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**SUIT reference protocol RP2-Imt**

**O2k high-resolution respirometry**

2016-03-25

D+mt: NFSGpTm\_1D 2Oct 3M 4c 5P 6G 7S 8Gp 9U 10Rot 11Ama 12Tm 13Azd

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *E* |  |  |  |  |  |  | **9U** | **10Rot** | **11Ama** | **12Tm** | **13Azd** |
| *P* | **1D** | **2Oct** | **3M+c** | **5P** | **6G** | **7S** | **8Gp** |  |  |  |  |
| *L* |  |  |  |  |  |  |  |  |  |  |  |
|  | ROX | F | F | NF | NF | NFS | NFSGp | SGp | ROX | Tm | ROX |
|  | ROX | FAO | FAO | CI  &FAO | CI  &FAO | CI&II  &FAO | CI&II  &FAO&Gp | CII  &GpDH | ROX | CIV | ROX |

**Sample mt=Isolated mitochondria, RP2-Imt:**

| **O2k and DatLab file: P**\_\_\_( A / B ) 2016-  **Experimental code:**  **Operator:**  **MiR:**  MiR05+CtlCr | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Event** | **Mark name** | **State** | **Final conc. 2 ml O2k** | **Stock**  **[mM]** | **Comment** | **Tit.**  **[µl]** | **A** | **B** |
| **MiR** |  |  |  |  |  |  |  |  |
| **O2** |  |  | ~200 µM |  |  |  |  |  |
| **D** |  |  | 2.5 mM | 500 |  | 10 |  |  |
| **mt** | **1D** | ROX |  |  |  |  |  |  |
| **Oct** | **2Oct** | Oct*P* | 0.5 mM | 100 |  | 10 |  |  |
| **M.05** | **3M.05** | Oct*P* | 0.05 mM | 50 |  | 2 |  |  |
| **M.1** | **3M.1** | Oct*P* | 0.1 mM | 50 |  | 2 |  |  |
| **M2** | **3M2** | Oct*P* | 2 mM | 400 |  | 9.5 |  |  |
| **c** | **4c** | Oct*P*c | 10 µM | 4 |  | 5 |  |  |
| **NADH** | **4NADH** | Oct*P*cNADH | 2.8 mM | 280 | NADH only if *FCFc* >.1 | 20 |  |  |
| **P** | **5P** | PMOct*P* | 5 mM | 2000 |  | 5 |  |  |
| **G** | **6G** | PGMOct*P* | 10 mM | 2000 |  | 10 |  |  |
| **S** | **7S** | PGMSOct*P* | 50 mM | 1000 |  | 100 |  |  |
| **Gp** | **8Gp** | PGMSOctGp*P* | 10 mM | 1000 |  | 20 |  |  |
| **U** | **9U** | PGMSOctGp*E* | Δ0.5 µM | 1 | CCCP | Δ1 |  |  |
| **Rot** | **10Rot** | SGp*E* | 0.5 µM | 1 |  | 1 |  |  |
| **Ama** | **11Ama** | ROX | 2.5 µM | 5 |  | 1 |  |  |
| **O2** |  |  | ~200 µM |  |  |  |  |  |
| **As** |  |  | 2 mM | 800 |  | 5 |  |  |
| **Tm** | **12Tm** | Tm*E* | 0.5 mM | 200 | ~20 min | 5 |  |  |
| **Azd** | **13Azd** | ROX | ≥100 mM | 4000 | ~10 min | 100 |  |  |
| **O2** | **14Azd** | ROX | ~200 µM |  | > 50 µM |  |  |  |