

Strain identifier

BacDive ID: 2992 **DOI:** 10.13145/bacdive2992.20190402.4
Type strain: yes **Designation:** 61A
Culture col. no.: DSM 11813, CCUG 52219

Sections

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

Name and taxonomic classification

| | | |
|----------------------------|-----------------------------|--|
| Ref.: 4500 | Domain | Bacteria |
| Ref.: 4500 | Phylum | Proteobacteria |
| Ref.: 4500 | Class | Betaproteobacteria |
| Ref.: 4500 | Order | Burkholderiales |
| Ref.: 4500 | Family | Comamonadaceae |
| Ref.: 4500 | Genus | Roseateles |
| Ref.: 4500 | Species | Roseateles depolymerans |
| Ref.: 4500 | Full Scientific Name | Roseateles depolymerans Suyama et al. 1999 |
| Ref.: 4500 | Designation: | 61A |
| Ref.: 4500 | Type strain: | yes |

Prokaryotic Nomenclature Up-to-date (PNU)

| | | |
|-----------------------------|----------------------|-------------------------------------|
| Ref.: 20215 | Domain | Bacteria |
| Ref.: 20215 | Phylum | Proteobacteria |
| Ref.: 20215 | Class | Betaproteobacteria |
| Ref.: 20215 | Literature reference | Int. J. Syst. Evol. Microbiol. 56:1 |
| Ref.: 20215 | Family | Comamonadaceae |
| Ref.: 20215 | Genus | Roseateles |
| Ref.: 20215 | Taxonomical status | gen. nov. (VP) |

| | | |
|-------------|-----------------------------|--|
| Ref.: 20215 | Literature reference | Int. J. Syst. Bacteriol. 49:449* |
| Ref.: 20215 | Species | Roseateles depolymerans |
| Ref.: 20215 | Taxonomical status | sp. nov. (VP) |
| Ref.: 20215 | Literature reference | Int. J. Syst. Bacteriol. 49:449* |
| Ref.: 20215 | Full Scientific Name | Roseateles depolymerans Suyama et al. 1999 |

Morphology and physiology

| | | |
|-------------|--------------------------------|-----------------------|
| Ref.: 23092 | Gram stain | negative |
| Ref.: 23092 | Cell length | 2.0 µm |
| Ref.: 23092 | Cell width | 0.5 µm |
| Ref.: 23092 | Cell shape | rod-shaped |
| Ref.: 23092 | Motility | yes |
| Ref.: 23092 | Flagellum arrangement | polar |
| | | |
| Ref.: 32233 | Gram stain | negative |
| Ref.: 32233 | Cell length | 2 µm |
| Ref.: 32233 | Cell width | 0.5 µm |
| Ref.: 32233 | Cell shape | rod-shaped |
| Ref.: 32233 | Motility | yes |
| | | |
| Ref.: 23092 | Cultivation medium used | PHC agar plate medium |
| Ref.: 23092 | Colony color | pink |
| Ref.: 23092 | Incubation period | 3 days |

| | | | | |
|---|----------------|--------------------|------------------------|------------------|
| Ref.: 23092 Ref.: 23092 Ref.: 23092 Ref.: 32233 Ref.: 32233 | Enzymes | Enzyme | Enzyme activity | EC number |
| | | catalase | - | 1.11.1.6 |
| | | cytochrome oxidase | + | 1.9.3.1 |
| | | gelatinase | + | |
| | | gelatinase | + | |
| | | cytochrome oxidase | + | 1.9.3.1 |

| | | | | |
|-------------|------------------------------|-----------------|---------------------|-------------------|
| Ref.: 23092 | Metabolite production | Chebi ID | Metabolite | Production |
| | | 53388 | Polyhydroxybutyrate | yes |

| | | | | |
|-------------------------------|-----------------|-------------------|-----------------------------|-----------------------------------|
| Metabolite utilization | Chebi ID | Metabolite | Utilization activity | Kind of utilization tested |
|-------------------------------|-----------------|-------------------|-----------------------------|-----------------------------------|



