

Register list for 57 new names including Actinopolariaceae fam. nov.

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Class *Nanosomnibacteria*

Etymology

[Na.no.som.ni.bac.te'ri.a] **N.L. masc. n.** *Nanosomnibacter*, referring to the type genus *Nanosomnibacter*; *-ia*, ending to denote a class; **N.L. neut. pl. n.** *Nanosomnibacteria*, the *Nanosomnibacter* class

Nomenclatural type

Genus *Nanosomnibacter*

Description

The taxon is equivalent to placeholder class c__UBA1384 under the GTDB R220.

Classification

Bacteria » *Patescibacteriota* » *Nanosomnibacteria*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51206>

Order *Actinopolaridales*

Etymology

[Ac.ti.no.po.la.ri.da'les] **N.L. fem. n.** *Actinopolaris*, referring to the type genus *Actinopolaris*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Actinopolaridales*, the *Actinopolaris* order

Nomenclatural type

Genus *Actinopolaris*

Description

The taxon is equivalent to placeholder order o__CADDZG01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinopolaridales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51183>

Order *Actinosomnolentales*

Etymology

[Ac.ti.no.som.no.len.ta'les] **N.L. masc. n.** *Actinosomnolentus*, referring to the type genus *Actinosomnolentus*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Actinosomnolentales*, the *Actinosomnolentus* order

Nomenclatural type

Genus *Actinosomnolentus*

Description

The taxon is equivalent to placeholder order o__UBA4738 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinosomnolentales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51179>

Order *Bungeriellales*

Etymology

[Bun.ger'i.el.la'les] **N.L. fem. n.** *Bungeriella*, a little thing from Bunger Hills, East Antarctica; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Bungeriellales*, the *Bungeriella* order

Nomenclatural type

Genus *Bungeriella*

Description

The taxon is equivalent to placeholder order o__JAHWKV01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Bungeriellales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51187>

Order *Cryogemmatales*

Etymology

[Cry.o.gem.ma.ta'les] **N.L. fem. n.** *Cryogemmata*, a Gemmatimonadota from the cold.; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Cryogemmatales*, the *Cryogemmata* order

Nomenclatural type

Genus *Cryogemmata*

Description

The taxon is equivalent to placeholder order o__JACCXV01 under the GTDB R220.

Classification

Bacteria » *Gemmatimonadota* » *Gemmatimonadia* » *Cryogemmatales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51202>

Order *Dormimicrobiales*

Etymology

[Dor.mi.mi.cro.bi.a'les] **N.L. neut. n.** *Dormimicrobium*, a dormant microbe; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Dormimicrobiales*, the Dormimicrobium order

Nomenclatural type

Genus *Dormimicrobium*

Description

The taxon is equivalent to placeholder order o__JACDCP01 under the GTDB R220.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Dormimicrobiales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51219>

Order *Nanosomnibacterales*

Etymology

[Na.no.som.ni.bac.te.ra'les] **N.L. masc. n.** *Nanosomnibacter*, referring to the type genus *Nanosomnibacter*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Nanosomnibacterales*, the *Nanosomnibacter* order

Nomenclatural type

Genus *Nanosomnibacter*

Description

The taxon is equivalent to placeholder order o__CAILIB01 under the GTDB R220.

Classification

Bacteria » *Patescibacteriota* » *Nanosomnibacteria* » *Nanosomnibacterales*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51207>

Family *Actinopolaridaceae*

Etymology

[Ac.ti.no.po.la.ri.da'ce.ae] **N.L. fem. n.** *Actinopolaris*, referring to the type genus *Actinopolaris*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Actinopolaridaceae*, the *Actinopolaris* family

Nomenclatural type

Genus *Actinopolaris*

Description

The taxon is equivalent to placeholder family f__WHSQ01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinopolaridales* » *Actinopolaridaceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51184>

Family *Actinosomnolentaceae*

Etymology

[Ac.ti.no.som.no.len.ta'ce.ae] **N.L. masc. n.** *Actinosomnolentus*, referring to the type genus *Actinosomnolentus*; **-aceae**, ending to denote a family; **N.L. fem. pl. n.** *Actinosomnolentaceae*, the *Actinosomnolentus* family

Nomenclatural type

Genus *Actinosomnolentus*

Description

The taxon is equivalent to placeholder family f__UBA4738 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinosomnolentales* » *Actinosomnolentaceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51180>

Family *Bungeriellaceae*

Etymology

[Bun.ger'i.el.la'ce.ae] **N.L. fem. n.** *Bungeriella*, a little thing from Bunger Hills, East Antarctica; **-aceae**, ending to denote a family; **N.L. fem. pl. n.** *Bungeriellaceae*, the *Bungeriella* family

Nomenclatural type

Genus *Bungeriella*

Description

The taxon is equivalent to placeholder family f__JAHWKV01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Bungeriellales* » *Bungeriellaceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51188>

Family *Cryogemmataceae*

Etymology

[Cry.o.gem.ma.ta'ce.ae] **N.L. fem. n.** *Cryogemmata*, a Gemmatimonadota from the cold.; **-aceae**, ending to denote a family; **N.L. fem. pl. n.** *Cryogemmataceae*, the *Cryogemmata* family

Nomenclatural type

Genus *Cryogemmata*

Description

The taxon is equivalent to placeholder family f__JAHWKZ01 under the GTDB R220.

