



Strain identifier

BacDive ID: 3804 **DOI:** 10.13145/bacdive3804.20190402.4
Type strain: yes **Designation:** Tibet-IIU11
Culture col. no.: DSM 18569, CGMCC 1.6365

Sections

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Name and taxonomic classification

Ref.: 7529	Domain	Bacteria
Ref.: 7529	Phylum	Bacteroidetes
Ref.: 7529	Class	Cytophagia
Ref.: 7529	Order	Cytophagales
Ref.: 7529	Family	Hymenobacteraceae
Ref.: 7529	Genus	Hymenobacter
Ref.: 7529	Species	Hymenobacter psychrotolerans
Ref.: 7529	Full Scientific Name	Hymenobacter psychrotolerans Zhang et al. 2008
Ref.: 7529	Designation:	Tibet-IIU11
Ref.: 7529	Type strain:	yes

Prokaryotic Nomenclature Up-to-date (PNU)

Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 62:1
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:235
Ref.: 20215	Genus	Hymenobacter
Ref.: 20215	Taxonomical status	genus (AL)
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	Species	Hymenobacter psychrotolerans
Ref.: 20215	Taxonomical status	sp. nov. (VP)

Ref.: 20215 Literature reference Int. J. Syst. Evol. Microbiol. 58:1215*
 Ref.: 20215 **Full Scientific Name** Hymenobacter psychrotolerans Zhang et al. 2008

Morphology and physiology

Ref.: 32500 **Gram stain** negative
 Ref.: 32500 **Cell length** 1.25 µm
 Ref.: 32500 **Cell width** 0.5 µm
 Ref.: 32500 **Cell shape** rod-shaped
 Ref.: 32500 **Motility** no

Enzymes	Enzyme	Enzyme activity	EC number
Ref.: 32500	acid phosphatase	+	3.1.3.2
Ref.: 32500	alkaline phosphatase	+	3.1.3.1
Ref.: 32500	catalase	+	1.11.1.6
Ref.: 32500	cytochrome oxidase	+	1.9.3.1

Halophily	Salt	Tested relation	Salt conc.
Ref.: 32500	NaCl	growth	0-1.5 %

Metabolite utilization	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
Ref.: 32500	17234	Glucose	+	carbon source
Ref.: 32500	37684	Mannose	+	carbon source
Ref.: 32500	17632	Nitrate	+	reduction
Ref.: 32500	30768	Propionic acid	+	carbon source
Ref.: 32500	17992	Sucrose	+	carbon source

Ref.: 32500 **Oxygen tolerance** aerobe

Ref.: 32500 **Ability of spore formation** no

Culture and growth conditions

Ref.: 7529 **Culture medium** R2A MEDIUM (DSMZ Medium 830), 22°C
 Ref.: 7529 **Culture medium growth** yes
 Ref.: 7529 **Culture medium link** https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium830.pdf

Ref.: 7529 Ref.: 32500 Ref.: 32500	Temperatures	Kind of temperature	Temperature
		growth	20-25 °C
		growth	04-28 °C
		optimum	18 °C

Ref.: 32500 **Temperature range** psychrophilic

Ref.: 32500 Ref.: 32500	pH	Kind of pH	pH
		growth	05-10
		optimum	7

Isolation, sampling and environmental information

Ref.: 7529 **Sample type/isolated from** permafrost sediment sample

Ref.: 7529 **Geographic location (country and/or sea, region)** Qinghai–Tibet Plateau, Beilu river basin (34° 50' N 92° 56' E, 4676 m above sea level)

Ref.: 7529 **Country** China

Ref.: 7529 **Continent** Asia

Ref.: 7529 **Geographic location** 34.8333°/92.9333°

Isolation sources categories	Cat1	Cat2	Cat3
	#Environmental	#Aquatic	#Sediment
	#Environmental	#Terrestrial	#Permafrost

Application and interaction

Ref.: 7529 **Biosafety level** 1 Risk group (German classification)

Molecular biology

Ref.: 7529 **GC-content** 60.0 mol%

Ref.: 32500 **GC-content** 60 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 20218	Marker Gene (GenBank Direct submission)	Hymenobacter psychrotolerans strain DSM 18569 DNA gyrase B (gyrB) gene, partial cds	GQ454839	1270	1121959



Ref.: 7529	GenBank Direct submission	Hymenobacter psychrotolerans strain Tibet-IIU11 16S ribosomal RNA gene, partial sequence	DQ177475	1484	1121959
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Strain availability

[Ref.: 7529](#) **Culture collection no.** DSM 18569, CGMCC 1.6365

[Ref.: 7529](#) **Strain history** <- G. Zhang, School of Life Sci., Lanzhou Univ., China; Tibet-IIU11

Associated Passport(s) in StrainInfo

[Ref.: 20218](#) 822636 - <http://www.straininfo.net/strains/822636>

[Ref.: 20218](#) 747637 - <http://www.straininfo.net/strains/747637>

References

[Ref.: 7529](#) Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 18569

[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.: 32500](#) 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 #28720**

[Ref.: 28720](#) IJSEM 1215 2008 (10.1099/ijs.0.65588-0)

*** These References are textmined**

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