

Table S4: Alphabetical list of candidate genes analyzed to be differentially expressed according to multivariate analyses, but not via univariate analysis. The number of genes detected only by applying SVM-RFE algorithm is 109; the number of genes only identified employing RF is five. The overlapping pool of genes detected using the multivariate algorithms only contains eight genes, which are marked in bold letters (RF = Random Forest, SVM-RFE = support vector machines with recursive feature elimination).

Gene symbol	SVM-RFE frequency	RF mean decrease accuracy
<i>1300010F03Rik</i>	32	Not detected
<i>1700012P22Rik</i>	38	Not detected
<i>1700042G07Rik</i>	30	Not detected
<i>2700062C07Rik</i>	38	Not detected
<i>4921537F17Rik</i>	40	Not detected
<i>4930474N05Rik</i>	40	Not detected
<i>4931440B09Rik</i>	31	Not detected
<i>5430406J06Rik</i>	40	2.208
<i>5730437N04Rik</i>	31	Not detected
<i>5830416P10Rik</i>	35	Not detected
<i>9030625A04Rik</i>	Not detected	2.405
<i>9627020_131</i>	36	Not detected
<i>A530021P12Rik</i>	36	Not detected
<i>A730030A06</i>	31	Not detected
<i>Acadvl</i>	38	Not detected
<i>Acta1</i>	40	Not detected
<i>Adam11</i>	38	Not detected
<i>Aldh1a3</i>	40	Not detected
<i>Alox8</i>	30	Not detected
<i>Als2cr4</i>	39	Not detected
<i>Arl16</i>	40	2.442
<i>Atg7</i>	39	2.471
<i>Atic</i>	36	Not detected
<i>Atp8b1</i>	40	Not detected
<i>AU040829</i>	36	Not detected
<i>B230312I18Rik</i>	38	Not detected
<i>Bex4</i>	39	Not detected
<i>C030032C09Rik</i>	31	Not detected
<i>C1qtnf5</i>	40	Not detected
<i>C530044C16Rik</i>	39	Not detected
<i>Ccdc137</i>	40	Not detected
<i>Cd80</i>	36	Not detected
<i>Cdc42se2</i>	40	Not detected
<i>Chd9</i>	40	Not detected
<i>Cp</i>	31	Not detected
<i>Crlf1</i>	39	2.328
<i>Cth</i>	30	Not detected
<i>D030013I16Rik</i>	40	Not detected
<i>D030063F01Rik</i>	31	Not detected
<i>D11Wsu47e</i>	36	Not detected
<i>D11Wsu99e</i>	40	Not detected
<i>Dgcr2</i>	34	Not detected
<i>Dnaic1</i>	40	Not detected
<i>Eya4</i>	40	Not detected
<i>F730038M08Rik</i>	31	Not detected
<i>Farsb</i>	38	Not detected
<i>Fbxo9</i>	35	Not detected

<i>Fcmd</i>	34	Not detected
<i>Fstl5</i>	40	Not detected
<i>Galns</i>	30	Not detected
<i>Galnt14</i>	30	Not detected
<i>Gsg2</i>	35	Not detected
<i>Hao</i>	33	Not detected
<i>Hemk1</i>	39	Not detected
<i>Hepacam</i>	30	Not detected
<i>Hist1h4j</i>	38	Not detected
<i>Igbp1b</i>	32	Not detected
<i>Il11ra1</i>	40	Not detected
<i>Jrkl</i>	30	Not detected
<i>Kcne1l</i>	32	Not detected
<i>Klhdc5</i>	34	Not detected
<i>Lag3</i>	34	Not detected
<i>Lbx1</i>	34	Not detected
LOC100046003	40	2.026
LOC100046025	39	Not detected
LOC100046946	33	Not detected
LOC100047937	Not detected	2.76
<i>LOC381019</i>	30	Not detected
<i>LOC386069</i>	39	Not detected
<i>LOC433745</i>	40	Not detected
<i>LOC433943</i>	34	Not detected
<i>LOC634015</i>	40	2.308
<i>LOC666145</i>	38	Not detected
<i>LOC674449</i>	36	Not detected
<i>LOC677448</i>	36	2.687
<i>Lrrc38</i>	38	Not detected
<i>Matk</i>	39	Not detected
<i>Myo18b</i>	34	Not detected
<i>Myst2</i>	40	Not detected
<i>Nploc4</i>	Not detected	2.693
<i>Nqo1</i>	39	Not detected
<i>Nqo2</i>	34	Not detected
<i>Odf2</i>	37	Not detected
<i>Olfr1289</i>	35	Not detected
<i>Olfr310</i>	30	Not detected
<i>Osbp1a</i>	Not detected	2.544
<i>Paip2b</i>	34	Not detected
<i>Pgbp1l</i>	40	2.367
<i>Pla2g2d</i>	36	Not detected
<i>Plek2</i>	38	Not detected
<i>Plekho2</i>	36	Not detected
<i>Ppfibp2</i>	32	Not detected
<i>Ppp1r1b</i>	38	Not detected
<i>Prdx6</i>	34	Not detected
<i>Rab12a</i>	33	Not detected
<i>Rbm9</i>	31	Not detected
<i>Riok2</i>	40	Not detected
<i>Rorb</i>	38	Not detected
<i>Rpl36al</i>	30	Not detected
<i>Sall4</i>	35	Not detected
<i>Skap2</i>	36	Not detected
<i>Slc37a1</i>	40	Not detected
<i>Slc43a3</i>	40	Not detected

<i>Slc46a3</i>	32	Not detected
<i>Sparc</i>	40	Not detected
<i>Spats1</i>	38	Not detected
<i>Srgn</i>	38	Not detected
<i>Srpk2</i>	39	Not detected
<i>Stk19</i>	37	Not detected
<i>Syt11</i>	30	Not detected
<i>Thy1</i>	Not detected	2.908
<i>Tmem98</i>	33	Not detected
<i>Tnip1</i>	32	Not detected
<i>Tpmt</i>	38	Not detected
<i>Ttc19</i>	40	Not detected
<i>Ttll5</i>	30	Not detected
<i>Tyms</i>	40	Not detected
<i>Wwc1</i>	35	Not detected
<i>Zfp294</i>	30	Not detected
<i>Zfp474</i>	37	Not detected
<i>Zfp619</i>	30	Not detected
<i>Zfp709</i>	36	Not detected