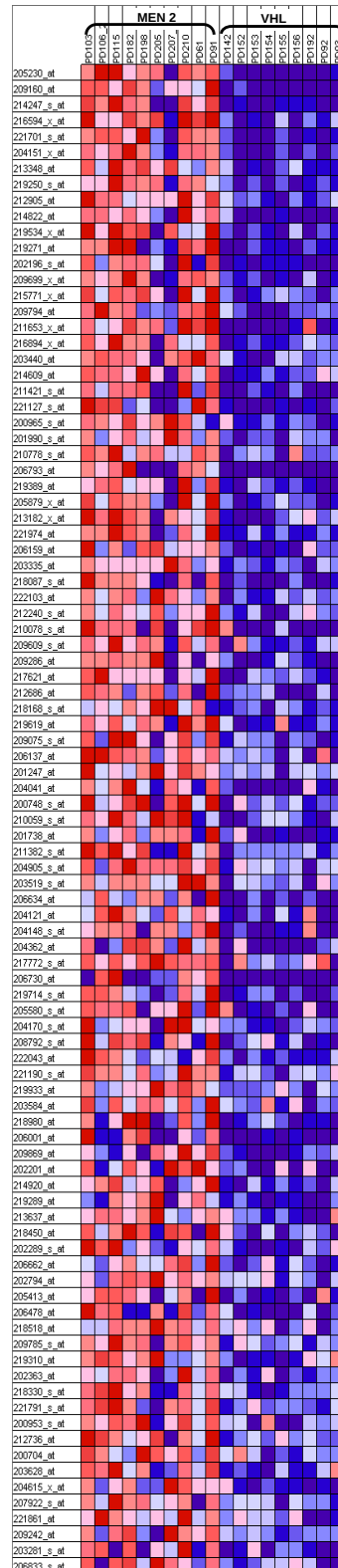
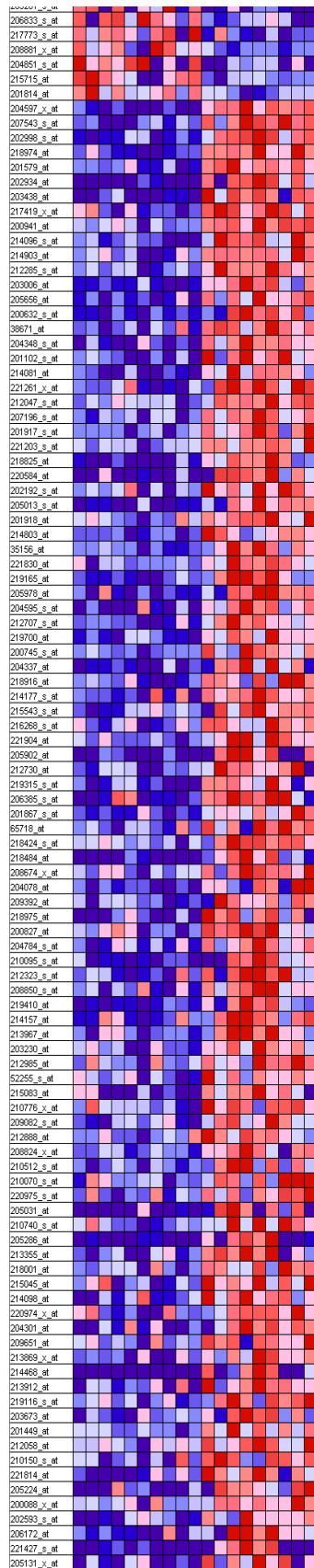


Genes that discriminate MEN2 vs. VHL tumors by supervised learning method  
 Marker analysis for the Pheochromocytoma MEN2 vs. VHL (19 samples, with 10 MEN2A and 9 VHL  
 Data thresholded (10 minimum and 16000 maximum) and filtered (5 fold minimum variation and 50 minimum absolute difference) (14811 fe  
 Marker analysis using mean based signal-to-noise ratio with significance evaluated with 2000 permutator

| #  | Class | Score | Probe Set n | Gene Name                                                               |
|----|-------|-------|-------------|-------------------------------------------------------------------------|
| 1  | MEN2  | 1.7   | 205230_at   | likely ortholog of mouse rabphilin 3f                                   |
| 2  | MEN2  | 1.58  | 209160_at   | aldo-keto reductase family 1, member C3                                 |
| 3  | MEN2  | 1.4   | 214247_s_at | dickkopf homolog 3 (Xenopus laevis                                      |
| 4  | MEN2  | 1.36  | 216594_x_at | aldo-keto reductase family 1, member C2                                 |
| 5  | MEN2  | 1.34  | 221701_s_at | hypothetical protein FLJ12541 similar to Stra                           |
| 6  | MEN2  | 1.26  | 204151_x_at | aldo-keto reductase family 1, member C1                                 |
| 7  | MEN2  | 1.23  | 213348_at   | cyclin-dependent kinase inhibitor 1C (p57, Kip2                         |
| 8  | MEN2  | 1.23  | 219250_s_at | fibronectin leucine rich transmembrane protein :                        |
| 9  | MEN2  | 1.2   | 212905_at   | likely ortholog of mouse variant polyadenylation protein CSTF-6         |
| 10 | MEN2  | 1.17  | 214822_at   | hypothetical protein from clone 2482f                                   |
| 11 | MEN2  | 1.16  | 219534_x_at | cyclin-dependent kinase inhibitor 1C (p57, Kip2                         |
| 12 | MEN2  | 1.16  | 219271_at   | hypothetical protein FLJ12691                                           |
| 13 | MEN2  | 1.15  | 202196_s_at | dickkopf homolog 3 (Xenopus laevis                                      |
| 14 | MEN2  | 1.09  | 209699_x_at | aldo-keto reductase family 1, member C2                                 |
| 15 | MEN2  | 1.08  | 215771_x_at | ret proto-oncogene                                                      |
| 16 | MEN2  | 1.08  | 209794_at   | SLIT-ROBO Rho GTPase-activating protein :                               |
| 17 | MEN2  | 1.07  | 211653_x_at | aldo-keto reductase family 1, member C2                                 |
| 18 | MEN2  | 1.07  | 216894_x_at | unknown EST, accession number D6413;                                    |
