



## Strain identifier

**BacDive ID:** 23303      **DOI:** 10.13145/bacdive23303.20190402.4  
**Type strain:** yes      **Designation:** NEAU-Da3  
**Culture col. no.:** DSM 42076, CGMCC 4.7047

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## Name and taxonomic classification

Ref.: 18930	<b>Domain</b>	Bacteria
Ref.: 18930	<b>Phylum</b>	Actinobacteria
Ref.: 18930	<b>Class</b>	Actinobacteria
Ref.: 18930	<b>Order</b>	Actinomycetales
Ref.: 18930	<b>Family</b>	Streptomycetaceae
Ref.: 18930	<b>Genus</b>	Streptomyces
Ref.: 18930	<b>Species</b>	Streptomyces harbinensis
Ref.: 18930	<b>Full Scientific Name</b>	Streptomyces harbinensis Liu et al. 2013
Ref.: 18930	<b>Designation:</b>	NEAU-Da3
Ref.: 18930	<b>Type strain:</b>	yes

### **Prokaryotic Nomenclature Up-to-date (PNU)**

Ref.: 20215	<b>Domain</b>	Bacteria
Ref.: 20215	<b>Phylum</b>	Actinobacteria
Ref.: 20215	<b>Class</b>	Actinobacteria
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 47:483*
Ref.: 20215	<b>Family</b>	Streptomycetaceae
Ref.: 20215	<b>Genus</b>	Streptomyces
Ref.: 20215	Taxonomical status	genus (AL)



Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	<b>Species</b>	Streptomyces harbinensis
Ref.: 20215	Taxonomical status	sp. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 63:3579*
Ref.: 20215	<b>Full Scientific Name</b>	Streptomyces harbinensis Liu et al. 2013

## Morphology and physiology

Ref.: 31027	<b>Gram stain</b>	positive
Ref.: 31027	<b>Cell length</b>	0.65 µm
Ref.: 31027	<b>Cell width</b>	0.39 µm
Ref.: 31027	<b>Motility</b>	no
Ref.: 18930	<b>Name of produced compound</b>	ikarugamycin

Ref.: 31027	<b>Enzymes</b>	Enzyme	Enzyme activity	EC number
		urease	+	3.5.1.5

Ref.: 31027	<b>Halophily</b>	Salt	Tested relation	Salt conc.
		NaCl	growth	0-5 %

Ref.: 31027	<b>Metabolite utilization</b>	Chebi ID	Metabolite	Utilization activity	Kind of utilization tested
		16449	Alanine	+	carbon source
Ref.: 31027		22599	Arabinose	+	carbon source
Ref.: 31027		29016	Arginine	+	carbon source
Ref.: 31027		4853	Esculin	+	hydrolysis
Ref.: 31027		28757	Fructose	+	carbon source
Ref.: 31027		28260	Galactose	+	carbon source
Ref.: 31027		17234	Glucose	+	carbon source
Ref.: 31027		15428	Glycine	+	carbon source
Ref.: 31027		17716	Lactose	+	carbon source
Ref.: 31027		17306	Maltose	+	carbon source
Ref.: 31027		37684	Mannose	+	carbon source
Ref.: 31027		26546	Rhamnose	+	carbon source
Ref.: 31027		17822	Serine	+	carbon source
Ref.: 31027		26986	Threonine	+	carbon source
Ref.: 31027		18222	Xylose	+	carbon source



Ref.: 31027 **Oxygen tolerance** aerobe

Ref.: 31027 **Ability of spore formation** yes

**Culture and growth conditions**

Ref.: 18930 **Culture medium** GYM STREPTOMYCES MEDIUM (DSMZ Medium 65), 28°C

Ref.: 18930 **Culture medium growth** yes

Ref.: 18930 **Culture medium link** [https://www.dsmz.de/microorganisms/medium/pdf/DSMZ\\_Medium65.pdf](https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium65.pdf)

Ref.: 18930 Ref.: 31027 Ref.: 31027	<b>Temperatures</b>	<b>Kind of temperature</b>	<b>Temperature</b>
		growth	28 °C
		growth	18-40 °C
		optimum	30 °C

Ref.: 18930 **Temperature range** mesophilic

Ref.: 31027 **Temperature range** mesophilic

Ref.: 31027 Ref.: 31027	<b>pH</b>	<b>Kind of pH</b>	<b>pH</b>
		growth	07-11
		optimum	8

**Isolation, sampling and environmental information**

Ref.: 18930 **Sample type/isolated from** surface sterilized root of a soybean (Glycine max (L.) Merr)

Ref.: 18930 **Host species** Glycine max

Ref.: 18930 **Geographic location (country and/or sea, region)** Heilongjiang province, Harbin (45° 45' N 126° 41' E)

Ref.: 18930 **Country** China

Ref.: 18930 **Continent** Asia

Ref.: 18930 **Geographic location** 45.75°/126.683°

<b>Isolation sources categories</b>	<b>Cat1</b>	<b>Cat2</b>	<b>Cat3</b>
	#Host	#Plants	#Herbaceous plants (Grass,Crops)
	#Host Body-Site	#Plant	#Root (Rhizome)

#Host Body-Site	#Plant	#Sterilized plant part
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### Application and interaction

Ref.: 18930      **Biosafety level**      1 Risk group (German classification)

### Molecular biology

Ref.: 18930      **GC-content**      73.2 mol% thermal denaturation, midpoint method (T<sub>m</sub>)

Ref.: 31027      **GC-content**      73.2 mol%

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID
Ref.: 18930	GenBank Direct submission	Streptomyces harbinensis strain NEAU-Da3 16S ribosomal RNA gene, partial sequence	JQ750974	1521	1176198

### Strain availability

Ref.: 18930      **Culture collection no.**      DSM 42076, CGMCC 4.7047

Ref.: 18930      **Strain history**      <- C. Liu, School of Science, Harbin, China; NEAU-Da3

#### **Associated Passport(s) in StrainInfo**

Ref.: 20218      891335 - <http://www.straininfo.net/strains/891335>

Ref.: 20218      891334 - <http://www.straininfo.net/strains/891334>

### References

Ref.: 18930      Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 42076

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.: 31027      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 #27357**

Ref.: 27357      IJSEM 3579 2013 (10.1099/ijms.0.050088-0)

\* These References are textmined

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