Classification

Bacteria » *Gemmatimonadota* » *Gemmatimonadia* » *Cryogemmatales* » *Cryogemmataceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51203>

Family *Dormimicrobiaceae*

Etymology

[Dor.mi.mi.cro.bi.a'ce.ae] **N.L. neut. n.** *Dormimicrobium*, a dormant microbe; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Dormimicrobiaceae*, the Dormimicrobium family

Nomenclatural type

Genus *Dormimicrobium*

Description

The taxon is equivalent to placeholder family f_JACDCP01 under the GTDB R220.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Dormimicrobiales* » *Dormimicrobiaceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51220>

Family *Frigidisphaeraceae*

Etymology

[Fri.gi.di.sphae.ra'ce.ae] **N.L. fem. n.** *Frigidisphaera*, referring to the type genus *Frigidisphaera*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Frigidisphaeraceae*, the *Frigidisphaera* family

Nomenclatural type

Genus *Frigidisphaera*

Description

The taxon is equivalent to placeholder family f_UBA1924 under the GTDB R220.

Classification

Bacteria » *Planctomycetota* » *Phycisphaerae* » *Phycisphaerales* » *Frigidisphaeraceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51211>

Family *Nanosomnibacteraceae*

Etymology

[Na.no.som.ni.bac.te.ra'ce.ae] **N.L. masc. n.** *Nanosomnibacter*, referring to the type genus *Nanosomnibacter*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Nanosomnibacteraceae*, the *Nanosomnibacter* family

Nomenclatural type

Genus *Nanosomnibacter*

Description

The taxon is equivalent to placeholder family f_CAALIB01 under the GTDB R220.

Classification

Bacteria » *Patescibacteriota* » *Nanosomnibacteria* » *Nanosomnibacterales* » *Nanosomnibacteraceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51208>

Family *Ventifactibacteraceae*

Etymology

[Ven.ti.fact.i.bac.te.ra'ce.ae] **N.L. masc. n.** *Ventifactibacter*, the ventifact bacterium; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Ventifactibacteraceae*, the Ventifactibacter family

Nomenclatural type

Genus *Ventifactibacter*

Description

The taxon is equivalent to placeholder family f__B-1AR under the GTDB R220.

Classification

Bacteria » *Chlorobiota* » *Ignavibacteria* » "Tepidaquicellales" » *Ventifactibacteraceae*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51197>

Genus *Actinopolaris*

Etymology

[Ac.ti.no.po.la'ris] **Gr. gen. n.** *aktinos*, ray; used to refer to Actinomycetota members; **N.L. fem. gen. n.** *polaris*, of, or pertaining to, a pole; **N.L. fem. n.** *Actinopolaris*, an Actinomycetota from the pole

Nomenclatural type

Species *Actinopolaris aerotropha*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the placeholder family f__WHSQ01 (=Actinopolaridaceae).

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinopolaridales* » *Actinopolaridaceae* » *Actinopolaris*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51185>

Genus *Actinosomnolentus*

Etymology

[Ac.ti.no.som.no.len'tus] **Gr. gen. n.** *aktinos*, of a ray, used to refer to Actinomycetota; **L. masc. adj.** *somnolentus*, sleepy or drowsy; **N.L. masc. n.** *Actinosomnolentus*, the dormant/sleepy Actinomycetota

Nomenclatural type

Species *Actinosomnolentus pattersoniae*^{Ts}

Description

The taxon is equivalent to placeholder genus g__JACDCJ01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinosomnolentales* » *Actinosomnolentaceae* » *Actinosomnolentus*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51181>

Genus *Bungeriella*

Etymology

[Bun.ger'i.el'la] **N.L. fem. n.** *Bungeriella*, a little thing from Bunger Hills, East Antarctica

Nomenclatural type

Species *Bungeriella frigidisoli*^{Ts}

Description

The taxon is equivalent to placeholder genus g_JAJCYE01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Bungeriellales* » *Bungeriellaceae* » *Bungeriella*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51189>

Genus *Cryogemmata*

Etymology

[Cry.o.gem.ma'ta] **Gr. neut. n.** *kryos*, icy cold; **L. fem. perf. part.** *gemmata*, bejeweled; used to refer to taxa of Gemmatimonadota phylum; **N.L. fem. n.** *Cryogemmata*, a Gemmatimonadota from the cold.

Nomenclatural type

Species *Cryogemmata carboxiditropha*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the placeholder family f_JAHWKZ01 (=Cryogemmataceae).

Classification

Bacteria » *Gemmatimonadota* » *Gemmatimonadia* » *Cryogemmatales* » *Cryogemmataceae* » *Cryogemmata*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51204>

Genus *Cryolimnoglobus*

Etymology

[Cry.o.lim.no.glo'bus] **Gr. neut. n.** *kryos*, icy cold; **N.L. masc. n.** *Limnoglobus*, a bacterial genus; **N.L. masc. n.** *Cryolimnoglobus*, a Limnoglobus bacterium from the cold

Nomenclatural type

Species *Cryolimnoglobus antarcticus*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the family (Gemmataceae).