| 19 | MEN2  | 1.06  | 203440_at   | cadherin 2, type 1, N-cadherin (neuronal                                |
| 20 | MEN2  | 1.04  | 214609_at   | aristaless homeobox (Drosophila)                                        |
| 21 | MEN2  | 1.04  | 211421_s_at | ret proto-oncogene                                                      |
| 22 | MEN2  | 1.03  | 221127_s_at | regulated in glioma                                                     |
| 23 | MEN2  | 1.01  | 200965_s_at | actin binding LIM protein 1                                             |
| 24 | MEN2  | 1.01  | 201990_s_at | cAMP responsive element binding protein-like :                          |
| 25 | MEN2  | 0.99  | 210778_s_at | MAX dimerization protein 4                                              |
| 26 | MEN2  | 0.98  | 206793_at   | phenylethanolamine N-methyltransferase                                  |
| 27 | MEN2  | 0.98  | 219389_at   | hypothetical protein FLJ10052                                           |
| 28 | MEN2  | 0.98  | 205879_x_at | ret proto-oncogene                                                      |
| 29 | MEN2  | 0.98  | 213182_x_at | cyclin-dependent kinase inhibitor 1C (p57, Kip2                         |
| 30 | MEN2  | 0.98  | 221974_at   | imprinted in Prader-Willi syndrome                                      |
| 31 | MEN2  | 0.97  | 206159_at   | growth differentiation factor 1f                                        |
| 32 | MEN2  | 0.96  | 203335_at   | phytanoyl-CoA hydroxylase (Refsum disease                               |
| 33 | MEN2  | 0.95  | 218087_s_at | sorbin and SH3 domain containing 1                                      |
| 34 | MEN2  | 0.95  | 222103_at   | activating transcription factor 1                                       |
| 35 | MEN2  | 0.95  | 212240_s_at | phosphoinositide-3-kinase, regulatory subunit, polypeptide 1 (p85 alpha |
| 36 | MEN2  | 0.92  | 210078_s_at | potassium voltage-gated channel, shaker-related subfamily, beta member  |
| 37 | MEN2  | 0.92  | 209609_s_at | mitochondrial ribosomal protein L5                                      |
| 38 | MEN2  | 0.91  | 209286_at   | Homo sapiens cDNA FLJ31353 fis, clone MESAN200026;                      |
| 39 | MEN2  | 0.91  | 217621_at   | peter pan homolog (Drosophila)                                          |
| 40 | MEN2  | 0.91  | 212686_at   | KIAA1157 protein                                                        |
| 41 | MEN2  | 0.9   | 218168_s_at | chaperone, ABC1 activity of bc1 complex like (S. pombe                  |
| 42 | MEN2  | 0.89  | 219619_at   | Di-Ras2                                                                 |
| 43 | MEN2  | 0.89  | 209075_s_at | nitrogen fixation cluster-like                                          |
