

Register list for *Lucifugimonas marina* gen. nov. sp. nov. and their lineage

Submitted by Lim, Yeonjung

Order *Lucifugimonadales*

Etymology

[Lu.ci.fu.gi.mo.na.da'les] N.L. fem. n. *Lucifugimonas*, referring to the type genus *Lucifugimonas*; *-ales*, ending to denote an order; N.L. fem. pl. n. *Lucifugimonadales*, the *Lucifugimonas* order

Nomenclatural type

Genus *Lucifugimonas*

Description

Aerobic, oligotrophic, and chemoheterotrophic. Gram-negative with a monoderm envelope. Cells are non-motile and dimorphic with short rods of $\sim 0.8 \times 0.4 \mu\text{m}$ and cocci of $\sim 0.5 \mu\text{m}$ diameter. Do not form colonies on solid agar plates. Grows very slowly and reaches stationary phase at ~ 50 days of growth in artificial seawater medium. Light inhibits cellular growth.

Classification

Bacteria » *Chloroflexota* » *Dehalococcoidia* » *Lucifugimonadales*

References

Effective publication: Lim et al., 2023 [1]

Assigned taxonomically: Lim et al., 2023 [1]

Registry URL

<https://seqco.de/i:44172>

Family *Lucifugimonadaceae*

Etymology

[Lu.ci.fu.gi.mo.na.da'ce.ae] N.L. fem. n. *Lucifugimonas*, referring to the type genus *Lucifugimonas*; *-aceae*, ending to denote a family; N.L. fem. pl. n. *Lucifugimonadaceae*, the *Lucifugimonas* family

Nomenclatural type

Genus *Lucifugimonas*

Description

Aerobic, oligotrophic, and chemoheterotrophic. Gram-negative with a monoderm envelope. Cells are non-motile and dimorphic with short rods of $\sim 0.8 \times 0.4 \mu\text{m}$ and cocci of $\sim 0.5 \mu\text{m}$ diameter. Do not form colonies on solid agar plates. Grows very slowly and reaches stationary phase at ~ 50 days of growth in artificial seawater medium. Light inhibits cellular growth.

Classification

Bacteria » *Chloroflexota* » *Dehalococcoidia* » *Lucifugimonadales* » *Lucifugimonadaceae*

References

Effective publication: Lim et al., 2023 [1]

Assigned taxonomically: Lim et al., 2023 [1]

Registry URL

<https://seqco.de/i:44171>

Genus *Lucifugimonas*

Etymology

[Lu.ci.fu.gi.mo'nas] L. fem. n. *lucis*, light; L. fem. n. *fuga*, avoidance; L. fem. n. *monas*, a unit, monad; N.L. fem. n. *Lucifugimonas*, a monad that prefers dark habitats

Nomenclatural type

Species *Lucifugimonas marina*^{Ts}

Description

Aerobic, oligotrophic, and chemoheterotrophic. Gram-negative with a monoderm envelope. Cells are non-motile and dimorphic with short rods of $\sim 0.8 \times 0.4 \mu\text{m}$ and cocci of $\sim 0.5 \mu\text{m}$ diameter. Do not form colonies on solid agar plates. Grows very slowly and reaches stationary phase at ~ 50 days of growth in artificial seawater medium. Light inhibits cellular growth.

Classification

Bacteria » *Chloroflexota* » *Dehalococcoidia* » *Lucifugimonadales* » *Lucifugimonadaceae* » *Lucifugimonas*

References

Effective publication: Lim et al., 2023 [1]

Assigned taxonomically: Lim et al., 2023 [1]

Registry URL

<https://seqco.de/i:44170>

Species *Lucifugimonas marina*^{Ts}

Etymology

[ma.ri'na] L. fem. adj. *marina*, marine, of the sea

Nomenclatural type

[INSDC Nucleotide: CP046146.1](#)^{Ts}

Reference Strain

JH545

Description

Aerobic, oligotrophic, and chemoheterotrophic. Gram-negative with a monoderm envelope. Cells are non-motile and dimorphic with short rods of $\sim 0.8 \times 0.4 \mu\text{m}$ and cocci of $\sim 0.5 \mu\text{m}$ diameter. Do not form colonies on solid agar plates. Grows very slowly and reaches stationary phase at ~ 50 days of growth in artificial seawater medium. Light inhibits cellular growth.

Classification

Bacteria » *Chloroflexota* » *Dehalococcoidia* » *Lucifugimonadales* » *Lucifugimonadaceae* » *Lucifugimonas* » *Lucifugimonas marina*^{Ts}

References

Effective publication: Lim et al., 2023 [1]

Assigned taxonomically: Lim et al., 2023 [1]

Registry URL

<https://seqco.de/i:44169>

References

1. Lim et al. (2023). Cultivation of marine bacteria of the SAR202 clade. *Nature Communications*. [DOI:10.1038/s41467-023-40726-8](https://doi.org/10.1038/s41467-023-40726-8)

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:tq6vmkw1 submitted by **Lim, Yeonjung** and including 4 new names has been successfully validated.

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