

Balon Protein

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Recently, scientists have discovered a **protein**, called **Balon**, that allows a bacterium, **Psychrobacter urativorans** to inhibit its cellular activities in **unfavourable living conditions** and resume it when such living conditions improve.

- Scientists found **Balon** to be bound to the bacterial ribosome's active protein synthesis centres which prevented the ribosomes from making new proteins.
- Functioning of **Balon** is different from other proteins that helped cells slow or shut down.
- In the case of **Balon**, when the bacteria's external conditions improved, cells resumed protein synthesis.
- The discovery could help our understanding of how bacteria survive harsh environments like the Arctic permafrost.
- It will also help how members of the **Psychrobacter group** of bacteria that cause rotting refrigerated food survive extreme cold temperatures.

Read more: Arctic permafrost

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