| | | | | |
|-------------|-------|--------------------------------|---|---------------|
| Ref.: 23092 | | Casamino acids | + | carbon source |
| Ref.: 23092 | | Casamino acids | + | growth |
| Ref.: 23092 | 30769 | Citric acid | + | carbon source |
| Ref.: 23092 | 30769 | Citric acid | + | growth |
| Ref.: 23092 | 15824 | D-Fructose | + | carbon source |
| Ref.: 23092 | 15824 | D-Fructose | + | growth |
| Ref.: 23092 | 12936 | D-Galactose | + | carbon source |
| Ref.: 23092 | 12936 | D-Galactose | + | growth |
| Ref.: 23092 | 17634 | D-Glucose | + | carbon source |
| Ref.: 23092 | 17634 | D-Glucose | + | growth |
| Ref.: 32233 | 24266 | Gluconic acid | + | carbon source |
| Ref.: 32233 | 17234 | Glucose | + | carbon source |
| Ref.: 23092 | 15589 | L-Malate | + | carbon source |
| Ref.: 23092 | 15589 | L-Malate | + | growth |
| Ref.: 23092 | 78320 | Lactic acid | + | carbon source |
| Ref.: 23092 | 78320 | Lactic acid | + | growth |
| Ref.: 32233 | 6650 | Malic acid | + | carbon source |
| Ref.: 32233 | 17306 | Maltose | + | carbon source |
| Ref.: 23092 | 29864 | Mannitol | + | carbon source |
| Ref.: 23092 | 29864 | Mannitol | + | growth |
| Ref.: 23092 | 53200 | Poly(caprolactone) | + | degradation |
| Ref.: 23092 | | Poly(hexamethylene carbonate) | + | degradation |
| Ref.: 23092 | | Poly(tetramethylene carbonate) | + | degradation |
| Ref.: 23092 | 32816 | Pyruvic acid | + | carbon source |
| Ref.: 23092 | 32816 | Pyruvic acid | + | growth |
| Ref.: 23092 | 15741 | Succinic acid | + | carbon source |
| Ref.: 23092 | 15741 | Succinic acid | + | growth |
| Ref.: 23092 | | Yeast extract | + | carbon source |
| Ref.: 23092 | | Yeast extract | + | growth |

Ref.: 23092 **Oxygen tolerance** obligate aerobe

Ref.: 32233 **Oxygen tolerance** aerobe

Ref.: 59470 **Oxygen tolerance** aerobe

Ref.: 23092 **Pigment name** carotenoids

Ref.: 23092 **Pigment name** Bacteriochlorophyll c

Culture and growth conditions

Ref.: 4500 **Culture medium** PHC MEDIUM (DSMZ Medium 885), 30°C
 Ref.: 4500 **Culture medium growth** yes
 Ref.: 4500 **Culture medium link** https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium885.pdf

Ref.: 4500 **Culture medium** HETEROTROPHIC MEDIUM H3P (DSMZ Medium 428), 30°C
 Ref.: 4500 **Culture medium growth** yes
 Ref.: 4500 **Culture medium link** https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium428.pdf

Ref.: 23092 **Culture medium** PHC agar plate medium
 Ref.: 23092 **Culture medium growth** yes

| Temperatures | | Kind of temperature | Temperature |
|---------------------|--|----------------------------|--------------------|
| Ref.: 4500 | | growth | 30 °C |
| Ref.: 23092 | | growth | 45.0 °C |
| Ref.: 23092 | | optimum | 35.0 °C |
| Ref.: 32233 | | growth | 20-30 °C |
| Ref.: 59470 | | growth | 37 °C |

Ref.: 4500 **Temperature range** mesophilic
 Ref.: 23092 **Temperature range** mesophilic
 Ref.: 59470 **Temperature range** mesophilic

| pH | | Kind of pH | pH |
|-------------|--|-------------------|-----------|
| Ref.: 23092 | | optimum | 6.5 |

