

Strain identifier

BacDive ID: 7507 **DOI:** 10.13145/bacdive7507.20190402.4
Type strain: yes **Designation:** ZS314
Culture col. no.: DSM 22350, CCTCC AB 209077, JCM 19552, NBRC 109630

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Name and taxonomic classification

Ref.: 16307	Domain	Bacteria
Ref.: 16307	Phylum	Actinobacteria
Ref.: 16307	Class	Actinobacteria
Ref.: 16307	Order	Actinomycetales
Ref.: 16307	Family	Microbacteriaceae
Ref.: 16307	Genus	Marisediminicola
Ref.: 16307	Species	Marisediminicola antarctica
Ref.: 16307	Full Scientific Name	Marisediminicola antarctica Li et al. 2010
Ref.: 16307	Designation:	ZS314
Ref.: 16307	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	Marisediminicola
Ref.: 20215	Taxonomical status	gen. nov. (VP)

Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 60:2535*
Ref.: 20215	Species	Marisediminicola antarctica
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 60:2535*
Ref.: 20215	Full Scientific Name	Marisediminicola antarctica Li et al. 2010

Morphology and physiology

Ref.: 29688	Gram stain	positive
Ref.: 29688	Cell length	0.7-0.9 µm
Ref.: 29688	Cell width	0.2-0.3 µm
Ref.: 29688	Cell shape	rod-shaped
Ref.: 29688	Motility	yes

Ref.: 29688	Enzymes	Enzyme	Enzyme activity	EC number
		catalase	+	1.11.1.6

Ref.: 29688 Ref.: 29688	Halophily	Salt	Tested relation	Salt conc.
		NaCl	growth	0-6 %
		NaCl	optimum	02-04 %

Ref.: 29688	Metabolite utilization	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
		4853	Esculin	+	hydrolysis

Ref.: 29688 **Decomposition/lysis** aggregates in chains

Ref.: 29688 **Oxygen tolerance** aerobe

Ref.: 29688 **Ability of spore formation** no

Culture and growth conditions

Ref.: 16307	Culture medium	BACTO MARINE BROTH (DIFCO 2216) (DSMZ Medium 514), 20°C, pH 7.6; 5-7 d
Ref.: 16307	Culture medium growth	yes
Ref.: 16307	Culture medium link	https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium514.pdf

Ref.: 16307 Ref.: 29688 Ref.: 29688	Temperatures	Kind of temperature	Temperature
		growth	15-20 °C
		growth	0-26 °C
		optimum	18-23 °C

Ref.: 16307	Temperature range	psychrophilic
Ref.: 29688	Temperature range	psychrophilic

Ref.: 29688 Ref.: 29688	pH	Kind of pH	pH
		growth	05-10
		optimum	06-08

Isolation, sampling and environmental information

Ref.: 16307	Sample type/isolated from	marine sediment of intertidal zones
Ref.: 16307	Geographic location (country and/or sea, region)	Zhongshan Station (69° 22' 13" S 76° 21' 41" E)
Ref.: 16307	Continent	Australia and Oceania
Ref.: 16307	Geographic location	-69.3703°/76.3614°

Isolation sources categories	Cat1	Cat2	Cat3
	#Environmental	#Aquatic	#Marine
	#Environmental	#Aquatic	#Sediment
	#Environmental	#Aquatic	#Tidal flat

Application and interaction

Ref.: 16307	Biosafety level	1 Risk group (German classification)
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Molecular biology

Ref.: 16307	GC-content	67.3 mol% high performance liquid chromatography (HPLC)
Ref.: 29688	GC-content	67 mol%

Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
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Ref.: 16307	GenBank Direct submission	Marisediminicola antarctica strain ZS314 16S ribosomal RNA gene, partial sequence	GQ496083	1480	674079
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Strain availability

[Ref.: 16307](#) **Culture collection no.** DSM 22350, CCTCC AB 209077, JCM 19552, NBRC 109630

[Ref.: 16307](#) **Strain history** <- H. Li, Polar Res. Institute of China, Shanghai, PR China; ZS314
<- H. Teng and H. Li

Associated Passport(s) in StrainInfo

[Ref.: 20218](#) 856776 - <http://www.straininfo.net/strains/856776>

[Ref.: 20218](#) 856903 - <http://www.straininfo.net/strains/856903>

References

[Ref.: 16307](#) Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 22350

[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.: 29688](#) 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 #26073**

[Ref.: 26073](#) IJSEM 2535 2010 (10.1099/ijs.0.018754-0)

*** These References are textmined**

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