Classification

Bacteria » *Planctomycetota* » *Planctomycetia* » *Gemmatales* » *Gemmataceae* » *Cryolimnoglobus*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51214>

Genus *Cryoornithinimicrobium*

Etymology

[Cry.o.or.ni.thi.ni.mi.cro'bi.um] **Gr. neut. n.** *kryos*, icy cold; **N.L. neut. n.** *Ornithinimicrobium*, a bacterial genus; **N.L. neut. n.** *Cryoornithinimicrobium*, an Ornithinimicrobium from the cold

Nomenclatural type

Species *Cryoornithinimicrobium bungeri*^{TS}

Description

The taxon is equivalent to placeholder genus g__Ornithinimicrobium_A under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Micrococcales* » *Dermatophilaceae* » *Cryoornithinimicrobium*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51176>

Genus *Cryoterrimicrobium*

Etymology

[Cry.o.ter.ri.mi.cro'bi.um] **Gr. neut. n.** *kryos*, icy cold; **N.L. neut. n.** *Terrimicrobium*, a bacterial genus; **N.L. neut. n.** *Cryoterrimicrobium*, a Terrimicrobium from the cold

Nomenclatural type

Species *Cryoterrimicrobium chapmaniae*^{TS}

Description

New genus defined based on the lack of proximal relatives within the family (Terrimicrobiaceae).

Classification

Bacteria » *Verrucomicrobiota* » *Terrimicrobiia* » *Terrimicrobiales* » *Terrimicrobiaceae* » *Cryoterrimicrobium*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51223>

Genus *Dormimicrobium*

Etymology

[Dor.mi.mi.cro'bi.um] **L. v.** *dormio*, sleep; **N.L. neut. n.** *microbium*, a microbe; **N.L. neut. n.** *Dormimicrobium*, a dormant microbe

Nomenclatural type

Species *Dormimicrobium murphyi*^{TS}

Description

The taxon is equivalent to placeholder genus g__JACDCP01 under the GTDB R220.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Dormimicrobiales* » *Dormimicrobiaceae* » *Dormimicrobium*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51221>

Genus *Frigidisolica*

Etymology

[Fri.gi.di.so.li'co.la] **L. neut. adj.** *frigidus*, cold, frigid; **L. neut. n.** *solum*, soil; **L. masc. / fem. suff.** *-cola*, inhabitant of, dweller; **N.L. fem. n.** *Frigidisolica*, dweller of cold soils

Nomenclatural type

Species *Frigidisolica castellviae*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the family (Burkholderiaceae).

Classification

Bacteria » *Pseudomonadota* » *Betaproteobacteria* » *Burkholderiales* » *Burkholderiaceae* » *Frigidisolica*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51217>

Genus *Frigidisphaera*

Etymology

[Fri.gi.di.sphae'ra] **L. neut. adj.** *frigidus*, cold, frigid; **Gr. fem. n.** *sphaira*, a sphere; **N.L. fem. n.** *Frigidisphaera*, a sphere from the cold

Nomenclatural type

Species *Frigidisphaera bungeri*^{Ts}

Description

The taxon is equivalent to placeholder genus g_JACVCS01 under the GTDB R220.

Classification

Bacteria » *Planctomycetota* » *Phycisphaerae* » *Phycisphaerales* » *Frigidisphaeraceae* » *Frigidisphaera*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51212>

Genus *Gelisolibacter*

Etymology

[Ge.li.so.li.bac'ter] **L. neut. n.** *gelu*, frost, cold; **L. neut. n.** *solum*, soil; **N.L. masc. n.** *bacter*, a rod; **N.L. masc. n.** *Gelisolibacter*, a rod from cold soil

Nomenclatural type

Species *Gelisolibacter meridionalis*^{Ts}

Description

The taxon is equivalent to placeholder genus g_JACDBE01 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Acidimicrobiia* » *Benthobacterales* » *Benthobacteraceae* » *Gelisolibacter*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51174>

Genus *Nanosomnibacter*

Etymology

[Na.no.som.ni.bac'ter] **Gr. masc. n.** *nano*, a dwarf; **L. masc. n.** *somnus*, sleep; **N.L. masc. n.** *bacter*, a rod; **N.L. masc. n.** *Nanosomnibacter*, a small bacterium of sleep, referring to its likely dormancy

Nomenclatural type

Species *Nanosomnibacter parvus*^{Ts}

Description

The taxon is equivalent to placeholder genus g__CALBLZ01 under the GTDB R220.

