BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICRORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE INTERNATIONAL FORM

TO: dr Ivanka Karadzic
University of Belgrade
Institute of Chemistry, Technology and Metallurgy
Dept. of Chemistry
Njegoseva 12, 11001 Belgrade, Serbia
P.O.box 473

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT

issued pursuant to Rule 7.1 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

NAME AND ADDRESS OF DEPOSITOR

<table>
<thead>
<tr>
<th>I. IDENTIFICATION OF THE MICROORGANISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification reference given by the Depositor:</td>
</tr>
<tr>
<td><em>Pseudomonas aeruginosa san ai</em></td>
</tr>
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</table>

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

- [ ] a scientific description
- [x] a proposed taxonomic designation

(Mark with a cross where applicable)

III. RECEIPT AND ACCEPTANCE

This International Depository Authority accepts the microorganism identified under I above, which was received by it on **January 21, 2011** (date of the original deposit)

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I. above was received by this International Depository Authority on **January 21, 2011** (date of the original deposit) and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on **March 07, 2011** (date of receipt of request for conversion)

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: **National Collection of Agricultural and Industrial Microorganisms**

Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s)

Address: **Budapest Somlói út 14-16.**
1118
HUNGARY

Date: **March 07, 2011**

(1) Where Rule 6.1(d) applies, such date is the date on which the status of international depositary authority was acquire Form BP/4 (sole page)
Statement in the case of an original deposit pursuant to Rule 6.1

| Send to: National Collection of Agricultural and Industrial Microorganisms |
|-----------------------------|-----------------------------|
| H-1118 Budapest, Somlói út 14-16. Hungary |
| Accession Number: NCAIM (P)- |
| (number to be filled in by NCAIM) |

The undersigned hereby deposits under the Budapest Treaty the microorganism identified hereunder and undertakes not to withdraw the deposit for the period specified in Rule 9.1

I. Identification of the microorganism:
I.1 Identification reference:
(Number, symbols, etc. given to the microorganism by the depositor)

\[ \text{Pseudomonas aeruginosa san ai} \]

I.2 Is this a mixture of microorganisms ?
Yes ☒ - No x

II. Conditions for cultivation:
Nutrient agar: Peptone 15g, Meat extract 3g, NaCl 5g, KH2PO4 0.3g, Agar 15g, ddH2O to 1000 ml. Temperature 30 °C for 24 hours.

III. Conditions for storage:
Up to 1 month at 4 °C on nutrient agar.
For storage longer than 1 month: Suspension of cells from nutrient agar in 20 % glycerol at -20 °C.

1 This form may also be used if the undersigned converts into a deposit under the Budapest Treaty the deposit of a microorganism that he or his predecessor in title has already deposited, outside the Budapest Treaty, with the same depositary institution either before (Rule 6.4(d)) or after the acquisition by that institution of the status of international depositary authority.

2 Mark this box with a cross if additional information is given on an attached sheet.
IV. Conditions for testing viability:

Growth on: 1. **Nutrient agar** (Peptone 15g, Meat extract 3g, NaCl 5g, KH2PO4 0.3g, Agar 15g, ddH2O to 1000 ml), temperature 30 °C for 24 hours, or 2. **Cetrimide agar**: Enzymatic Digest of Gelatin 20 g, Glycerol 10 mL, MgCl2 1.4 g, KCl 10 g, Cetrimide (Cetyltrimethylammonium Bromide) 0.3 g, Agar 13.6 g, ddH2O to 1000 ml; or 3. Cultivation in 100 ml of **LB medium** (composition: Tryptone, 10 g; Yeast extract 5g; NaCl 10 g to 1000 ml) in Erlenmayer flask volume 500 ml, with agitation at 250 cycles/min on a horizontal shaker, at 30°C for 20 hours.

V. Components of mixture: (in case the answer to I.2 is "Yes")

V.1 Description of components:

V.2 Method(s) for checking presence of components:

VI. Properties dangerous to health or environment:

(Mark with a cross the applicable box)

x The microorganism identified under I above has the following properties which are or may be dangerous to health or the environment:

*P. aeruginosa* species belongs to to Risk group 2, being an opportunistic pathogen bacterium.

The undersigned is not aware of such properties.

VII. Scientific description and/or proposed taxonomic designation:

It is strongly recommended that the scientific description and/or proposed taxonomic designation of the microorganism be indicated.

VII.1 Scientific description:

Shape- rod; Size 0.5x 1.0 μm; Motility +; Gram stain-; Spore formation -; Growth temperature 30-45 °C; pH for growth 4.6-9.8; VP test -; MR test -; Indol production -; H2S production +; Reduction of nitrate +; Urease test -; Gelatin liquefaction +; Starch hydrolysis -; Catalase test +; Oxidase test +; Utilization of: glucose +, sucrose -, lactose -, galactose -; Production of pigmen (pyocyanine) +.

VII.2 Proposed taxonomic designation:
Mark this box with a cross if additional information is given on an attached sheet.

VIII. Additional data: (optional)
- the source of the microorganism;
- the name(s) and address(es) of any other depositary institution(s) with which the microorganism has been deposited;
- the criterion used when drafting the proposed taxonomic designation.

