

Table S2. Genes that are more than 2-fold upregulated in *Dlx5/6*^{-/-} mdBA1 compared with the wild type

| Gene title | Gene symbol | In situ verification | Average fold change |
|--|----------------------|----------------------|---------------------|
| proline-rich acidic protein 1 | <i>Prap1</i> | | 115.8051462 |
| guanylate cyclase activator 2b (retina) | <i>Guca2b</i> | | 12.89633204 |
| Riken cDNA 2900092D14 | <i>2900092D14Rik</i> | Yes | 7.817279747 |
| transmembrane protein 30B | <i>Tmem30b</i> | Yes | 6.498019171 |
| Riken cDNA 2610017I09 | <i>2610017I09Rik</i> | Yes | 4.924577653 |
| inter-alpha (globulin) inhibitor H5 | <i>Itih5</i> | | 4.775181453 |
| POU domain, class 3, transcription factor 3 | <i>Pou3f3</i> | Yes | 4.666116158 |
| T-box18 | <i>Tbx18</i> | | 4.630317464 |
| Transcribed locus, weakly similar to XP_311625.1 | <i>E330015D05Rik</i> | Yes | 4.421219754 |
| Forkhead family transcription factor I2 | <i>Foxl2</i> | Yes | 4.353640318 |
| Secreted phosphoprotein 1 | <i>Spp1</i> | | 3.848895348 |
| cytochrome P450, family 26, subfamily a, polypeptide 1 | <i>Cyp26a1</i> | Yes | 3.618910819 |
| RIKEN cDNA 4631408O11 gene | <i>4631408O11Rik</i> | | 3.618910819 |
| early B-cell factor 2 | <i>Ebf2</i> | False positive | 3.376563187 |
| Nerve growth factor receptor | <i>Ngfr</i> | | 3.376563187 |
| thrombospondin, type I, domain 2 | <i>Thsd2</i> | | 3.324951585 |
| insulin-like growth factor 1 | <i>Igf1</i> | | 3.150444852 |
| RIKEN cDNA 1110018M03 gene | <i>1110018M03Rik</i> | | 3.054870262 |
| hyaluronan synthase 2 | <i>Has2</i> | | 2.598677813 |
| Iroquois related homeobox 5 (Drosophila) | <i>Irx5</i> | Yes | 2.481325691 |
| brain derived neurotrophic factor | <i>Bdnf</i> | | 2.443398014 |
| secreted frizzled-related sequence protein 2 | <i>Sfrp2</i> | | 2.29739671 |
| Lim homeobox protein 6 | <i>Lhx6</i> | | 2.193649959 |
| phosphatidic acid phosphatase type 2B | <i>Ppap2b</i> | | 2.176820159 |

Grey shading indicates that the changes in expression were verified by in situ hybridization.