| 44 | MEN2  | 0.89  | 206137_at   | regulating synaptic membrane exocytosis ;                               |
| 45 | MEN2  | 0.88  | 201247_at   | Homo sapiens mRNA; cDNA DKFZp434N1610 (from clone DKFZp434N1610         |
| 46 | MEN2  | 0.88  | 204041_at   | monoamine oxidase B                                                     |
| 47 | MEN2  | 0.88  | 200748_s_at | ferritin, heavy polypeptide 1                                           |
| 48 | MEN2  | 0.87  | 210059_s_at | mitogen-activated protein kinase 13                                     |
| 49 | MEN2  | 0.87  | 201738_at   | translation factor su11 homolog                                         |
| 50 | MEN2  | 0.87  | 211382_s_at | transforming, acidic coiled-coil containing protein :                   |
| 51 | MEN2  | 0.87  | 204905_s_at | eukaryotic translation elongation factor 1 epsilon ;                    |
| 52 | MEN2  | 0.86  | 203519_s_at | regulator of nonsense transcripts 2                                     |
| 53 | MEN2  | 0.86  | 206634_at   | sine oculis homeobox homolog 3 (Drosophila                              |
| 54 | MEN2  | 0.86  | 204121_at   | growth arrest and DNA-damage-inducible, gamma                           |
| 55 | MEN2  | 0.85  | 204148_s_at | POM (POM121 homolog, rat) and ZP3 fusor                                 |
| 56 | MEN2  | 0.85  | 204362_at   | src family associated phosphoprotein ;                                  |
| 57 | MEN2  | 0.85  | 217772_s_at | mitochondrial carrier homolog 2                                         |
| 58 | MEN2  | 0.84  | 206730_at   | glutamate receptor, ionotropic, AMPA ;                                  |
| 59 | MEN2  | 0.84  | 219714_s_at | calcium channel, voltage-dependent, alpha 2/delta 3 subun               |
| 60 | MEN2  | 0.84  | 205580_s_at | histamine receptor H1                                                   |
| 61 | MEN2  | 0.83  | 204170_s_at | CDC28 protein kinase 2                                                  |
| 62 | MEN2  | 0.83  | 208792_s_at | clusterin (complement lysis inhibitor, SP-40,40                         |
| 63 | MEN2  | 0.83  | 222043_at   | clusterin (complement lysis inhibitor, SP-40,40                         |
| 64 | MEN2  | 0.82  | 221190_s_at | colon cancer-associated protein Mic1                                    |
| 65 | MEN2  | 0.82  | 219933_at   | glutaredoxin 2                                                          |
| 66 | MEN2  | 0.82  | 203584_at   | KIAA0103 gene produc                                                    |
| 67 | MEN2  | 0.82  | 218980_at   | hypothetical protein FLJ22297                                           |
