

Strain identifier

BacDive ID: 7467 **DOI:** 10.13145/bacdive7467.20190402.4
Type strain: yes **Designation:** YLB-01
Culture col. no.: DSM 23767, CCTCC AB 2010363, JCM 19554, MCCC 1A06153

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Name and taxonomic classification

Ref.: 17367	Domain	Bacteria
Ref.: 17367	Phylum	Actinobacteria
Ref.: 17367	Class	Actinobacteria
Ref.: 17367	Order	Actinomycetales
Ref.: 17367	Family	Microbacteriaceae
Ref.: 17367	Genus	Microbacterium
Ref.: 17367	Species	Microbacterium sediminis
Ref.: 17367	Full Scientific Name	Microbacterium sediminis Yu et al. 2013
Ref.: 17367	Designation:	YLB-01
Ref.: 17367	Type strain:	yes

Prokaryotic Nomenclature Up-to-date (PNU)

Ref.: 20215	Domain	Bacteria
Ref.: 20215	Phylum	Actinobacteria
Ref.: 20215	Class	Actinobacteria
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 47:483*
Ref.: 20215	Family	Microbacteriaceae
Ref.: 20215	Genus	Microbacterium
Ref.: 20215	Taxonomical status	genus (AL)

Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	Species	Microbacterium sediminis
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 63:25*
Ref.: 20215	Full Scientific Name	Microbacterium sediminis Yu et al. 2013

Morphology and physiology

Ref.: 30121	Gram stain	positive
Ref.: 30121	Cell length	5.5 µm
Ref.: 30121	Cell width	1.25 µm
Ref.: 30121	Cell shape	rod-shaped
Ref.: 30121	Motility	yes

Enzymes	Enzyme	Enzyme activity	EC number
Ref.: 30121	acid phosphatase	+	3.1.3.2
Ref.: 30121	alkaline phosphatase	+	3.1.3.1
Ref.: 30121	catalase	+	1.11.1.6
Ref.: 30121	cytochrome oxidase	+	1.9.3.1

Halophily	Salt	Tested relation	Salt conc.
Ref.: 30121	NaCl	growth	0-8 %

Metabolite utilization	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
Ref.: 30121	16449	Alanine	+	carbon source
Ref.: 30121	4853	Esculin	+	hydrolysis
Ref.: 30121	28757	Fructose	+	carbon source
Ref.: 30121	24149	Galactonic acid	+	carbon source
Ref.: 30121	28260	Galactose	+	carbon source
Ref.: 30121	24266	Gluconic acid	+	carbon source
Ref.: 30121	17234	Glucose	+	carbon source
Ref.: 30121	15428	Glycine	+	carbon source
Ref.: 30121	21217	L-Alaninamide	+	carbon source
Ref.: 30121	25017	Leucine	+	carbon source
Ref.: 30121	29864	Mannitol	+	carbon source
Ref.: 30121	37684	Mannose	+	carbon source
Ref.: 30121	53258	Sodium citrate	+	carbon source

Ref.: 30121

30911	Sorbitol	+	carbon source
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Ref.: 30121

Oxygen tolerance

aerobe

Culture and growth conditions

Ref.: 17367

Culture medium

TRYPTICASE SOY YEAST EXTRACT MEDIUM (DSMZ Medium 92), 28°C

Ref.: 17367

Culture medium growth

yes

Ref.: 17367

Culture medium link

https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium92.pdf

Temperatures

Ref.: 17367

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Ref.: 30121

Kind of temperature	Temperature
growth	28 °C
growth	04-50 °C
optimum	28 °C

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Temperature range

mesophilic

Ref.: 30121

Temperature range

mesophilic

pH

Ref.: 30121

Ref.: 30121

Kind of pH	pH
growth	5.0-10.0
optimum	7

Isolation, sampling and environmental information

Ref.: 17367

Sample type/isolated from

deep-sea sediment

Ref.: 17367

Geographic location (country and/or sea, region)

Indian Ocean (49.8405° E 37.8111° S) at 2327 m water depth

Ref.: 17367

Country

China

Ref.: 17367

Continent

Asia

Ref.: 17367

Geographic location

-37.8111°/49.8405°

Isolation sources categories

Cat1	Cat2	Cat3
#Environmental	#Aquatic	#Marine
#Environmental	#Aquatic	#Sediment

Application and interaction

Ref.: 17367 **Biosafety level** 1 Risk group (German classification)

Molecular biology

Ref.: 17367 **GC-content** 71 mol%

Ref.: 30121 **GC-content** 71 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 17367	GenBank Direct submission	Microbacterium sediminis strain YLB-01 16S ribosomal RNA gene, partial sequence	HQ219727	1487	904291

Strain availability

Ref.: 17367 **Culture collection no.** DSM 23767, CCTCC AB 2010363, JCM 19554, MCCC 1A06153

Ref.: 17367 **Strain history** <- Y. Libo, Key Lab. Marine Biogenetic Resources, Third Institute of Oceanography, Xiamen; YLB-01

Associated Passport(s) in StrainInfo

Ref.: 20218 884173 - <http://www.straininfo.net/strains/884173>

Ref.: 20218 884172 - <http://www.straininfo.net/strains/884172>

Ref.: 20218 884174 - <http://www.straininfo.net/strains/884174>

References

Ref.: 17367 Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 23767

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.: 30121 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 #26475**

Ref.: 26475 IJSEM 25 2013 (10.1099/ij.s.0.029652-0)

* **These References are textmined**

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