IX. If the depositor is a legal entity and if official notifications should not be sent to the address given in point XII, then indicate name and address of the person to whom official notifications should be sent:

Name: 
Address:

X. If the depositor has a patent agent:
Will this patent agent handle all communications with NCAIM instead of the depositor? Yes □ No □

Should NCAIM send the patent agent a copy of the official receipt and viability statement? Yes □ No □

Name: 
Address:

XII. Depositor:

Name: Dr Ivanka Karadzic
Address: Institute of Chemistry, Technology and Metallurgy, Department of Chemistry, Njegoseva 12, PO Box 473, 11000 Belgrade, Serbia
Signature: 
(Where the signature is required on behalf of a legal entity, the typewritten name(s) of the natural person(s) signing on behalf of the legal entity should accompany the signature(s)).
Date:
Pseudomonas aeruginosa NCAIM B.001380, whole genome shotgun sequencing project

NCBI Reference Sequence: NZ_JMKR00000000.1

- This entry is the master record for a whole genome shotgun sequencing project and contains no sequence data.

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<td>Tanja Woyke (<a href="mailto:microbe@cuba.jgi-psf.org">microbe@cuba.jgi-psf.org</a>)</td>
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Whole genome sequencing and draft assembly at JGI-PGF
Annotation by JGI-ORNL
The JGI and collaborators endorse the principles for the
distribution and use of large scale sequencing data adopted by
the
larger genome sequencing community and urge users of this data to
follow them. It is our intention to publish the work of this
project in a timely fashion and we welcome collaborative
interaction on the project and analysis.
(\url{http://www.genome.gov/page.cfm?pageID=10506376})
Full annotations are available from IMG.

```plaintext
##MIGS-Data-START##
assembly :: HGAP v. 1.1
investigation_type :: bacteria_archaea
project_name :: Pseudomonas aeruginosa NCAIM B.001380
sequencing_meth :: WGS
GOLD Stamp ID :: Gi14120
Funding Program :: DOE-CSP 2011
Gene Calling Method :: Prodigal 2.5
Gram Staining :: Gram-
##MIGS-Data-END##

##Genome-Assembly-Data-START##
Finishing Goal :: Improved High-Quality Draft
Current Finishing Status :: Improved High-Quality Draft
Assembly Method :: HGAP v. 1.1
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Sequencing Technology :: Illumina HiSeq 2000
##Genome-Assembly-Data-END##

##Genome-Annotation-Data-START##
Annotation Provider :: NCBI
Annotation Date :: 09/08/2014 03:19:41
Annotation Pipeline :: NCBI Prokaryotic Genome Annotation Pipeline
Annotation Method :: Best-placed reference protein set;
Annotation Software revision :: 2.7 (rev. 445703)
Features Annotated :: Gene; CDS; rRNA; tRNA; ncRNA;
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Genes :: 6,499
CDS :: 6,279
Pseudo Genes :: 138
rRNAs :: 14 ( 5S, 16S, 23S )
tRNAs :: 67
ncRNA :: 1
Frameshifted Genes :: 131
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Pseudomonas aeruginosa NCAIM B.001380, whole genome shotgun sequencing project

GenBank: JMKR00000000.1

- This entry is the master record for a whole genome shotgun sequencing project and contains no sequence data.

**Go to:**

- **LOCUS** JMKR01000000 15 rc DNA linear
- **BCT** 08-MAY-2014
- **DEFINITION** Pseudomonas aeruginosa NCAIM B.001380, whole genome shotgun sequencing project.
- **ACCESSION** JMKR00000000
- **VERSION** JMKR00000000.1 GI:631850534
- **DBLINK** BioProject: PRJNA195719
  - BioSample: SAMN02743347
- **KEYWORDS** WGS; IMPROVED_HIGH_QUALITY_DRAFT.
- **SOURCE** Pseudomonas aeruginosa NCAIM B.001380
- **ORGANISM** Pseudomonas aeruginosa NCAIM B.001380
  - Bacteria; Proteobacteria; Gammaproteobacteria;
  - Pseudomonadales;
  - Pseudomonadaceae; Pseudomonas.
- **REFERENCE** 1 (bases 1 to 15)
  - **AUTHORS** Karadzic,I., Huntemann,M., Han,J., Chen,A., Kyrpides,N., Mavromatis,K., Markowitz,V., Palaniappan,K., Ivanova,N., Schaumberg,A., Pati,A., Liolios,K., Nordberg,H.P., Cantor,M.N., Hua,S.X. and Woyke,T.
  - **CONSRTM** DOE Joint Genome Institute
  - **TITLE** Direct Submission
  - **JOURNAL** Submitted (24-APR-2014) DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598-1698, USA
  - **COMMENT** The Pseudomonas aeruginosa NCAIM B.001380 whole genome shotgun WGS) project has the project accession JMKR00000000. This version of the project (01) has the accession number JMKR01000000, and consists of sequences JMKR01000001-JMKR01000015.
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Full annotations are available from IMG.

##MIGS-Data-START##
| assembly            | HGAP v. 1.1 |
| investigation_type  | bacteria_archaea |
| project_name        | Pseudomonas aeruginosa NCAIM B.001380 |

**sequencing_meth** :: WGS
**GOLD Stamp ID** :: Gi14120
**Funding Program** :: DOE-CSP 2011
**Gene Calling Method** :: Prodigal 2.5
**Gram Staining** :: Gram-

##MIGS-Data-END##

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**Current Finishing Status** :: Improved High-Quality Draft
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**Genome Coverage** :: Unknown
**Sequencing Technology** :: Illumina HiSeq 2000

##Genome-Assembly-Data-END##

**FEATURES**

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**WGS**

JMKR010000001-JMKR01000015