

| | Accession No | Gene name | Catalog number Advanced Cell Diagnostics | Target Region | Channel |
|-------------|---------------------|------------------|---|----------------------|----------------|
| FISH probes | NM_009700.2 | Aqp4-C2 | 417161-C2 | 1646 - 2644 | C2 |
| | NM_007428.3 | Agt | 426941 | 347 - 1538 | C1 |
| | NM_009655.2 | Alcam | 462061 | 501 - 1441 | C1 |
| | NM_021704.3 | Cxcl12 α | 460921 | 431 - 1496 | C1 |
| | EF191515 | dapB | 310043 | 414 - 862 | C1 |
| | NM_001010937.2 | Gjb6 | 458811 | 251 - 1383 | C1 |
| | NM_134438.3 | Gpr3711 | 319301 | 251 - 1388 | C1 |
| | NM_175189.4 | Hepacam | 476101 | 166 - 1082 | C1 |
| | NM_008397.4 | Itga6 | 441701 | 895 - 1860 | C1 |
| | NM_009022.4 | Lpar1 | 318591 | 188 - 1315 | C1 |
| | NM_010865.3 | Myoc | 460981 | 102 - 1068 | C1 |
| | NM_010865.3 | Myoc | 460981 | 102 - 1068 | C1 |
| | NM_001081306.1 | Ptprz1 | 460991 | 1374 - 2358 | C1 |
| NM_054055.2 | Slc13a3 | 461041 | 149 - 1111 | C1 | |

| | Gene name | Species | company | Dilution | |
|------------|------------------|---------------------------------|--------------------|---------------------------|---------------------|
| | | | | Immunofluorescence | Western Blot |
| Antibodies | Acta2 | Mouse monoclonal (clone 1A4) | Sigma | 1/500 | 1/500 |
| | Aqp4 | Rabbit polyclonal | Sigma | 1/400 | 1/500 |
| | Cldn5 | Rabbit polyclonal | Thermo fisher | / | 1/500 |
| | Cx26 | Rabbit polyclonal | Thermo fisher | 1/500 | 1/500 |
| | Cx43 | Mouse monoclonal | BD Bioscience | 1/500 | 1/500 |
| | GFAP | Chicken polyclonal | Abcam | 1/500 | / |
| | Gl1 | Rabbit polyclonal | Frontier institute | 1/1000 | 1/10000 |
| | H3 | Rabbit polyclonal | Cell signaling | / | 1/2000 |
| | Hepacam/Glialcam | Rabbit polyclonal | Raul Estevez | 1/500 | / |
| | Kir4.1 | Rabbit polyclonal | Alomone Labs | 1/500 | 1/500 |

Table S5 List of antibodies and FISH probes