Table S1. Antibodies used in this study, with pertinent species, source and dilution information.

| Antibody                  | Species | Company                                         | Dilution |
|---------------------------|---------|-------------------------------------------------|----------|
| Anti-Collagen, Type IV    | Rabbit  | Millipore, Temecula, CA, USA                    | 1:1000   |
| Anti-MITF                 | Rabbit  | Gift from Dr. Kapil Bharti (OGVFB, NEI, Bethesda, MD, USA) | 1:1000   |
| Anti-MITF                 | Rabbit  | Sigma-Aldrich, St. Louis, MO                    | 1:500    |
| Anti-OTX2                 | Goat    | R&D Systems, Minneapolis, MN, USA               | 1:2000   |
| Anti-PAX2                 | Rabbit  | Invitrogen, Carlsbad, CA, USA                   | 1:500    |
| Anti-PAX6                 | Rabbit  | Covance, Princeton, NJ, USA                     | 1:2000   |
| Anti-CHX10/Vsx2           | Goat    | Santa Cruz Biotechnology, Dallas, Texas, USA    | 1:2000   |
| Anti-ZNF503               | Rabbit  | Sigma, St. Louis, MO, USA                       | 1:1000   |
| Anti-BRN3a                | Mouse   | Millipore, Temecula, CA, USA                    | 1:400    |
| Anti-CALRETININ           | Mouse   | Millipore, Temecula, CA, USA                    | 1:2000   |
| Anti-ISL1                 | Goat    | Neuromics, Edina, MD, USA                       | 1:1000   |