ZOO 409, Fall 2019: Lab 4 – Absorption

|  |  |  |  |
| --- | --- | --- | --- |
| **Reagent/Material** | **Quantity** | **Vendor stock #** | **purpose** |
| 2.0 mL micro-centrifuge tubes | 1 bag (at least 100 microtubes) |  | Prep contents for coumarin extraction (leave as ww) and protein quant? |
| Micro-centrifuge tube holders/racks | 6 | Make sure tubes fit into them |  |
| 15 mL conical tubes | 1 bag |  | For making standards |
| 50 mL conical tubes | 1 bag |  | For ?? |
| Glass wool | 1 jar | Forbey lab can provide if you do not have |  |
| Digital timers | 6 |  | Allow for consistent time for extraction |
| Flat bottom clear 96-well plates | 12 |  | View UV in extracts |
| Plate reader (or 6 UV lights) | 1 | Only one still in SCNC building, or is there one in Riverfront? | Measure UV - If plate reader not in building, have students rank their color #1-8 relative to standard using UV lights? |
| Vortexer | 3 |  | Mix extractions |
| 100mL beakers | 6 |  |  |
| 250mL beakers | 6 |  |  |
| Pipettors: *In all three sizes* | 6 pipettors/size |  | Transfer DI to tubes and extracts to plates |
| Pipette tip boxes/bags | 1 bag/size | Bring boxes for each size for students to refill from bags | Transfer DI to tubes and extracts to plates |
| Pipettor stands | 3-6 |  | Transfer DI to tubes and extracts to plates |
| Yogurt cups or boxes or extra beakers | 6 | For temporary pipette tip disposal until students can transfer to sharps container | disposal |
| Sharpies: Fine point | 6 |  |  |
| Sharpies: Thick point | 6 |  |  |
| Wax pencils | 6 |  |  |
| Ziploc bags – quart size | 1 box |  |  |
| Parafilm | 1 roll |  |  |
| Scissors | 6 |  |  |
| Aluminum foil | 1 roll |  |  |
| DI water | 1 jug |  |  |
| 70% Ethanol | 6 squeeze bottles |  |  |
| Ethanol | 200 mL | 70% or 100% is fine. We can dilute if necessary. |  |
| 10% bleach | 6 squeeze bottles |  | Clean up. |
| Kim wipes | 6 boxes |  |  |
| Gloves – small, medium and large | Several boxes of each size |  |  |
| Scopoletin standard curve | 1 set, enough for 6 groups | Forbey lab will provide | Coumarin assay standard |
| Gallic acid standard curve | 1 set, enough for 6 groups | Forbey lab will provide | Phenolics assay standard |
| 10% Folin & Ciocalteu’s phenol reagent | ~5 mL | Forbey lab will provide | Phenolics assay standard |
| 700mM sodium carbonate solution | ~4 mL | Forbey lab will provide | Phenolics assay standard |