



**Strain identifier**

**BacDive ID:** 7447                      **DOI:** 10.13145/bacdive7447.20190402.4  
**Type strain:** yes                      **Designation:** DS-66  
**Culture col. no.:** DSM 23024, CCUG 54523, KCTC 19247, JCM 19115

**Sections**

- [Name and taxonomic classification](#)
- [Morphology and physiology](#)
- [Culture and growth conditions](#)
- [Isolation, sampling and environmental information](#)
- [Application and interaction](#)
- [Molecular biology](#)
- [Strain availability](#)
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**Name and taxonomic classification**

<a href="#">Ref.: 16654</a>	<b>Domain</b>	Bacteria
<a href="#">Ref.: 16654</a>	<b>Phylum</b>	Actinobacteria
<a href="#">Ref.: 16654</a>	<b>Class</b>	Actinobacteria
<a href="#">Ref.: 16654</a>	<b>Order</b>	Actinomycetales
<a href="#">Ref.: 16654</a>	<b>Family</b>	Microbacteriaceae
<a href="#">Ref.: 16654</a>	<b>Genus</b>	Microbacterium
<a href="#">Ref.: 16654</a>	<b>Species</b>	Microbacterium insulae
<a href="#">Ref.: 16654</a>	<b>Full Scientific Name</b>	Microbacterium insulae Yoon et al. 2009
<a href="#">Ref.: 16654</a>	<b>Designation:</b>	DS-66
<a href="#">Ref.: 16654</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>	Microbacteriaceae
<a href="#">Ref.: 20215</a>	<b>Genus</b>	Microbacterium
<a href="#">Ref.: 20215</a>	Taxonomical status	genus (AL)



Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	<b>Species</b>	Microbacterium insulae
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 59:1738*
Ref.: 20215	<b>Full Scientific Name</b>	Microbacterium insulae Yoon et al. 2009

**Morphology and physiology**

Ref.: 29157	<b>Gram stain</b>	positive
Ref.: 29157	<b>Cell length</b>	1.15 µm
Ref.: 29157	<b>Cell width</b>	0.35 µm
Ref.: 29157	<b>Cell shape</b>	coccus-shaped
Ref.: 29157	<b>Motility</b>	no

Ref.: 60213	<b>Incubation period</b>	1-2 days
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Enzymes	Enzyme	Enzyme activity	EC number
Ref.: 29157	cytochrome oxidase	+	1.9.3.1

Halophily	Salt	Tested relation	Salt conc.
Ref.: 29157	NaCl	growth	0-5 %
Ref.: 29157	NaCl	optimum	0.75 %

Metabolite utilization	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
Ref.: 29157	22599	Arabinose	+	carbon source
Ref.: 29157	17057	Cellobiose	+	carbon source
Ref.: 29157	4853	Esculin	+	hydrolysis
Ref.: 29157	28757	Fructose	+	carbon source
Ref.: 29157	28260	Galactose	+	carbon source
Ref.: 29157	5291	Gelatin	+	carbon source
Ref.: 29157	17234	Glucose	+	carbon source
Ref.: 29157	17754	Glycerol	+	carbon source
Ref.: 29157	17716	Lactose	+	carbon source
Ref.: 29157	17306	Maltose	+	carbon source
Ref.: 29157	29864	Mannitol	+	carbon source
Ref.: 29157	37684	Mannose	+	carbon source
Ref.: 29157	37657	Methyl D-glucoside	+	carbon source
Ref.: 29157	26546	Rhamnose	+	carbon source

Ref.: 29157	17814	Salicin	+	carbon source
Ref.: 29157	17992	Sucrose	+	carbon source
Ref.: 29157	27082	Trehalose	+	carbon source
Ref.: 29157	53424	Tween 20	+	carbon source
Ref.: 29157	53423	Tween 40	+	carbon source
Ref.: 29157	53425	Tween 60	+	carbon source
Ref.: 29157	53426	Tween 80	+	carbon source
Ref.: 29157	18222	Xylose	+	carbon source