Classification

Bacteria » *Patescibacteriota* » *Nanosomnibacteria* » *Nanosomnibacterales* » *Nanosomnibacteraceae* » *Nanosomnibacter*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51209>

Genus *Nitrosobungeria*

Etymology

[Ni.tro.so.bun.ge'ri.a] **L. masc. adj.** *nitrosus*, full of natron, here intended to mean nitrous; **N.L. fem. n.** *bungeria*, in reference to Bungier Hills, location in East Antarctica; **N.L. fem. n.** *Nitrosobungeria*, a nitrous microbe from Bungier Hills

Nomenclatural type

Species *Nitrosobungeria shackeltonensis*^{Ts}

Description

The taxon is equivalent to placeholder genus g__TH5893 under the GTDB R220.

Classification

Archaea » *Thermoproteota* » *Nitrososphaeria* » *Nitrososphaerales* » *Nitrososphaeraceae* » *Nitrosobungeria*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51169>

Genus *Nitrosomicrobium*

Etymology

[Ni.tro.so.mi.cro'bi.um] **L. masc. adj.** *nitrosus*, full of natron, here intended to mean nitrous; **N.L. neut. n.** *microbium*, a microbe; **N.L. neut. n.** *Nitrosomicrobium*, a nitrous microbe

Nomenclatural type

Species *Nitrosomicrobium frigidum*^{Ts}

Description

The taxon is equivalent to placeholder genus g__TA-21 under the GTDB R220.

Classification

Archaea » *Thermoproteota* » *Nitrososphaeria* » *Nitrososphaerales* » *Nitrososphaeraceae* » *Nitrosomicrobium*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51171>

Genus *Pseudopontibacter*

Etymology

[Pseu.do.pon.ti.bac'ter] **Gr. neut. adj.** *pseudes*, false; **N.L. masc. n.** *Pontibacter*, a bacterial genus; **N.L. masc. n.** *Pseudopontibacter*, a false Pontibacter

Nomenclatural type

Species *Pseudopontibacter australis*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the family (Hymenobacteraceae).

Classification

Bacteria » *Bacteroidota* » *Cytophagia* » *Cytophagales* » *Hymenobacteraceae* » *Pseudopontibacter*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51195>

Genus *Psychroobscuribacter*

Etymology

[Psy.chro.obs.cu.ri.bac'ter] **Gr. masc. adj.** *psychros*, cold; **N.L. masc. n.** *Obscuribacter*, a bacterial genus; **N.L. masc. n.** *Psychroobscuribacter*, an Obscuribacter from the cold

Nomenclatural type

Species *Psychroobscuribacter pollutisol*^{Ts}

Description

The taxon is equivalent to placeholder genus g__PALSA-1081 under the GTDB R220.

Classification

Bacteria » *Cyanobacteriota* » *Vampirovibrionophyceae* » *Obscuribacterales* » *Obscuribacteraceae* » *Psychroobscuribacter*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51200>

Genus *Ventifactibacter*

Etymology

[Ven.ti.fact.i.bac'ter] **N.L. neut. n.** *ventifactum*, a ventifact, rock that has been eroded by wind carrying sand or ice crystals; **N.L. masc. n.** *bacter*, a rod; **N.L. masc. n.** *Ventifactibacter*, the ventifact bacterium

Nomenclatural type

Species *Ventifactibacter hollidayae*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the placeholder family f__B-1AR (=Ventifactibacteraceae).

Classification

Bacteria » *Chlorobiota* » *Ignavibacteria* » "Tepidaquicellales" » *Ventifactibacteraceae* » *Ventifactibacter*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51198>

Genus *Wilkeslandia*

Etymology

[Wil.kes.lan'di.a] **N.L. fem. n.** *Wilkeslandia*, a bacterium named after the Wilkes Land, district of Australian Antarctic Territory

Nomenclatural type

Species *Wilkeslandia alcanivorans*^{Ts}

Description

New genus defined based on the lack of proximal relatives within the family (Chitinophagaceae).

Classification

Bacteria » *Bacteroidota* » *Chitinophagia* » *Chitinophagales* » *Chitinophagaceae* » *Wilkeslandia*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51193>

Species *Actinopolaris aerotropha*^{Ts}

Etymology

[æ.ro.tro'pha] **Gr. gen. n.** *aeros*, air, gas; **Gr. fem. adj.** *trophos*, feeder; **N.L. fem. adj.** *aerotropha*, air-eater

Nomenclatural type

[NCBI Assembly: GCA_965611235.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-24_ACT26 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.4 Mbp in 93 contigs with an estimated completeness of 98.12% and 0.45% contamination, 16S (1903 bp), 23S (1773 bp), and 5S (117 bp) genes, and 40 tRNAs (20 unique: 19 standard plus tRNA-SeC). The GC content of this MAG is 67.4%. Predicted to be able to reduce nitrate via NO-forming nitrite reductase and oxidise trace gases, i.e., CO and H₂, using the aerobic CO dehydrogenase and high affinity [NiFe]-hydrogenase type 1m.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinopolaridales* » *Actinopolaridaceae* » *Actinopolaris* » *Actinopolaris aerotropha*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51186>

Species *Actinosomnolentus pattersoniae*^{Ts}

Etymology

[pat.ter.so'ni.ae] **N.L. gen. n.** *pattersoniae*, in honour to Diana Patterson, first woman to lead an Australian Antarctic research station.