| 68 | MEN2  | 0.81  | 206001_at   | neuropeptide Y                                                          |
| 69 | MEN2  | 0.81  | 209869_at   | adrenergic, alpha-2A-, receptor                                         |
| 70 | MEN2  | 0.81  | 202201_at   | biliverdin reductase B (flavin reductase (NADPH)                        |
| 71 | MEN2  | 0.8   | 214920_at   | Homo sapiens cDNA FLJ11022 fis, clone PLACE100377;                      |
| 72 | MEN2  | 0.8   | 219289_at   | hypothetical protein FLJ2071f                                           |
| 73 | MEN2  | 0.8   | 213637_at   | ESTs,accession number BE503392                                          |
| 74 | MEN2  | 0.79  | 218450_at   | heme binding protein 1                                                  |
| 75 | MEN2  | 0.79  | 202289_s_at | transforming, acidic coiled-coil containing protein :                   |
| 76 | MEN2  | 0.79  | 206662_at   | glutaredoxin (thioltransferase                                          |
| 77 | MEN2  | 0.78  | 202794_at   | inositol polyphosphate-1-phosphatase                                    |
| 78 | MEN2  | 0.78  | 205413_at   | chromosome 11 open reading frame 8                                      |
| 79 | MEN2  | 0.78  | 206478_at   | KIAA0125 gene produc                                                    |
| 80 | MEN2  | 0.78  | 218518_at   | chromosome 5 open reading frame f                                       |
| 81 | MEN2  | 0.78  | 209785_s_at | phospholipase A2, group IVC (cytosolic, calcium-independen              |
| 82 | MEN2  | 0.78  | 219310_at   | chromosome 20 open reading frame 3f                                     |
| 83 | MEN2  | 0.78  | 202363_at   | sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testicar   |
| 84 | MEN2  | 0.77  | 218330_s_at | neuron navigator 2                                                      |
| 85 | MEN2  | 0.77  | 221791_s_at | hypothetical protein HSPC01f                                            |
| 86 | MEN2  | 0.77  | 200953_s_at | cyclin D2                                                               |
| 87 | MEN2  | 0.77  | 212736_at   | hypothetical gene BC008967                                              |
| 88 | MEN2  | 0.76  | 200704_at   | LPS-induced TNF-alpha factor                                            |
| 89 | MEN2  | 0.76  | 203628_at   | insulin-like growth factor 1 receptor                                   |
| 90 | MEN2  | 0.76  | 204615_x_at | isopentenyl-diphosphate delta isomerase                                 |
| 91 | MEN2  | 0.76  | 207922_s_at | macrophage erythroblast attacher                                        |
| 92 | MEN2  | 0.76  | 221861_at   | Homo sapiens mRNA; cDNA DKFZp762M127 (from clone DKFZp762M127           |
