

Table S1. Cytochromes discussed in this article.

| Gene | Protein | Location | Note |
|----------|------------------|---------------------|---|
| GSU0274 | CbcI, CbcY, CbcL | Inner membrane | <i>b-/c</i> -Type fusion cytochrome, Low redox potential pathway |
| GSU0592 | CbcC | Inner membrane | <i>c</i> -Type cytochrome for Cbc5 complex, Fe(III) oxide |
| GSU3259 | ImcH | Inner membrane | High redox potential pathway |
| GSU0466 | MacA | Inner membrane | Regulator for OmcB expression |
| GSU0612 | PpcA | Periplasm | Major in the PpcA family, Fe(III), U(VI), AQDS |
| GSU0364 | PpcB | Periplasm | Homolog of PpcA |
| GSU0365 | PpcC | Periplasm | Homolog of PpcA |
| GSU1024 | PpcD | Periplasm | Homolog of PpcA |
| GSU1760 | PpcE | Periplasm | Homolog of PpcA |
| GSU3274 | PccH | Periplasm | Mono-heme, Cathode |
| GSU2515 | | Periplasm | Electron transfer partner for PccH? |
| GSU2737 | OmcB | Outer membrane | Pcc complex, Fe(III) |
| GSU2738 | OmaB | Periplasm | Pcc complex with OmcB |
| GSU2731 | OmcC | Outer membrane | Pcc complex, Homolog of OmcB |
| GSU2732 | OmaC | Periplasm | Pcc complex with OmcC |
| GSU2642 | OmcW, ExtD | Outer membrane | Pcc complex, Anode |
| GSU2643 | ExtC | Periplasm | Pcc complex with ExtD |
| GSU2645 | ExtA | Periplasm | Pcc complex with ExtD |
| GSU2724 | OmcV, ExtG | Outer membrane | Pcc complex, Fe(III) oxide |
| GSU2725 | ExtF | Periplasm | Pcc complex with ExtG |
| GSU2504 | OmcS | Outer membrane | Association with e-pili, Filament formation, Fe(III) oxide, Fe(0), DIET |
| GSU2076 | OmcZ | Outer membrane | Biofilm-anode interface, Filament formation, Anode, Fe(0) |
| GSU2503 | OmcT | Outer membrane | Homolog of OmcS |
| GSU0618 | OmcE | Outer membrane | One of the most abundant <i>c</i> -type cytochromes among sheared proteins |
| GSU2432 | OmcF | Outer membrane | Mono-heme, Regulator for OmcB expression |
| GSU2882 | OmcG | Outer membrane | Regulator for OmcB expression |
| GSU2883 | OmcH | Outer membrane | Regulator for OmcB expression |
| GSU1761 | PgcA | Extracellular space | Induced by adaptive evolution for Fe(III) oxide |
| Gbem3371 | GscA | Outer membrane | <i>G. bemidjiensis</i> homolog of the cytochrome in uranium bioremediation Substitute for OmcS |

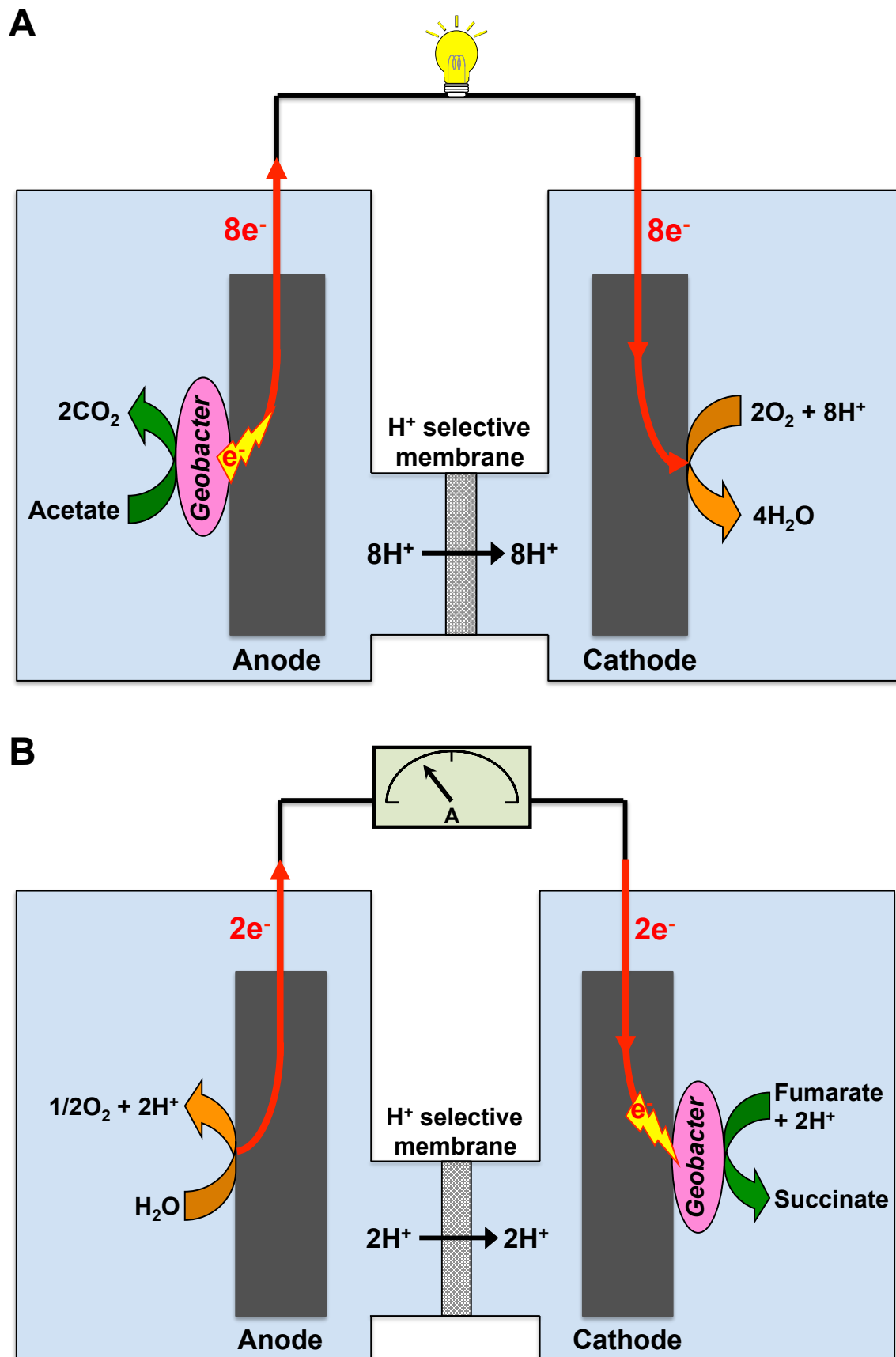


Figure S1. Schematic presentation of two-chambered H-cell bioelectrochemical devices.
 (A) Anode as the electron acceptor (current production).
 (B) Cathode as the electron donor (current consumption).