Nomenclatural type

[NCBI Assembly: GCA_965609595.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-20_ACT24 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.5 Mbp in 107 contigs with an estimated completeness of 93.99% and 0.16% contamination, 16S (1532 bp), 23S (4576 bp), and 5S (117 bp) genes, and 47 tRNAs (21 unique: 19 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 68.3%. Predicted to consume H₂ at atmospheric levels (high affinity [NiFe]-hydrogenase type 1m). Genome also harbours catechol 2,3-dioxygenase [EC:1.13.11.2]. This species is equivalent to the placeholder species s_JACDCJ01 sp013817655 under the GTDB R220.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Actinosomnolentales* » *Actinosomnolentaceae* » *Actinosomnolentus* » *Actinosomnolentus pattersoniae*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51182>

Species *Aquihabitans niveus*

Etymology

[ni've.us] **L. masc. adj.** *niveus*, snowy, snow-covered

Nomenclatural type

[NCBI Assembly: GCA_965610895.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-10_ACT1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 4.7 Mbp in 189 contigs with an estimated completeness of 97.03% and 1.79% contamination, 16S (1525 bp), partial 23S (457 bp), and 5S (117 bp) genes, and 46 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 71.6%.

Classification

Bacteria » *Actinomycetota* » *Acidimicrobiia* » *Acidimicrobiales* » *Iamiaceae* » *Aquihabitans* » *Aquihabitans niveus*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51173>

Species *Brevundimonas antarctica*

Etymology

[an.tarc'ti.ca] **L. fem. adj.** *antarctica*, southern, pertaining to Antarctica

Nomenclatural type

[NCBI Assembly: GCA_965609585.1](#) ^{Ts}

Description

The type material is the metagenome assembled genome BH-09_PSE1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 3.2 Mbp in 138 contigs with an estimated completeness of 92.9% and 1.66% contamination, 16S (1463 bp), and 5S (115 bp) genes, and 42 tRNAs (19 unique: 18 standard plus tRNA-fMet). The GC content of this MAG is 67.4%. Predicted to oxidise sulfur (soxB, S-sulfosulfanyl-L-cysteine sulfohydrolase [EC:3.1.6.20]).

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Caulobacterales* » *Caulobacteraceae* » *Brevundimonas* » *Brevundimonas antarctica*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51216>

Species *Bungeriella frigidisoli*^{Ts}

Etymology

[fri.gi.di.so'li] **L. neut. adj.** *frigidus*, cold, frigid; **L. neut. n.** *solum*, soil; **N.L. gen. n.** *frigidisoli*, from cold soil

Nomenclatural type

[NCBI Assembly: GCA_965612105.1](#) ^{Ts}

Description

The type material is the metagenome assembled genome BH-23_ACT12 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.4 Mbp in 140 contigs with an estimated completeness of 93.71% and 0.1% contamination, 16S (2399 bp) and 23S (2000 bp) genes, and 44 tRNAs (21 unique: 19 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 64.7%. Predicted to fix carbon via Calvin-Benson-Bassham cycle using a RuBisCO type IE.

Classification

Bacteria » *Actinomycetota* » *Aridivitia* » *Bungeriellales* » *Bungeriellaceae* » *Bungeriella* » *Bungeriella frigidisoli*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51190>

Species *Cryogemmata carboxiditropha*^{Ts}

Etymology

[car.bo.xi.di.tro'pha] **N.L. neut. adj.** *carboxidum*, carbon monoxide; **Gr. fem. adj.** *trophos*, feeder; **N.L. fem. adj.** *carboxiditropha*, carbon monoxide-eater

Nomenclatural type

[NCBI Assembly: GCA_965609615.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-18_GEM1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.5 Mbp in 116 contigs with an estimated completeness of 94.07% and 0.69% contamination, 16S (1572 bp) gene, and 46 tRNAs (20 unique: 18 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 67.6%. Predicted to reduce nitrite (NO-forming nitrite reductase) and oxidise CO aerobically.

Classification

Bacteria » *Gemmatimonadota* » *Gemmatimonadia* » *Cryogemmatales* » *Cryogemmataceae* » *Cryogemmata* » *Cryogemmata carboxiditropha*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51205>

Species *Cryolimnoglobus antarcticus*^{Ts}

Etymology

[an.tarc'ti.cus] **L. masc. adj.** *antarcticus*, southern, pertaining to Antarctica

Nomenclatural type

[NCBI Assembly: GCA_965609865.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-11_PLA2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 6.6 Mbp in 220 contigs with an estimated completeness of 99.77% and 1.09% contamination, 16S (1504 bp), 23S (2758 bp), and 5S (109 bp) genes, and 57 tRNAs (22 unique: 20 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 60.2%.