| 93 | MEN2  | 0.75  | 209242_at   | paternally expressed 3                                                  |
| 94 | MEN2  | 0.75  | 203281_s_at | ubiquitin-activating enzyme E1-like                                     |

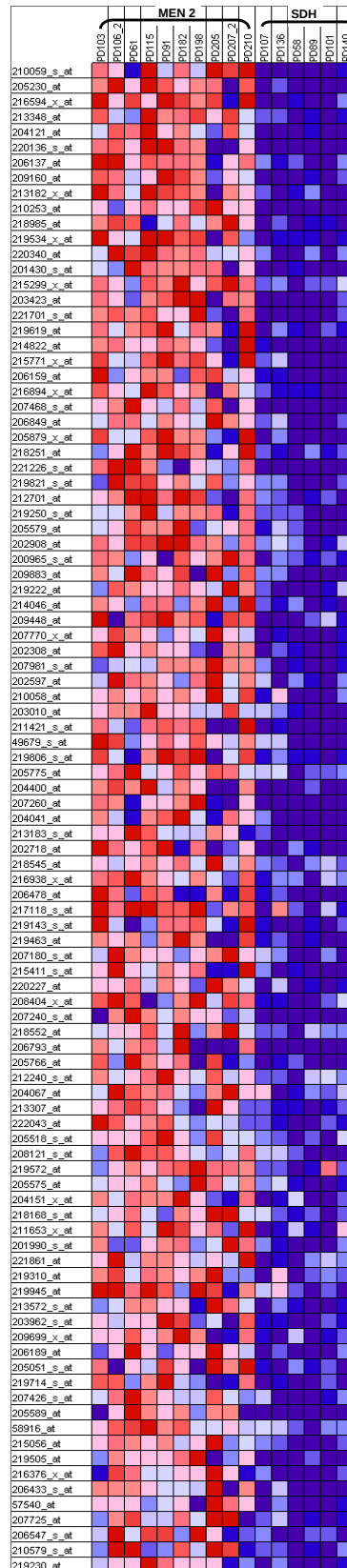


95 MEN2 0.75 206833\_s\_at acylphosphatase 2, muscle type  
96 MEN2 0.74 217773\_s\_at NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kD  
97 MEN2 0.74 208881\_x\_at isopentenyl-diphosphate delta isomerase  
98 MEN2 0.74 204851\_s\_at doublecortin; lissencephaly, X-linked (doublecortin  
99 MEN2 0.74 215715\_at solute carrier family 6 (neurotransmitter transporter, noradrenalin), member :  
100 MEN2 0.74 201814\_at TBC1 domain family, member 5  
101 VHL 2.05 204597\_x\_at stanniocalcin 1  
102 VHL 1.69 207543\_s\_at procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase  
103 VHL 1.61 202998\_s\_at lysyl oxidase-like 2  
104 VHL 1.54 218974\_at hypothetical protein FLJ10155  
105 VHL 1.46 201579\_at FAT tumor suppressor homolog 1 (Drosophila  
106 VHL 1.44 202934\_at hexokinase 2  
107 VHL 1.39 203438\_at stanniocalcin 2  
108 VHL 1.27 217419\_x\_at agrin  
109 VHL 1.26 200941\_at heat shock factor binding protein 1  
110 VHL 1.24 214096\_s\_at serine hydroxymethyltransferase 2 (mitochondrial  
111 VHL 1.24 214903\_at Homo sapiens clone 24527 mRNA sequence  
112 VHL 1.22 212285\_s\_at agrin  
113 VHL 1.16 203006\_at inositol polyphosphate-5-phosphatase, 40kD  
114 VHL 1.14 205656\_at protocadherin 17  
115 VHL 1.14 200632\_s\_at N-myc downstream regulated gene 1  
116 VHL 1.14 38671\_at KIAA0620 protein  
117 VHL 1.09 204348\_s\_at adenylate kinase 3  
118 VHL 1.09 201102\_s\_at phosphofructokinase, liver  
119 VHL 1.07 214081\_at tumor endothelial marker 7 precursor  
120 VHL 1.07 221261\_x\_at MAGE-E1 protein  
121 VHL 1.07 212047\_s\_at DKFZP566H073 protein  
122 VHL 1.05 207196\_s\_at Nef-associated factor 1  
123 VHL 1.04 201917\_s\_at hypothetical protein FLJ10616  
124 VHL 1.03 221203\_s\_at hypothetical protein FLJ10201  
125 VHL 1.03 218825\_at NEU1 protein  
126 VHL 1.02 220584\_at hypothetical protein FLJ22184  
127 VHL 1.02 202192\_s\_at growth arrest-specific 7  
128 VHL 1.02 205013\_s\_at adenosine A2a receptor  
129 VHL 1 201918\_at hypothetical protein FLJ10616  
130 VHL 1 214803\_at Homo sapiens mRNA; cDNA DKFZp564N1116  
131 VHL 1 35156\_at ESTs, Highly similar to T08701 hypothetical protein DKFZp564N123.1 - human  
132 VHL 1 221830\_at Homo sapiens cDNA FLJ37267 fis, clone BRAMY201129  
133 VHL 0.99 219165\_at PDZ-LIM protein mystique  
134 VHL 0.98 205978\_at klotho  
135 VHL 0.98 204595\_s\_at stanniocalcin 1  
136 VHL 0.96 212707\_s\_at Ca2+-promoted Ras inactivator  
