

### Strain identifier

<b>BacDive ID:</b>	12582	<b>DOI:</b>	10.13145/bacdive12582.20190402.4
<b>Type strain:</b>	yes	<b>Designation:</b>	DS-61
<b>Culture col. no.:</b>	DSM 18665, KCTC 19206		

### Sections

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### Name and taxonomic classification

<a href="#">Ref.: 7646</a>	<b>Domain</b>	Bacteria
<a href="#">Ref.: 7646</a>	<b>Phylum</b>	Actinobacteria
<a href="#">Ref.: 7646</a>	<b>Class</b>	Actinobacteria
<a href="#">Ref.: 7646</a>	<b>Order</b>	Actinomycetales
<a href="#">Ref.: 7646</a>	<b>Family</b>	Promicromonosporaceae
<a href="#">Ref.: 7646</a>	<b>Genus</b>	Cellulosimicrobium
<a href="#">Ref.: 7646</a>	<b>Species</b>	Cellulosimicrobium terreum
<a href="#">Ref.: 7646</a>	<b>Full Scientific Name</b>	Cellulosimicrobium terreum Yoon et al. 2007
<a href="#">Ref.: 7646</a>	<b>Designation:</b>	DS-61
<a href="#">Ref.: 7646</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>	Actinobacteria
<a href="#">Ref.: 20215</a>	<b>Class</b>	Actinobacteria
<a href="#">Ref.: 20215</a>	Literature reference	Int. J. Syst. Bacteriol. 47:483*
<a href="#">Ref.: 20215</a>	<b>Family</b>	Promicromonosporaceae
<a href="#">Ref.: 20215</a>	<b>Genus</b>	Cellulosimicrobium
<a href="#">Ref.: 20215</a>	Taxonomical status	gen. nov. (VP)

Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 51:1007*
Ref.: 20215	<b>Species</b>	Cellulosimicrobium terreum
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 57:2493*
Ref.: 20215	<b>Full Scientific Name</b>	Cellulosimicrobium terreum Yoon et al. 2007

### Morphology and physiology

Ref.: 32055	<b>Gram stain</b>	positive
Ref.: 32055	<b>Cell length</b>	1.2 µm
Ref.: 32055	<b>Cell width</b>	0.6 µm
Ref.: 32055	<b>Cell shape</b>	coccus-shaped
Ref.: 32055	<b>Motility</b>	no

Ref.: 32055	<b>Enzymes</b>	Enzyme	Enzyme activity	EC number
		acid phosphatase	+	3.1.3.2
		alkaline phosphatase	+	3.1.3.1
		catalase	+	1.11.1.6
		urease	+	3.5.1.5

Ref.: 32055	<b>Halophily</b>	Salt	Tested relation	Salt conc.
		NaCl	growth	0-9 %
		NaCl	optimum	1 %

Ref.: 32055	<b>Metabolite utilization</b>	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
		15366	Acetic acid	+	carbon source
		22599	Arabinose	+	carbon source
		17057	Cellobiose	+	carbon source
		4853	Esculin	+	hydrolysis
		28757	Fructose	+	carbon source
		28260	Galactose	+	carbon source
		17234	Glucose	+	carbon source
		18237	Glutamic acid	+	carbon source
		17306	Maltose	+	carbon source
		37684	Mannose	+	carbon source
		17632	Nitrate	+	reduction
		32816	Pyruvic acid	+	carbon source

Ref.: 32055	17814	Salicin	+	carbon source
Ref.: 32055	17992	Sucrose	+	carbon source
Ref.: 32055	27082	Trehalose	+	carbon source
Ref.: 32055	53424	Tween 20	+	carbon source
Ref.: 32055	53423	Tween 40	+	carbon source
Ref.: 32055	53425	Tween 60	+	carbon source
Ref.: 32055	53426	Tween 80	+	carbon source
Ref.: 32055	16199	Urea	+	carbon source
Ref.: 32055	18222	Xylose	+	carbon source

Ref.: 7646	<b>Murein short key</b>	A11.45
Ref.: 7646	<b>Murein types</b>	A4alpha L-Lys-L-Thr-D-Asp
Ref.: 32055	<b>Oxygen tolerance</b>	aerobe
Ref.: 32055	<b>Ability of spore formation</b>	no

### Culture and growth conditions

Ref.: 7646	<b>Culture medium</b>	TRYPTICASE SOY YEAST EXTRACT MEDIUM (DSMZ Medium 92), 28°C
Ref.: 7646	<b>Culture medium growth</b>	yes
Ref.: 7646	<b>Culture medium link</b>	<a href="https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium92.pdf">https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium92.pdf</a>

	<b>Temperatures</b>	<table border="1"> <thead> <tr> <th>Kind of temperature</th> <th>Temperature</th> </tr> </thead> <tbody> <tr> <td>growth</td> <td>28 °C</td> </tr> <tr> <td>growth</td> <td>04-34 °C</td> </tr> <tr> <td>optimum</td> <td>25 °C</td> </tr> </tbody> </table>	Kind of temperature	Temperature	growth	28 °C	growth	04-34 °C	optimum	25 °C
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Ref.: 7646	<b>Temperature range</b>	mesophilic
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	<b>pH</b>	<table border="1"> <thead> <tr> <th>Kind of pH</th> <th>pH</th> </tr> </thead> <tbody> <tr> <td>growth</td> <td>06-09</td> </tr> <tr> <td>optimum</td> <td>7</td> </tr> </tbody> </table>	Kind of pH	pH	growth	06-09	optimum	7
Kind of pH	pH							
growth	06-09							
optimum	7							
Ref.: 32055								
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### Isolation, sampling and environmental information



Ref.: 7646 **Sample type/isolated from** soil

Ref.: 7646 **Geographic location (country and/or sea, region)** Dokdo

Ref.: 7646 **Country** Republic of Korea

Ref.: 7646 **Continent** Asia

**Isolation sources categories**

Cat1	Cat2	Cat3
#Environmental	#Terrestrial	#Soil

**Application and interaction**

Ref.: 7646 **Biosafety level** 1 Risk group (German classification)

**Molecular biology**

Ref.: 7646 **GC-content** 72.9 mol%

Ref.: 32055 **GC-content** 72.9 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 7646	GenBank Direct submission	Cellulosimicrobium terreum strain DS-61 16S ribosomal RNA gene, partial sequence	EF076760	1478	412439

**Strain availability**

Ref.: 7646 **Culture collection no.** DSM 18665, KCTC 19206

Ref.: 7646 **Strain history** <- Jung-Hoon Yoon, DS-61

**Associated Passport(s) in StrainInfo**

Ref.: 20218 756760 - <http://www.straininfo.net/strains/756760>

Ref.: 20218 756761 - <http://www.straininfo.net/strains/756761>

**References**

Ref.: 7646 Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 18665



- 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.: 32055 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 #28304**
- Ref.: 28304 IJSEM 2493 2007 (10.1099/ijms.0.64889-0)

\* These References are textmined

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