

Materials List for:

# Examining the Dynamics of Cellular Adhesion and Spreading of Epithelial Cells on Fibronectin During Oxidative Stress

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## Materials

| Name  | Company                       | Catalog Number                                | Comments   |
|---|-------------------------------|---|--|
| 0.05% Trypsin-EDTA (1x)                                   | Gibco by Life Technologies    | 25300-054                                     | cell dissociation  |
| 10 cm <sup>2</sup> dishes                                 | Cell Treat                    | 229620  | sterile, tissue culture treated  |
| 15 mL conical tubes                                       | Fisher Scientific             | 05-539-5                                      | sterile  |
| 1X Phosphate Buffered Saline                              | Corning Cellgro               | 21-031-CV                                     | PBS, sterile, free of Mg <sup>2+</sup> and Ca <sup>2+</sup>                      |
| 24-well cell culture treated plates                       | Fisher Scientific             | 07-200-740                                    | sterile, tissue culture treated  |
| 4°C refrigerator  | Fisher Scientific             |   |  |
| Mouse IgG anti-paxillin primary antibody (clone 165)      | BD Transduction Laboratories  | 610620  | marker of focal adhesions  |
| Aspirator   | Argos                         | EV310   |  |
| Biosafety cabinet   | Nuair                         | NU-477-400                                    | Class II, Type A, series 5   |
| Delipidated Bovine Serum Albumin (Fatty Acid Free) Powder | Fisher Scientific             | BP9704-100                                    | dIBSA  |
| Dimethyl Sulfoxide  | Fisher Scientific             | BP231-100                                     | organic solvent to dissolve Ku55933  |
| Dulbecco's Modified Eagle Media, High Glucose             | Fisher Scientific             | 11965092                                      | REF52 base cell culture medium   |
| Fetal bovine serum  | Fisher Scientific             | 16000044                                      | certified, cell culture medium supplement  |
| Fiji  | National Institutes of Health | <a href="http://fiji.sc/">http://fiji.sc/</a> | image analysis program   |
| Filter syringe  | Fisher Scientific             | 6900-2502                                     | 0.2 µM, sterile  |
| Glass coverslips (12-Cir-1.5)                             | Fisher Scientific             | 12-545-81                                     | autoclave in foil to sterilize   |
| Goat anti-mouse IgG secondary antibody Alexa Fluor 488    | Invitrogen                    | A11001  | fluorescent secondary antibody, light sensitive                                  |
| Goat Serum  | Gibco by Life Technologies    | 16210-064                                     | component of blocking solution for immunofluorescence                            |
| Hemocytometer   | Fisher Scientific             | 22-600-107                                    | for cell counting  |
| Human Plasma Fibronectin                                  | Gibco by Life Technologies    | 33016-015                                     | FN   |
| IX73 Fluorescence Inverted Microscope                     | Olympus                       |   | microscope to visualize fluorescence, cell morphology, counting and dissociation |
| Ku55933   | Sigma-Aldrich                 | SML1109-25MG                                  | ATM kinase inhibitor, inducer of reactive oxygen species                         |
| L-glutamine   | Fisher Scientific             | 25-030-081                                    | cell culture medium supplement   |
| Monochrome CMOS 16 bit camera                             | Optimos                       |   |  |

|  |                            |            |   |
|--|----------------------------|------------|---|
| Paraformaldehyde                           | Sigma-Aldrich              | P6148-500G | PFA, fixative for immunofluorescence                                  |
| Penicillin-streptomycin                    | Fisher Scientific          | 15-140-122 | P/S, antibiotic solution for culture medium                           |
| Alexa Fluor 594 phalloidin (F-actin probe) | Invitrogen                 | A12381     | marker of F-actin, light sensitive                                    |
| ProLong Gold Anti-fade reagent with DAPI   | Invitrogen                 | P36941     | cover slip mounting media including nuclear dye DAPI, light sensitive |
| REF52 cells                                |                            |            | Graham, D.M. et. al. Journal of Cell Biology 2018                     |
| Stir plate with heat control               | Corning Incorporated       | PC-420D    |   |
| Syringe                                    | BD Biosciences             | 309653     | 60 mL syringe   |
| Tissue culture incubator                   | Nuair                      |            |   |
| Triton X-100                               | Fisher Scientific          | BP151-500  | detergent used to permeabilize cell membranes                         |
| Trypan Blue Solution                       | Fisher Scientific          | 15-250-061 | for cell counting   |
| Trypsin Neutralizing Solution (1x)         | Gibco by Life Technologies | R-002-100  | TNS, neutralizes trypsin instead of fetal bovine serum                |
| tube rotator                               | Fisher Scientific          | 11-676-341 |   |
| water bath                                 | Fisher Scientific          | FSGPD02    |   |