137 VHL 0.91 219700\_at tumor endothelial marker 7 precursor  
138 VHL 0.91 200745\_s\_at guanine nucleotide binding protein (G protein), beta polypeptide  
139 VHL 0.91 204337\_at regulator of G-protein signalling 4  
140 VHL 0.91 218916\_at hypothetical protein FLJ23436  
141 VHL 0.9 214177\_s\_at hematopoietic PBX-interacting protein  
142 VHL 0.9 215543\_s\_at like-glycosyltransferase  
143 VHL 0.89 216268\_s\_at jagged 1 (Alagille syndrome)  
144 VHL 0.89 221904\_at hypothetical protein MGC21686  
145 VHL 0.89 205902\_at potassium intermediate/small conductance calcium-activated channel, subfamily  
146 VHL 0.88 212730\_at desmulin  
147 VHL 0.87 219315\_s\_at hypothetical protein FLJ20896  
148 VHL 0.87 206385\_s\_at ankyrin 3, node of Ranvier (ankyrin G  
149 VHL 0.87 201867\_s\_at transducin (beta)-like 1X-linker  
150 VHL 0.87 65718\_at tumor endothelial marker 5 precursor  
151 VHL 0.87 218424\_s\_at dudulin 2  
152 VHL 0.86 218484\_at NADH:ubiquinone oxidoreductase MLRQ subunit homolog  
153 VHL 0.86 208674\_x\_at dolichyl-diphosphooligosaccharide-protein glycosyltransferase  
154 VHL 0.86 204078\_at nucleolar autoantigen (55kD) similar to rat synaptonemal complex protein  
155 VHL 0.86 209392\_at ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin  
156 VHL 0.86 218975\_at collagen, type V, alpha 2  
157 VHL 0.86 200827\_at procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase  
158 VHL 0.86 204784\_s\_at myeloid leukemia factor 1  
159 VHL 0.84 210095\_s\_at insulin-like growth factor binding protein :  
160 VHL 0.84 212323\_s\_at KIAA0453 protein  
161 VHL 0.84 208850\_s\_at Thy-1 cell surface antigen  
162 VHL 0.84 219410\_at hypothetical protein FLJ10134  
163 VHL 0.84 214157\_at GNAS complex locus  
164 VHL 0.83 213967\_at Homo sapiens clone 24468 mRNA sequence  
165 VHL 0.83 203230\_at dishevelled, dsh homolog 1 (Drosophila  
166 VHL 0.83 212985\_at Homo sapiens mRNA; cDNA DKFZp434E033 (from clone DKFZp434E033  
167 VHL 0.82 52255\_s\_at collagen, type V, alpha 2  
168 VHL 0.81 215083\_at Homo sapiens mRNA; cDNA DKFZp564F133 (from clone DKFZp564F133  
169 VHL 0.81 210776\_x\_at transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47  
170 VHL 0.81 209082\_s\_at collagen, type XVIII, alpha 1  
171 VHL 0.81 212888\_at Homo sapiens cDNA FLJ333775 fis, clone BRSSN2000496  
172 VHL 0.81 208824\_x\_at PCTAIRE protein kinase 1  
173 VHL 0.81 210512\_s\_at vascular endothelial growth factor  
174 VHL 0.81 210070\_s\_at carnitine palmitoyltransferase I, muscle  
175 VHL 0.8 220975\_s\_at C1q and tumor necrosis factor related protein 1  
176 VHL 0.8 205031\_at ephrin-B3  
177 VHL 0.8 210740\_s\_at inositol 1,3,4-triphosphate 5/6 kinase  
