



## Strain identifier

**BacDive ID:** 14228      **DOI:** 10.13145/bacdive14228.20191129.4.1  
**Type strain:** yes      **Designation:** RW1  
**Culture col. no.:** DSM 6014, JCM 10273, JCM 15750, CCUG 31198

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## Name and taxonomic classification

<a href="#">Ref.: 2419</a>	<b>Domain</b>	Bacteria
<a href="#">Ref.: 2419</a>	<b>Phylum</b>	Proteobacteria
<a href="#">Ref.: 2419</a>	<b>Class</b>	Alphaproteobacteria
<a href="#">Ref.: 2419</a>	<b>Order</b>	Sphingomonadales
<a href="#">Ref.: 2419</a>	<b>Family</b>	Sphingomonadaceae
<a href="#">Ref.: 2419</a>	<b>Genus</b>	Sphingomonas
<a href="#">Ref.: 2419</a>	<b>Species</b>	Sphingomonas wittichii
<a href="#">Ref.: 2419</a>	<b>Full Scientific Name</b>	Sphingomonas wittichii Yabuuchi et al. 2001
<a href="#">Ref.: 2419</a>	<b>Designation:</b>	RW1
<a href="#">Ref.: 2419</a>	<b>Type strain:</b>	yes

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

<a href="#">Ref.: 20215</a>	<b>Domain</b>	Bacteria
<a href="#">Ref.: 20215</a>	<b>Phylum</b>	Proteobacteria
<a href="#">Ref.: 20215</a>	<b>Class</b>	Alphaproteobacteria
<a href="#">Ref.: 20215</a>	Literature reference	Int. J. Syst. Evol. Microbiol. 56:1
<a href="#">Ref.: 20215</a>	<b>Family</b>	Sphingomonadaceae
<a href="#">Ref.: 20215</a>	Literature reference	Int. J. Syst. Evol. Microbiol. 50:1953
<a href="#">Ref.: 20215</a>	<b>Genus</b>	Sphingomonas



Ref.: 20215	Taxonomical status	gen. nov. (VL)
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 40:320
Ref.: 20215	<b>Species</b>	Sphingomonas wittichii
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 51:281*
Ref.: 20215	<b>Full Scientific Name</b>	Sphingomonas wittichii Yabuuchi et al. 2001 emend. Kim et al. 2016

## Morphology and physiology

Ref.: 2419	<b>Name of produced compound</b>	hydrolases
Ref.: 2419	<b>Name of produced compound</b>	2,2',3 trihydroxybiphenyl dioxygenase
Ref.: 2419	<b>Name of produced compound</b>	dibenzofuran-4,4a-dioxygenase

Ref.: 2419

### API 20NE

API ID	9094
NO3	-
TRP	-
GLU_Ferm	-
ADH (Arg)	-
URE	-
ESC	-
GEL	-
PNPG	-
GLU_Assim	-
ARA	+
MNE	-
MAN	+
NAG	-
MAL	+
GNT	+
CAP	-
ADI	-
MLT	-
CIT	-
PAC	+



OX	+
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**Culture and growth conditions**

Ref.: 2419	<b>Culture medium</b>	NUTRIENT AGAR (DSMZ Medium 1), 30°C
Ref.: 2419	<b>Culture medium growth</b>	yes
Ref.: 2419	<b>Culture medium link</b>	<a href="https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium1.pdf">https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium1.pdf</a>
Ref.: 2419	<b>Culture medium</b>	MINERAL MEDIUM (BRUNNER) (DSMZ Medium 457), 30°C, with dibenzofuran via incubation atmosphere
Ref.: 2419	<b>Culture medium growth</b>	yes
Ref.: 2419	<b>Culture medium link</b>	<a href="https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium457.pdf">https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium457.pdf</a>
Ref.: 37289	<b>Culture medium</b>	MEDIUM 72- for trypto casein soja agar
Ref.: 37289	<b>Culture medium growth</b>	yes
Ref.: 37289	<b>Culture medium composition</b>	Distilled water make up to (1000.000 ml);Trypto casein soy agar (40.000 g)

**Temperatures**

Ref.: 2419  
Ref.: 37289

Kind of temperature	Temperature
growth	30 °C
growth	30 °C

Ref.: 2419	<b>Temperature range</b>	mesophilic
Ref.: 37289	<b>Temperature range</b>	mesophilic

**Isolation, sampling and environmental information**

Ref.: 2419	<b>Sample type/isolated from</b>	water samples
Ref.: 2419	<b>Geographic location (country and/or sea, region)</b>	Elbe river near Hamburg
Ref.: 2419	<b>Country</b>	Germany
Ref.: 2419	<b>Continent</b>	Europe
Ref.: 50470	<b>Sample type/isolated from</b>	Water,enrichment with dibenzo-p-dioxin



# Sphingomonas wittichii

Ref.: 50470      **Geographic location (country and/or sea, region)**      Elbe,downstream Hamburg harbour

Ref.: 50470      **Country**      Germany

Ref.: 50470      **Continent**      Europe

**Isolation sources categories**

Cat1	Cat2	Cat3
#Environmental	#Aquatic	-

**Application and interaction**

Ref.: 2419      **Biosafety level**      1 Risk group (German classification)

**Molecular biology**

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 2419	whole genome shotgun sequence, Whole Genome Shotgun (WGS) Sequence INSDC	Sphingomonas wittichii strain YR128, whole genome shotgun sequencing project	JQMC01000000	78	160791
Ref.: 2419	whole genome shotgun sequence, Whole Genome Shotgun (WGS) Sequence INSDC	Sphingomonas wittichii DP58, whole genome shotgun sequencing project	AHKO01000000	739	400971
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Sphingomonas wittichii gene for 16S rRNA, strain DSM 6014	AB021492	1481	392499
Ref.: 2419	16S rRNA gene, Marker Gene (EMBL Direct submission)	Sphingomonas sp. partial 16S rRNA gene	X72723	1460	28214

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**Strain availability**

Ref.: 2419      **Culture collection no.**      DSM 6014, JCM 10273, JCM 15750, CCUG 31198

Ref.: 2419      **Strain history**      <- R.M. Wittich; RW1



**Associated Passport(s) in StrainInfo**

Ref.: 20218      144024 - <http://www.straininfo.net/strains/144024>

**References**

Ref.: 2419      Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 6014

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.: 37289      None; Curators of the CIP; None

Ref.: 50470      Culture Collection University of Gothenburg (CCUG); Curators of the CCUG; CCUG 31198

**\* These References are textmined**

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