Parapedobacter composti

Strain identifier

BacDive ID:	14136	**DOI:**	10.13145/bacdive14136.20190402.4
Type strain:	yes	**Designation:**	4M40
Culture col. no.:	DSM 22900, JCM 15978, KACC 10972		

Sections

Name and taxonomic classification

Ref.: 16611	**Domain**	Bacteria
Ref.: 16611	**Phylum**	Bacteroidetes
Ref.: 16611	**Class**	Sphingobacteriia
Ref.: 16611	**Order**	Sphingobacteriales
Ref.: 16611	**Family**	Sphingobacteriaceae
Ref.: 16611	**Genus**	Parapedobacter
Ref.: 16611	**Species**	Parapedobacter composti
Ref.: 16611	**Full Scientific Name**	Parapedobacter composti Kim et al. 2010
Ref.: 16611	**Designation:**	4M40
Ref.: 16611	**Type strain:**	yes

Prokaryotic Nomenclature Up-to-date (PNU)

Ref.: 20215	**Domain**	Bacteria
Ref.: 20215	**Phylum**	Bacteroidetes
Ref.: 20215	**Class**	Sphingobacteriia
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 62:2
Ref.: 20215	**Family**	Sphingobacteriaceae
Ref.: 20215	**Genus**	Parapedobacter
Ref.: 20215	Taxonomical status	gen. nov. (VP)

Parapedobacter composti

Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 57:1336*
Ref.: 20215	**Species**	Parapedobacter composti
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 60:1849*
Ref.: 20215	**Full Scientific Name**	Parapedobacter composti Kim et al. 2010

Morphology and physiology

Ref.: 29451	**Gram stain**	negative
Ref.: 29451	**Cell length**	1.2-5 µm
Ref.: 29451	**Cell width**	0.2-0.5 µm
Ref.: 29451	**Cell shape**	rod-shaped
Ref.: 29451	**Motility**	no

Enzymes

	Enzyme	Enzyme activity	EC number
Ref.: 29451	catalase	+	1.11.1.6
Ref.: 29451	cytochrome oxidase	+	1.9.3.1

Halophily

	Salt	Tested relation	Salt conc.
Ref.: 29451	NaCl	growth	0-5 %

Metabolite utilization

	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
Ref.: 29451	22599	Arabinose	+	carbon source
Ref.: 29451	17234	Glucose	+	carbon source
Ref.: 29451	28087	Glycogen	+	carbon source
Ref.: 29451	37684	Mannose	+	carbon source
Ref.: 29451	28053	Melibiose	+	carbon source
Ref.: 29451	26546	Rhamnose	+	carbon source
Ref.: 29451	33942	Ribose	+	carbon source
Ref.: 29451	17814	Salicin	+	carbon source
Ref.: 29451	17992	Sucrose	+	carbon source

Ref.: 29451	**Decomposition/lysis**	aggregates in chains
Ref.: 29451	**Oxygen tolerance**	aerobe
Ref.: 29451	**Ability of spore formation**	no

Parapedobacter composti

Culture and growth conditions

Ref.: 16611	**Culture medium**	R2A MEDIUM (DSMZ Medium 830), 28°C, pH 7.0
Ref.: 16611	**Culture medium growth**	yes
Ref.: 16611	**Culture medium link**	https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium830.pdf

Temperatures

	Kind of temperature	Temperature
Ref.: 16611	growth	28 °C
Ref.: 29451	growth	15-45 °C
Ref.: 29451	optimum	30 °C

Ref.: 16611	**Temperature range**	mesophilic
Ref.: 29451	**Temperature range**	mesophilic

pH

	Kind of pH	pH
Ref.: 29451	growth	06-08
Ref.: 29451	optimum	7

Isolation, sampling and environmental information

Ref.: 16611	**Sample type/isolated from**	cotton waste compost
Ref.: 16611	**Geographic location (country and/or sea, region)**	Suwon
Ref.: 16611	**Country**	Republic of Korea
Ref.: 16611	**Continent**	Asia

Isolation sources categories

Cat1	Cat2	Cat3
#Engineered	#Agriculture	-
#Engineered	#Biodegradation	#Composting
#Engineered	#Waste	#Solid plant waste
#Host	#Plants	#Shrub (Scrub)

Application and interaction

Ref.: 16611	**Biosafety level**	1 Risk group (German classification)

Molecular biology

Ref.: 16611	**GC-content**	48.6 mol% high performance liquid chromatography (HPLC)
Ref.: 29451	**GC-content**	48.6 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 16611	GenBank Direct submission		FJ754321		

Strain availability

Ref.: 16611	**Culture collection no.**	DSM 22900, JCM 15978, KACC 10972
Ref.: 16611	**Strain history**	<- S.-W. Kwon, KACC; 4M40 <- H.-Y. Weon

Associated Passport(s) in StrainInfo

Ref.: 20218	856161 - http://www.straininfo.net/strains/856161
Ref.: 20218	855513 - http://www.straininfo.net/strains/855513
Ref.: 20218	855514 - http://www.straininfo.net/strains/855514

References

Ref.: 16611	Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 22900
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)
Ref.: 29451	Barberan A, Caceres Velazquez H, Jones S, Fierer N. Hiding in Plain Sight: Mining Bacterial Species Records for Phenotypic Trait Information. mSphere 2: None-None 2017 (10.1128/mSphere.00237-17, None) - ***originally annotated from #25856***
Ref.: 25856	IJSEM 1849 2010 (10.1099/ijs.0.013318-0)

*** These References are textmined**

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