

# Identification of the Source of Secreted Proteins in the Kidney by Brefeldin A Injection

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## Materials

| Name                                        | Company                | Catalog Number                   | Comments         |
|---------------------------------------------|------------------------|----------------------------------|------------------|
| 1 mL Insulin syringes                       | BD                     | 329654                           |                  |
| 10 mL Syringe                               | BD                     | 302995                           |                  |
| 2 mL tube                                   | Fisher brand           | 05-408-138                       |                  |
| 20 mL Syringe                               | BD                     | 302830                           |                  |
| 25 G needles                                | BD                     | 305125                           |                  |
| 28 G needles                                | BD                     | 329424                           |                  |
| 96-well-plate                               | Corning                | 9017                             |                  |
| Aristolochic acid-I                         | Sigma-Aldrich          | A9461                            |                  |
| $\alpha$ -SMA antibody conjugated with Cy3  | Sigma-Aldrich          | C6198                            | RRID:AB_476856   |
| Blade for cryostat                          | C.L. Sturkey, Inc      | DT315R50                         |                  |
| Bovine serum albumin (BSA)                  | Sigma-Aldrich          | A7906                            |                  |
| Brefeldin A                                 | Sigma-Aldrich          | B6542                            |                  |
| Cisplatin                                   | Sigma-Aldrich          | P4394                            |                  |
| Citric acid                                 | Sigma-Aldrich          | 791725                           |                  |
| Confocal microscope                         | ZEISS                  | LSM710                           |                  |
| Confocal microscopy objectives              | ZEISS                  | 40x / 1.10 LD C-Apochromat WATER |                  |
| Confocal software                           | ZEISS                  | ZEN                              |                  |
| Coplin jar                                  | Fisher Scientific      | 19-4                             |                  |
| Cover glass                                 | Fisher brand           | 12545F                           |                  |
| Cryostat                                    | Leica                  | CM1850                           |                  |
| CTGF antibody                               | Genetex                | GTX124232                        | RRID:AB_11169640 |
| Cy3-AffiniPure Donkey Anti-Rabbit IgG (H+L) | Jackson immunoresearch | 711-165-152                      | RRID: AB_2307443 |
| Cy5-AffiniPure Donkey Anti-Goat IgG (H+L)   | Jackson immunoresearch | 705-175-147                      | RRID: AB_2340415 |
| DAPI                                        | Sigma-Aldrich          | D9542                            |                  |
| Dimethyl sulfoxide (DMSO)                   | Sigma-Aldrich          | D8418                            |                  |
| Disposable base molds                       | Fisher brand           | 22-363-553                       |                  |

|                                                                                   |                             |                                    |                                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------|------------------------------------|---------------------------------------------------------------------------------|
| donkey serum                                                                      | Jackson immunoresearch      | 017-000-121                        |                                                                                 |
| Ethanol                                                                           | Decon Labs, Inc.            | 2701                               |                                                                                 |
| Forceps                                                                           | VETUS                       | ESD-13                             |                                                                                 |
| Glycine                                                                           | Fisher brand                | 12007-0050                         |                                                                                 |
| Heating pads                                                                      | Kent scientific             | DCT-20                             |                                                                                 |
| Heparin sodium salt                                                               | ACROS organics              | 41121-0010                         | 100mg/15ml of dH2O                                                              |
| Humidified chamber                                                                | Invitrogen                  | 44040410                           | A plastic box covered in foil can be used as an alternative humidified chamber. |
| Insulin syringes                                                                  | BD                          | 329461                             |                                                                                 |
| Inverted microscope                                                               | NIKON                       | Eclipse Ti-E2                      | immunofluorescence                                                              |
| KIM-1 antibody                                                                    | R & D                       | AF1817                             | RRID: AB_2116446                                                                |
| Lemazole (Histo-clear)                                                            | National diagnostics        | HS-200                             |                                                                                 |
| lotus tetragonolobus lectin                                                       | Vector                      | FL-13212                           |                                                                                 |
| Microscope slide                                                                  | Fisher scientific           | 12-550-343                         |                                                                                 |
| Microtome                                                                         | Reichert                    | Jung 820 II                        |                                                                                 |
| monochrome CMOS camera                                                            | NIKON                       | DS-Qi-2                            |                                                                                 |
| Mouse surgical kit                                                                | Kent scientific             | INSMOUSEKIT                        |                                                                                 |
| NIS Elements                                                                      | NIKON                       |                                    |                                                                                 |
| Objectives                                                                        | NIKON                       | Plan Apo 20x/0.75                  | image acquisition software linked to Eclipse Ti-E2 (inverted microscope)        |
| OCT compound                                                                      | Scigen                      | 4586                               |                                                                                 |
| Pap pen                                                                           | Vector                      | H-4000                             |                                                                                 |
| PBS with calcium and magnesium                                                    | Corning                     | 21-030-CV                          |                                                                                 |
| PBS without calcium and magnesium                                                 | Corning                     | 21-031-CV                          |                                                                                 |
| PDGF-D antibody                                                                   | Thermo-Fisher scientific    | 40-2100                            |                                                                                 |
| PFA                                                                               | Electron Microscopy Science | 15710                              | RRID: AB_2533455                                                                |
| Plate reader                                                                      | Promega                     | GloMax® Discover Microplate Reader | 4% PFA is diluted from 16% in PBS.                                              |
| povidone-iodine (Betadine)                                                        | Avrio Health L.P.           | NDC 67618-151-17                   |                                                                                 |
| Pressure cooker                                                                   | Tristar 8                   | Qt. Power Cooker Plus              |                                                                                 |
| ProLong Gold Antifade Reagent                                                     | Invitrogen                  | P36930                             |                                                                                 |
| Quantichrom Urea (BUN) assay Kit II                                               | BioAssay Systems            | DUR2-100                           |                                                                                 |
| Single-edge razor blade for kidney dissection (.009", 0.23 mm)                    | IDL tools                   | 521013                             |                                                                                 |
| Slide warmer                                                                      | Lab Scientific Inc.,        | XH-2001                            |                                                                                 |
| Software                                                                          | NIKON                       | NIS elements                       |                                                                                 |
| Sucrose                                                                           | RPI                         | S24060                             |                                                                                 |
| TGF-b1 antibody                                                                   | Sigma-Aldrich               | SAB4502954                         |                                                                                 |
| Tris EDTA buffer                                                                  | Corning                     | 46-009-CM                          | RRID: AB_10747473                                                               |
| Trisodium citrate dihydrate                                                       | Sigma-Aldrich               | SLBR6660V                          |                                                                                 |
| Trisodium citrate dihydrate                                                       | Sigma-Aldrich               | SLBR6660V                          |                                                                                 |
| Triton                                                                            | Sigma-Aldrich               | 9002-93-1                          |                                                                                 |
| Tween 20                                                                          | Sigma-Aldrich               | P1379                              |                                                                                 |
| White Glass Charged Microscope Slide, 25 x 75 mm Size, Ground Edges, Blue Frosted | Globe Scientific            | 1358D                              |                                                                                 |