

Insights: Publications

Understanding the properties of phenazine mediators that promote extracellular electron transfer in *Escherichia coli*

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The ability to establish successful and efficient extracellular electron transfer (EET) between bacteria and electrode surfaces is critical for the development of mediated microbial electrochemical technologies. Here, we describe a phenazine-based mediator system to facilitate electron transfer from the model bacterium *Escherichia coli* during glucose metabolism. Phenazine redox mediators were experimentally evaluated, demonstrating distinct mediated currents, dependent on mediator structure. Our results show that the choice of a mediator with the appropriate redox potential is not the single aspect to consider when rationally designing future mediator-based EET systems.