

Supplementary information

**Near-anoxia induces immobilization and sustains viability of sperm in ant queens**

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**Supplementary Movie 1**

Sperm motility under hypoxic PBS conditions (created using AnaeroPack<sup>®</sup> kenki pouch) and aerobic PBS control.

**Supplementary Movie 2**

Sperm motility in aerobic PBS control and anoxic PBS conditions (created by adding sodium sulfite).

**Supplementary Movie 3**

Motility of sperm cells preserved in anoxic conditions for 2, 4, and 8 h and subsequently exposed to aerobic PBS solutions.