178 VHL 0.8 205286\_at transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)  
179 VHL 0.79 213355\_at alpha2,3-sialyltransferase  
180 VHL 0.79 218001\_at mitochondrial ribosomal protein S2  
181 VHL 0.79 215045\_at trinucleotide repeat containing 4  
182 VHL 0.79 214098\_at KIAA1107 protein  
183 VHL 0.79 220974\_x\_at similar to rat tricarboxylate carrier-like protein  
184 VHL 0.79 204301\_at KIAA0711 gene product  
185 VHL 0.78 209651\_at transforming growth factor beta 1 induced transcript :  
186 VHL 0.78 213869\_x\_at Thy-1 cell surface antigen  
187 VHL 0.78 214468\_at myosin, heavy polypeptide 6, cardiac muscle, alpha  
188 VHL 0.78 213912\_at KIAA0984 protein  
189 VHL 0.78 219116\_s\_at hypothetical protein FLJ10704  
190 VHL 0.78 203673\_at thyroglobulin  
191 VHL 0.77 201449\_at Homo sapiens cDNA FLJ36425 fis, clone THYMU201148  
192 VHL 0.77 212058\_at KIAA0332 protein  
193 VHL 0.77 210150\_s\_at laminin, alpha 5  
194 VHL 0.76 221814\_at tumor endothelial marker 5 precursor  
195 VHL 0.76 205224\_at surfactant 2  
196 VHL 0.76 200088\_x\_at ribosomal protein L12  
197 VHL 0.76 202593\_s\_at membrane interacting protein of RGS16  
198 VHL 0.76 206172\_at interleukin 13 receptor, alpha 2  
199 VHL 0.76 221427\_s\_at likely ortholog of mouse Paneth cell enhanced expression  
200 VHL 0.76 205131\_x\_at stem cell growth factor; lymphocyte secreted C-type lectin

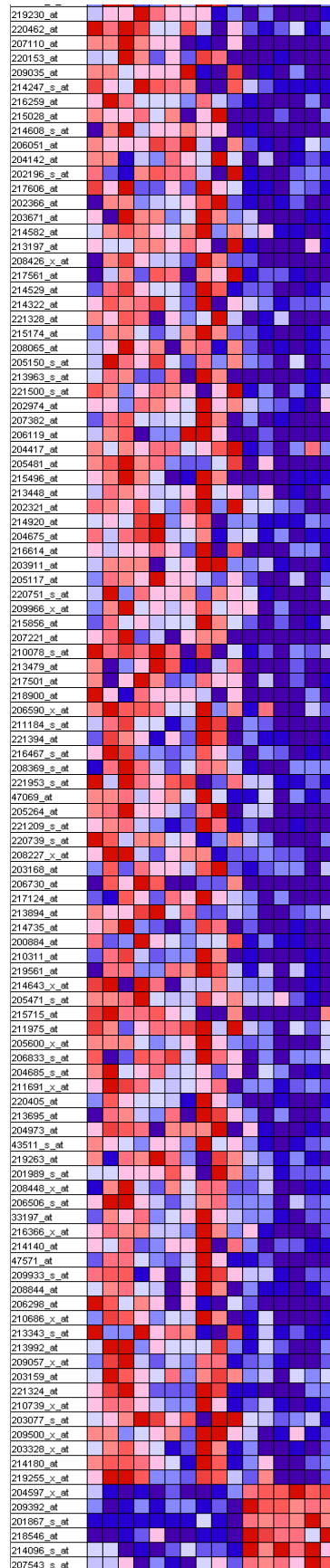


Genes that discriminate MEN2 vs. SDH tumors by supervised learning method:  
 Marker analysis for the Pheochromocytoma MEN2 vs. SDH (16 samples with 10 MEN2A, 5 SDHB, and 1 SDHD  
 Data thresholded (10 minimum and 16000 maximum) and filtered (5 fold minimum variation and 50 minimum absolute difference) (13153 features passed filter)  
 Marker analysis using mean based signal-to-noise ratio with significance evaluated with 2000 permutation

| #  | Class | Score | Feature     | Gene Name                                                                |
|----|-------|-------|-------------|--------------------------------------------------------------------------|
| 1  | MEN2  | 1.7   | 210059_s_at | mitogen-activated protein kinase 1:                                      |
| 2  | MEN2  | 1.65  | 205230_at   | likely ortholog of mouse rabphilin 3A                                    |
| 3  | MEN2  | 1.63  | 216594_x_at | aldo-keto reductase family 1, member C2                                  |
| 4  | MEN2  | 1.63  | 213348_at   | cyclin-dependent kinase inhibitor 1C (p57, Kip2                          |
| 5  | MEN2  | 1.6   | 204121_at   | growth arrest and DNA-damage-inducible, gamma                            |
| 6  | MEN2  | 1.47  | 220136_s_at | crystallin, beta A2                                                      |