Ref.: 16654	<b>Murein short key</b>	B06
Ref.: 16654	<b>Murein types</b>	B2β {Gly} [L-Hsr] D-Glu(Hyg)-Gly-D-Orn
Ref.: 60213	<b>Oxygen tolerance</b>	aerobe
Ref.: 29157	<b>Ability of spore formation</b>	no

### Culture and growth conditions

Ref.: 16654	<b>Culture medium</b>	TRYPTICASE SOY YEAST EXTRACT MEDIUM (DSMZ Medium 92), 28°C
Ref.: 16654	<b>Culture medium growth</b>	yes
Ref.: 16654	<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>											
Ref.: 16654		<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>20-38 °C</td> </tr> <tr> <td>optimum</td> <td>30 °C</td> </tr> <tr> <td>growth</td> <td>30-37 °C</td> </tr> </tbody> </table>	Kind of temperature	Temperature	growth	28 °C	growth	20-38 °C	optimum	30 °C	growth	30-37 °C
Kind of temperature	Temperature											
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growth	20-38 °C											
optimum	30 °C											
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Ref.: 29157												
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Ref.: 60213												

Ref.: 16654	<b>Temperature range</b>	mesophilic
Ref.: 29157	<b>Temperature range</b>	mesophilic
Ref.: 60213	<b>Temperature range</b>	mesophilic

	<b>pH</b>							
Ref.: 29157		<table border="1"> <thead> <tr> <th>Kind of pH</th> <th>pH</th> </tr> </thead> <tbody> <tr> <td>growth</td> <td>5.5-8.0</td> </tr> <tr> <td>optimum</td> <td>6.75</td> </tr> </tbody> </table>	Kind of pH	pH	growth	5.5-8.0	optimum	6.75
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growth	5.5-8.0							
optimum	6.75							
Ref.: 29157								



**Isolation, sampling and environmental information**

Ref.: 16654	<b>Sample type/isolated from</b>	soil
Ref.: 16654	<b>Geographic location (country and/or sea, region)</b>	Dokdo
Ref.: 16654	<b>Country</b>	Republic of Korea
Ref.: 16654	<b>Continent</b>	Asia
Ref.: 60213	<b>Sample type/isolated from</b>	Soil
Ref.: 60213	<b>Sampling date</b>	2004-05-01
Ref.: 60213	<b>Geographic location (country and/or sea, region)</b>	Dokdo
Ref.: 60213	<b>Country</b>	Republic of Korea
Ref.: 60213	<b>Continent</b>	Asia

**Isolation sources categories**

Cat1	Cat2	Cat3
#Environmental	#Terrestrial	#Soil

**Application and interaction**

Ref.: 16654	<b>Biosafety level</b>	1 Risk group (German classification)
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**Molecular biology**

Ref.: 16654	<b>GC-content</b>	69.9 mol% high performance liquid chromatography (HPLC)
Ref.: 29157	<b>GC-content</b>	69.9 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 16654	GenBank Direct submission	Microbacterium insulae strain DS-66 16S ribosomal RNA gene, partial sequence	EU239498	1447	483014

**Strain availability**

Ref.: 16654	<b>Culture collection no.</b>	DSM 23024, CCGU 54523, KCTC 19247, JCM 19115
Ref.: 16654	<b>Strain history</b>	<- CCGU <- J.-H. Yoon, KRIBB

**Associated Passport(s) in StrainInfo**

Ref.: 20218 843280 - <http://www.straininfo.net/strains/843280>

Ref.: 20218 843281 - <http://www.straininfo.net/strains/843281>

**References**

Ref.: 16654 Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 23024

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.: 29157 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 #25581**

Ref.: 25581 IJSEM 1738 2009 (10.1099/ij.s.0.007591-0)

Ref.: 60213 Culture Collection University of Gothenburg (CCUG); Curators of the CCUG; CCUG 54523

**\* These References are textmined**

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