# Article information:

Pseudarthrobacter psychrotolerans sp. nov., a cold-adapted bacterium isolated from Antarctic soil - PubMed
<https://pubmed.ncbi.nlm.nih.gov/33048040/>

# Article summary:

1. A novel cold-tolerant bacterium, designated strain YJ56T, was isolated from Antarctic soil collected from the Cape Burk area.

2. Strain YJ56T is most closely related to the genus Pseudarthrobacter and has a genome size of 5.2 Mbp with a G+C content of 64.7 mol%.

3. The primary polar lipids of strain YJ56T are diphosphatidylglycerol, phosphatidylglycerol, two glycolipids and phosphatidylinositol; major cellular fatty acids include anteiso-C15 : 0, anteiso-C17 : 0, iso-C15 : 0, C16 : 0 and iso-C16 : 0.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of the findings of the study conducted by Yoonjae Shin et al., as it provides detailed information about the characteristics of the newly discovered cold-adapted bacterium Pseudarthrobacter psychrotolerans sp. nov., which was isolated from Antarctic soil collected from the Cape Burk area. The article also provides evidence for its claims through phylogenetic analysis through 16S rRNA gene sequence similarity, genomic G+C content analysis, average nucleotide identity and average amino acid identity values between strain YJ56T and P. sulfonivorans ALLT, digital DNA-DNA hybridization value between the two strains, two-dimensional TLC results revealing primary polar lipids present in strain YJ56T, and fatty acid methyl ester analysis showing major cellular fatty acids in strain YJ56T.

However, there are some potential biases that should be noted when considering this article's trustworthiness and reliability. For example, there is no discussion or exploration of any possible risks associated with this new species or any potential implications for human health or environmental safety that may arise from its discovery. Additionally, while the article does provide evidence for its claims through various analyses mentioned above, it does not explore any counterarguments or alternative explanations for these findings that could potentially challenge them or provide additional insight into their accuracy or validity. Furthermore, while the article does provide a list of similar articles at the end of its text for further reading on related topics in this field of research, it does not provide any links to these articles nor does it discuss how they relate

# Topics for further research:

* Potential risks associated with Pseudarthrobacter psychrotolerans sp. nov.
* Implications for human health and environmental safety of Pseudarthrobacter psychrotolerans sp. nov.
* Counterarguments to findings of Yoonjae Shin et al. study
* Alternative explanations for findings of Yoonjae Shin et al. study
* Digital DNA-DNA hybridization value between Pseudarthrobacter psychrotolerans sp. nov. and P. sulfonivorans ALLT
* Links to similar articles related to Pseudarthrobacter psychrotolerans sp. nov.

# Report location:

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