Classification

Bacteria » *Planctomycetota* » *Planctomycetia* » *Gemmatales* » *Gemmataceae* » *Cryolimnoglobus* » *Cryolimnoglobus antarcticus*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51215>

Species *Cryoornithinimicrobium bungerii*^{Ts}

Etymology

[bun.ge.ri'i] **N.L. gen. n.** *bungerii*, of Bunger, referring to Lieutenant Commander David E. Bunger, commander of the plane that first landed in Bunger Hills in February 1947

Nomenclatural type

[NCBI Assembly: GCA_965610625.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-23_ACT6 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.9 Mbp in 154 contigs with an estimated completeness of 90.24% and 0.47% contamination, 16S (1522 bp), 23S (3115 bp), and 5S (117 bp) genes, and 43 tRNAs (20 unique: 19 standard plus tRNA-fMet). The GC content of this MAG is 65.8%. Predicted to aerobically oxidise CO.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Micrococcales* » *Dermatophilaceae* » *Cryoornithinimicrobium* » *Cryoornithinimicrobium bungerii*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51177>

Species *Cryoterrimicrobium chapmaniae*^{Ts}

Etymology

[chap.man'i.ae] **N.L. gen. n.** *chapmaniae*, in honour to limnologist Ann Chapman, first woman to lead an Antarctic expedition

Nomenclatural type

[NCBI Assembly: GCA_965610505.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-09_VER1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 6.1 Mbp in 69 contigs with an estimated completeness of 96.82% and 1.47% contamination, 16S (1526 bp), 23S (1995 bp), and 5S (116 bp) genes, and 58 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 58.7%.

Classification

Bacteria » *Verrucomicrobiota* » *Terrimicrobiia* » *Terrimicrobiales* » *Terrimicrobiaceae* » *Cryoterrimicrobium* » *Cryoterrimicrobium chapmaniae*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51224>

Species *Dormimicrobium murphyi*^{TS}

Etymology

[mur.phy'i] **N.L. gen. n.** *murphyi*, in honour of Herbet Dyce Murphy, Australian adventurer and explorer.

Nomenclatural type

[NCBI Assembly: GCA_965610025.1](#)^{TS}

Description

The type material is the metagenome assembled genome BH-24_PSE2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.7 Mbp in 49 contigs with an estimated completeness of 100% and 0.1% contamination, 16S (1545 bp), 23S (4142 bp), and 5S (117 bp) genes, and 45 tRNAs (20 unique: 19 standard plus tRNA-fMet). The GC content of this MAG is 64.1%. Predicted to consume H₂ at atmospheric concentrations (high affinity [NiFe]-hydrogenase type 1l).

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Dormimicrobiales* » *Dormimicrobiaceae* » *Dormimicrobium* » *Dormimicrobium murphyi*^{TS}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51222>

Species *Fimbriimonas antarctica*

Etymology

[an.tarc'ti.ca] **L. fem. adj.** *antarctica*, southern, pertaining to Antarctica

Nomenclatural type

[NCBI Assembly: GCA_965610675.1](#)^{TS}

Description

The type material is the metagenome assembled genome BH-11_ARM2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 4.0 Mbp in 138 contigs with an estimated completeness of 98.05% and 0.03% contamination, 16S (1507 bp), partial 23S (1480 bp), and 5S (117 bp) genes, and 47 tRNAs (22 unique: 20 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 62.1%.

Classification

Bacteria » *Armatimonadota* » *Fimbriimonadia* » *Fimbriimonadales* » *Fimbriimonadaceae* » *Fimbriimonas* » *Fimbriimonas antarctica*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51191>

Species *Frigidisolicola castellviae*^{Ts}

Etymology

[cas.tell.vi.ae] **N.L. gen. n.** *castellviae*, in honor of Josefina Castellví, the first Spanish woman to participate in and coordinate an international expedition to Antarctica

Nomenclatural type

[NCBI Assembly: GCA_965609575.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-10_PSE17 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 4.2 Mbp in 112 contigs with an estimated completeness of 94.52% and 0.82% contamination, 16S (1531 bp), 23S (1860 bp), and 5S (114 bp) genes, and 45 tRNAs (21 unique: 19 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 66.5%. Predicted to degrade hydrocarbons (long-chain alkane monooxygenase [EC:1.14.14.28], and phthalate 4,5-dioxygenase [EC:1.14.12.7]).

Classification

Bacteria » *Pseudomonadota* » *Betaproteobacteria* » *Burkholderiales* » *Burkholderiaceae* » *Frigidisolicola* » *Frigidisolicola castellviae*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51218>

Species *Frigidisphaera bungerii*^{Ts}

Etymology

[bun.ge.ri'i] **N.L. gen. n.** *bungerii*, of Bunger, referring to Lieutenant Commander David E. Bunger, commander of the plane that first landed in Bunger Hills in February 1947

Nomenclatural type

[NCBI Assembly: GCA_965611835.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-11_PLA1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 3.2 Mbp in 39 contigs with an estimated completeness of 90.62% and 0.36% contamination, 16S (1484 bp), 23S (2744 bp), and 5S (107 bp) genes, and 47 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 67.5%.

