 12680		

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### Name and taxonomic classification

Ref.: 4790	<b>Domain</b>	Bacteria
Ref.: 4790	<b>Phylum</b>	Firmicutes
Ref.: 4790	<b>Class</b>	Clostridia
Ref.: 4790	<b>Order</b>	Clostridiales
Ref.: 4790	<b>Family</b>	Syntrophomonadaceae
Ref.: 4790	<b>Genus</b>	Syntrophothermus
Ref.: 4790	<b>Species</b>	Syntrophothermus lipocalidus
Ref.: 4790	<b>Full Scientific Name</b>	Syntrophothermus lipocalidus Sekiguchi et al. 2000
Ref.: 4790	<b>Designation:</b>	TGB-C1
Ref.: 4790	<b>Type strain:</b>	yes

#### **Prokaryotic Nomenclature Up-to-date (PNU)**

Ref.: 20215	<b>Domain</b>	Bacteria
Ref.: 20215	<b>Phylum</b>	Firmicutes
Ref.: 20215	<b>Class</b>	Clostridia
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 60:469
Ref.: 20215	<b>Family</b>	Syntrophomonadaceae
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 43:285*
Ref.: 20215	<b>Genus</b>	Syntrophothermus



Ref.: 20215	Taxonomical status	gen. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 50:771*
Ref.: 20215	<b>Species</b>	Syntrophothermus lipocalidus
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 50:771*
Ref.: 20215	<b>Full Scientific Name</b>	Syntrophothermus lipocalidus Sekiguchi et al. 2000

## Morphology and physiology

Ref.: 4790	<b>Incubation period</b>	3-7 days
Ref.: 4790	<b>Oxygen tolerance</b>	anaerobe

## Culture and growth conditions

Ref.: 4790	<b>Culture medium</b>	SYNTROPHOTHERMUS MEDIUM (DSMZ Medium 870), 55°C, anaerobic
Ref.: 4790	<b>Culture medium growth</b>	yes
Ref.: 4790	<b>Culture medium link</b>	<a href="https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium870.pdf">https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium870.pdf</a>

Ref.: 4790	<b>Temperatures</b>	<b>Kind of temperature</b>	<b>Temperature</b>
		growth	55 °C

## Isolation, sampling and environmental information

Ref.: 4790	<b>Sample type/isolated from</b>	anaerobic granular sludge, thermophilic UASB reactor
Ref.: 4790	<b>Country</b>	Japan
Ref.: 4790	<b>Continent</b>	Asia

<b>Isolation sources categories</b>	<b>Cat1</b>	<b>Cat2</b>	<b>Cat3</b>
	#Engineered	#Biodegradation	#Anaerobic digester
	#Engineered	#Waste	#Activated sludge
	#Condition	#Anoxic (anaerobic)	-
	#Condition	#Thermophilic (>45°C)	-

## Application and interaction

Ref.: 4790      **Biosafety level**      1 Risk group (German classification)

### Molecular biology

Ref.: 4790      **GC-content**      51.0 mol% high performance liquid chromatography (HPLC)

	<b>Sequence database</b>	<b>Sequence accession description</b>	<b>Sequence accession number</b>	<b>Sequence length(bp)</b>	<b>Associated NCBI tax ID</b>	
Ref.: 20218	Marker Gene (EMBL Direct submission)	TPA: Syntrophothermus lipocalidus DSM 12680 transfer-messenger mRNA Syntr_lipoc_12680, single chain mature transcript	HG787873	351	643648	*
Ref.: 20218	Marker Gene (GenBank Direct submission)	Syntrophothermus lipocalidus DSM 12680 strain TGB-C1 16S ribosomal RNA gene, partial sequence	JQ346743	1500	643648	*
Ref.: 4790	GenBank Genome project data	Syntrophothermus lipocalidus DSM 12680, complete genome	CP002048	2405559	643648	
Ref.: 4790	DDBJ EMBL Direct submission		AB021305			

### Strain availability

Ref.: 4790      **Culture collection no.**      DSM 12680

Ref.: 4790      **Strain history**      <- Y. Sekiguchi, Nagaoka Univ. Technology, Japan; TGB-C1 <- Y. Sekiguchi {1998}

#### **Associated Passport(s) in StrainInfo**

Ref.: 20218      163308 - <http://www.straininfo.net/strains/163308>

### References

Ref.: 4790      Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 12680

Ref.: 20215      D.Gleim, M.Kracht, N.Weiss et. al.: Prokaryotic Nomenclature Up-to-date - compilation of all names of Bacteria and Archaea, validly published according to the Bacteriological Code since 1. Jan. 1980, and validly published nomenclatural changes since.

Ref.: 20218      Verslyppe, B., De Smet, W., De Baets, B., De Vos, P., Dawyndt P. StrainInfo introduces electronic passports for microorganisms.. Syst Appl Microbiol. 37: 42-50 2014 (10.1016/j.syapm.2013.11.002, 24321274)

\* These References are textmined

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