

**Table S1.** Primary antibodies.

| Type       | Host Species | Against    | Catalog No. | Company                                                                            | Application |
|------------|--------------|------------|-------------|------------------------------------------------------------------------------------|-------------|
| Polyclonal | Chicken      | B1-VATPase | .           | Gift from Dr. Sylvie Breton<br>(Center for System Biology, Harvard Medical School) | 1:1000 [1]  |
| Monoclonal | Rabbit       | Keratin 5  | RM-2106     | Thermo Fisher Scientific (Waltham, MA, USA)                                        | 1:200 [13]  |
| Monoclonal | Mouse        | ZO1        | 33-9100     | Thermo Fisher Scientific (Waltham, MA, USA)                                        | 1:200 [16]  |

**Table S2.** Secondary antibodies.

| Host Species | Against     | Conjugated to | Catalog No. | Company                                                        | Application |
|--------------|-------------|---------------|-------------|----------------------------------------------------------------|-------------|
| Donkey       | Chicken IgG | CY3           | 703-166-155 | Jackson ImmunoResearch Laboratories, Inc (West Grove, PA, USA) | 1:800       |
| Donkey       | Rabbit IgG  | FITC          | 711-096-152 | Jackson ImmunoResearch Laboratories, Inc (West Grove, PA, USA) | 1:150       |
| Donkey       | Mouse IgG   | FITC          | 715-096-150 | Jackson ImmunoResearch Laboratories, Inc (West Grove, PA, USA) | 1:150       |