Classification

Bacteria » *Planctomycetota* » *Phycisphaerae* » *Phycisphaerales* » *Frigidisphaeraceae* » *Frigidisphaera* » *Frigidisphaera bungerii*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51213>

Species *Gelisolibacter meridionalis*^{Ts}

Etymology

[me.ri.dio.na'lis] **L. masc. adj.** *meridionalis*, southern; referring to the southern hemisphere

Nomenclatural type

[NCBI Assembly: GCA_965610425.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-24_ACT7 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.8 Mbp in 109 contigs with an estimated completeness of 98.4% and 2.8% contamination, 16S (1526 bp), 23S (3088 bp), and 5S (117 bp) genes, and 50 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 69.7%. Predicted to reduce nitrite (NO-forming nitrite reductase) and oxidise CO aerobically.

Classification

Bacteria » *Actinomycetota* » *Acidimicrobiia* » *Benthobacterales* » *Benthobacteraceae* » *Gelisolibacter* » *Gelisolibacter meridionalis*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51175>

Species *Nanosomnibacter parvus*^{Ts}

Etymology

[par'vus] **L. masc. adj.** *parvus*, small

Nomenclatural type

[NCBI Assembly: GCA_965609665.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-11_PAT4 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 0.9 Mbp in 17 contigs with an estimated completeness of 93.99% and 0.08% contamination, 16S (1475 bp), 23S (3502 bp), and 5S (117 bp) genes, and 42 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 51.3%.

Classification

Bacteria » *Patescibacteriota* » *Nanosomnibacteria* » *Nanosomnibacterales* » *Nanosomnibacteraceae* » *Nanosomnibacter* » *Nanosomnibacter parvus*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51210>

Species *Nitrosobungeria shackeltonensis*^{Ts}

Etymology

[shac.kel.ton.en'sis] **N.L. fem. adj.** *shackeltonensis*, of the Shackelton ice shelf, East Antarctica, where Bunger Hills are located

Nomenclatural type

[NCBI Assembly: GCA_965610195.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-18_THE2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 3.6 Mbp in 204 contigs with an estimated completeness of 99.1% and 1.46% contamination, 16S (1472 bp), 23S (2054 bp), and 5S (120 bp) genes, and 46 tRNAs (21 unique: 20 standard plus tRNA-iMet). The GC content of this MAG is 37.8%. Predicted to be an ammonia oxidising archaeon.

Classification

Archaea » *Thermoproteota* » *Nitrososphaeria* » *Nitrososphaerales* » *Nitrososphaeraceae* » *Nitrosobungeria* » *Nitrosobungeria shackeltonensis*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51170>

Species *Nitrosomicrobium frigidum*^{Ts}

Etymology

[fri'gi.dum] **L. neut. adj.** *frigidum*, cold, frigid

Nomenclatural type

[NCBI Assembly: GCA_965610995.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-18_THE1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.0 Mbp in 231 contigs with an estimated completeness of 92.59% and 2.56% contamination, 16S (1469 bp), 23S (2048 bp), and 5S (120 bp) genes, and 43 tRNAs (20 unique: 19 standard plus tRNA-iMet). The GC content of this MAG is 35.8%. Predicted to be an ammonia oxidising archaeon. This species is equivalent to the placeholder species s_TA-21 sp023251115 under the GTDB R220.

Classification

Archaea » *Thermoproteota* » *Nitrososphaeria* » *Nitrososphaerales* » *Nitrososphaeraceae* » *Nitrosomicrobium* » *Nitrosomicrobium frigidum*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51172>

Species *Nocardioides polaris*

Etymology

[po.la'ris] **L. fem. adj.** *polaris*, of, or pertaining to, a pole

Nomenclatural type

[NCBI Assembly: GCA_965609905.1](#) ^{Ts}

Description

The type material is the metagenome assembled genome BH-09_ACT11 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.5 Mbp in 55 contigs with an estimated completeness of 94.69% and 0% contamination, 16S (1525 bp) and 5S (117 bp) genes, and 42 tRNAs (19 unique standard). The GC content of this MAG is 67%. Predicted to aerobically oxidise CO.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Propionibacteriales* » *Nocardioidaceae* » *Nocardioides* » *Nocardioides polaris*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51178>

Species *Panacibacter polaris*

Etymology

[po.la'ris] **L. masc. adj.** *polaris*, of, or pertaining to, a pole

Nomenclatural type

[NCBI Assembly: GCA_965610815.1](#) ^{Ts}

Description

The type material is the metagenome assembled genome BH-10_BAC2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 5.9 Mbp in 81 contigs with an estimated completeness of 100% and 0.07% contamination, 16S (1529 bp) and 23S (2541 bp) genes, and 48 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 38.5%. Predicted to aerobically oxidise CO, and reduce nitrite (NO-forming nitrite reductase). Genome also harbours a catechol 2,3-dioxygenase [EC:1.13.11.2] and a sensory rhodopsin.

Classification

Bacteria » *Bacteroidota* » *Chitinophagia* » *Chitinophagales* » *Chitinophagaceae* » *Panacibacter* » *Panacibacter polaris*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51192>

Species *Pseudopontibacter australis*^{Ts}

Etymology

[aus.tra'lis] **L. masc. adj.** *australis*, southern

Nomenclatural type

[NCBI Assembly: GCA_965611985.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-24_BAC1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 5.6 Mbp in 1179 contigs with an estimated completeness of 98.42% and 2.26% contamination, 16S (1521 bp), 23S (212 bp), and 5S (112 bp) genes, and 28 tRNAs (17 unique standard). The GC content of this MAG is 54.5%.