Isolation, sampling and environmental information

Ref.: 4500 **Sample type/isolated from** fresh water
 Ref.: 4500 **Geographic location (country and/or sea, region)** Hanamuro river, Ibaraki prefecture
 Ref.: 4500 **Country** Japan
 Ref.: 4500 **Continent** Asia



| | | |
|-------------|---|---|
| Ref.: 23092 | Sample type/isolated from | river |
| Ref.: 23092 | Enrichment culture composition | containing emulsified poly(hexamethylene carbonate) |
| Ref.: 59470 | Sample type/isolated from | Fresh water |
| Ref.: 59470 | Geographic location (country and/or sea, region) | Hanamuro river |
| Ref.: 59470 | Country | Japan |
| Ref.: 59470 | Continent | Asia |

| | | | |
|-------------------------------------|----------------|-------------|----------------|
| Isolation sources categories | Cat1 | Cat2 | Cat3 |
| | #Environmental | #Aquatic | #Freshwater |
| | #Environmental | #Aquatic | #River (Creek) |

Application and interaction

| | | |
|------------|------------------------|--------------------------------------|
| Ref.: 4500 | Biosafety level | 1 Risk group (German classification) |
|------------|------------------------|--------------------------------------|

Molecular biology

| | | |
|-------------|-------------------|--|
| Ref.: 23092 | GC-content | 66.2-66.3 mol% high performance liquid chromatography (HPLC) |
|-------------|-------------------|--|

| | Sequence database | Sequence accession description | Sequence accession number | Sequence length(bp) | Associated NCBI tax ID | |
|-------------|--------------------------------------|---|----------------------------------|----------------------------|-------------------------------|---|
| Ref.: 20218 | Marker Gene (DDBJ Direct submission) | Roseateles depolymerans rpoS like gene, partial cds | AB062129 | 143 | 76731 | * |
| Ref.: 20218 | Marker Gene (EMBL Direct submission) | Roseateles depolymerans partial puf operon, type strain CCUG 52219T | AM773545 | 1527 | 76731 | * |
| Ref.: 20218 | Marker Gene (EMBL Direct submission) | Roseateles depolymerans partial gyrB gene for DNA gyrase subunit B, type strain CCUG 52219T | FM945420 | 1009 | 76731 | * |
| Ref.: 20218 | Marker Gene (DDBJ Direct submission) | Roseateles depolymerans strain 61A (DSM11813) gene for 16S rRNA, clone:group2 | AB003624 | 1452 | 76731 | * |



| | | | | | | |
|-----------------------------|--------------------------------------|--|----------|------|-------|---|
| Ref.: 20218 | Marker Gene (DDBJ Direct submission) | Roseateles depolymerans DNA for puf operon, complete cds | AB028938 | 8087 | 76731 | * |
| Ref.: 4500 | DDBJ EMBL Direct submission | | AB003623 | | | |
| Ref.: 32233 | GenBank/EMBL /DDBJ | Roseateles depolymerans partial 16S rRNA gene, type strain CCUG 52219T | AM501443 | 1396 | 76731 | |

Strain availability

[Ref.: 4500](#) **Culture collection no.** DSM 11813, CCUG 52219

[Ref.: 4500](#) **Strain history** <- T. Suyama; 61A

Associated Passport(s) in StrainInfo

[Ref.: 20218](#) 162888 - <http://www.straininfo.net/strains/162888>

References

- [Ref.: 4500](#) Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 11813
- [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.: 23092](#) Tetsushi Suyama, Toru Shigematsu, Shinichi Takaichi, Yoshinobu Nodasaka, Seizo Fujikawa, Hiroyuki Hosoya, Yutaka Tokiwa, Takahiro Kanagawa, Satoshi Hanada Roseateles depolymerans gen. nov., sp. nov., a new bacteriochlorophyll a-containing obligate aerobe belonging to the ?-subclass of the Proteobacteria. IJSEM 49: 449-457 1999 (10.1099/00207713-49-2-449, None)
- [Ref.: 32233](#) 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 #28475**
- [Ref.: 28475](#) IJSEM 6 2008 (10.1099/ijs.0.65169-0)
- [Ref.: 59470](#) Culture Collection University of Gothenburg (CCUG); Curators of the CCUG; CCUG 52219

* **These References are textmined**

[back to top](#)