

Materials List for

Assessment of Mitochondrial Oxygen Consumption Using a Plate Reader-based Fluorescent Assay

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Materials

| Name | Company | Catalog Number | Comments |
|---|------------------------------|----------------|---|
| 96-well black/optical bottom plates | Thermo Fisher | 265301 | Untreated black-wall plates with clear bottoms. |
| ADP | Sigma | A2754 | Dilute 100 μ M stock with EB immediately before use. |
| BSA | Thermo Fisher | BP1600-100 | Make 2 mg/mL stock in water for protein assay. |
| Dulbeccos 1x PBS (-/-) | Sigma | D8537 | Make sure the PBS is without Mg^{2+} or Ca^{2+} ions. |
| EGTA | Sigma | E3889 | |
| K_2HPO_4 | Sigma | P3786 | |
| KH_2PO_4 | Sigma | P0662 | |
| L-glutamic acid | Sigma | G1251 | |
| L-glutamic acid potassium salt | Sigma | S372226 | |
| L-malic acid | Sigma | M8304 | |
| L-malic acid mono-potassium salt | Sigma | 49601 | |
| MitoXpress oxygen consumption kit | Agilent | MX-200-4 | Kit contains probe stock and HS mineral oil. |
| MOPS | Sigma | M3183 | |
| Protien Assay Dye (5x) | BioRad | 500-0006 | Any protein assay can substitute. |
| R version 3.3 | R Core Development Team 2016 | | |
| Thermomax microplate reader EnSpire Multi-mode Plate reader and software | PerkinElmer | | Standard fluorescent plate-reader |
| Trisma base | Sigma | T6066 | Any version of Tris base can be utilized. |