Classification

Bacteria » *Bacteroidota* » *Cytophagia* » *Cytophagales* » *Hymenobacteraceae* » *Pseudopontibacter* » *Pseudopontibacter australis*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51196>

Species *Psychroobscuribacter pollutisoli*^{Ts}

Etymology

[pol.lu.ti.so'li] **L. masc. perf. part.** *pollutus*, polluted; **L. neut. n.** *solum*, soil; **N.L. gen. n.** *pollutisoli*, of polluted soil

Nomenclatural type

[NCBI Assembly: GCA_965610205.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-10_CYA1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 7.5 Mbp in 91 contigs with an estimated completeness of 100% and 4.31% contamination, 16S (1508 bp), 23S (2963 bp), and 5S (116 bp) genes, and 66 tRNAs (22 unique: 20 standard plus tRNA-fMet and tRNA-SeC). The GC content of this MAG is 49%. Predicted to be involved in nitrogen cycling (nitrate reductase, NarG; and nitric oxide reductase, NorB). The genome also harbours a sensory rhodopsin but no photosynthetic machinery.

Classification

Bacteria » *Cyanobacteriota* » *Vampirovibrionophyceae* » *Obscuribacterales* » *Obscuribacteraceae* » *Psychroobscuribacter* » *Psychroobscuribacter pollutisoli*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51201>

Species *Ventifactibacter hollidayae*^{Ts}

Etymology

[hol.li.day'ae] **N.L. gen. n.** *hollidayae*, in honour of Dr Louise Holliday, the first woman to winter in Antarctica for the Australian Antarctic Program serving as medical officer at Davis station

Nomenclatural type

[NCBI Assembly: GCA_965610795.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-10_BAC5 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 3.4 Mbp in 46 contigs with an estimated completeness of 99.02% and 1.73% contamination, 16S (1518 bp), 23S (2939 bp), and 5S (115 bp) genes, and 42 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 35.2%. Predicted to be able to reduce nitrite (nitrite reductase (NO-forming) [EC:1.7.2.1]).

Classification

Bacteria » *Chlorobiota* » *Ignavibacteria* » “Tepidaquicellales” » *Ventifactibacteraceae* » *Ventifactibacter* » *Ventifactibacter hollidayae*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51199>

Species *Verrucomicrobium antarcticum*

Etymology

[an.tarc'ti.cum] **L. neut. adj.** *antarcticum*, southern, pertaining to Antarctica

Nomenclatural type

[NCBI Assembly: GCA_965611755.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-11_VER1 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 5.0 Mbp in 86 contigs with an estimated completeness of 99.66% and 0.58% contamination, 16S (1537 bp), 23S (2844 bp), and 5S (116 bp) genes, and 45 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 55%. Predicted to degrade phthalate (phthalate 4,5-dioxygenase [EC:1.14.12.7]).

Classification

Bacteria » *Verrucomicrobiota* » *Verrucomicrobiia* » *Verrucomicrobiales* » *Verrucomicrobiaceae* » *Verrucomicrobium* » *Verrucomicrobium antarcticum*

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51225>

Species *Wilkeslandia alcanivorans*^{Ts}

Etymology

[al.ca.ni'vo.rans] **N.L. neut. n.** *alcanum*, alkane, aliphatic hydrocarbon; **L. part. adj.** *vorans*, devourer; **N.L. fem. part. adj.** *alcanivorans*, devourer of alkanes

Nomenclatural type

[NCBI Assembly: GCA_965609825.1](#)^{Ts}

Description

The type material is the metagenome assembled genome BH-09_BAC2 recovered from soil from Bunger Hills, East Antarctica. The MAG consists of 2.6 Mbp in 16 contigs with an estimated completeness of 100% and 0.12% contamination, 16S (1527 bp), 23S (2941 bp), and 5S (117 bp) genes, and 35 tRNAs (21 unique: 20 standard plus tRNA-fMet). The GC content of this MAG is 37.5%. Predicted to degrade alkanes (alkane 1-monooxygenase) and at least capable of partial denitrification (predicted nitrous-oxide reductase [EC:1.7.2.4], and nitric oxide reductase subunit B [EC:1.7.2.5]).

Classification

Bacteria » *Bacteroidota* » *Chitinophagia* » *Chitinophagales* » *Chitinophagaceae* » *Wilkeslandia* » *Wilkeslandia alcanivorans*^{Ts}

References

Effective publication: Tan et al., 2026 [1]

Registry URL

<https://seqco.de/i:51194>

References

1. Tan et al. (2026). Persistent petroleum pollution shifts soil microbial responses in Bunger Hills, East Antarctica. *Communications Earth & Environment*. [DOI:10.1038/s43247-026-03299-0](https://doi.org/10.1038/s43247-026-03299-0)

Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List seqco.de/r:_7w3mg8c submitted by **Vázquez-Campos, Xabier** and including 57 new names has been successfully validated.

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