| 7  | MEN2  | 1.46  | 206137_at   | regulating synaptic membrane exocytosis ;                                |
| 8  | MEN2  | 1.44  | 209160_at   | aldo-keto reductase family 1, member C3                                  |
| 9  | MEN2  | 1.44  | 213182_x_at | cyclin-dependent kinase inhibitor 1C (p57, Kip2                          |
| 10 | MEN2  | 1.44  | 210253_at   | HIV-1 Tat interactive protein 2, 30kDa                                   |
| 11 | MEN2  | 1.43  | 218985_at   | solute carrier family 2, (facilitated glucose transporter) member 1      |
| 12 | MEN2  | 1.4   | 219534_x_at | cyclin-dependent kinase inhibitor 1C (p57, Kip2                          |
| 13 | MEN2  | 1.38  | 220340_at   | hypothetical protein FLJ13687                                            |
| 14 | MEN2  | 1.37  | 201430_s_at | dihydropyrimidinase-like 3                                               |
| 15 | MEN2  | 1.36  | 215299_x_at | sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1      |
| 16 | MEN2  | 1.34  | 203423_at   | retinol binding protein 1, cellular                                      |
| 17 | MEN2  | 1.34  | 221701_s_at | hypothetical protein FLJ12541 similar to Stra1                           |
| 18 | MEN2  | 1.33  | 219619_at   | Di-Ras2                                                                  |
| 19 | MEN2  | 1.32  | 214822_at   | hypothetical protein from clone 2482f                                    |
| 20 | MEN2  | 1.31  | 215771_x_at | ret proto-oncogene                                                       |
| 21 | MEN2  | 1.31  | 206159_at   | growth differentiation factor 1C                                         |
| 22 | MEN2  | 1.28  | 216894_x_at | accession number D64137                                                  |
| 23 | MEN2  | 1.28  | 207468_s_at | secreted frizzled-related protein 5                                      |
| 24 | MEN2  | 1.27  | 206849_at   | gamma-aminobutyric acid (GABA) A receptor, gamma 2                       |
| 25 | MEN2  | 1.26  | 205879_x_at | ret proto-oncogene                                                       |
| 26 | MEN2  | 1.24  | 218251_at   | hypothetical protein STRAIT1149f                                         |
| 27 | MEN2  | 1.24  | 221226_s_at | putative acid-sensing ion channel                                        |
| 28 | MEN2  | 1.23  | 219821_s_at | hypothetical protein FLJ2033f                                            |
| 29 | MEN2  | 1.23  | 212701_at   | talin 2                                                                  |
| 30 | MEN2  | 1.22  | 219250_s_at | fibronectin leucine rich transmembrane protein 1                         |
| 31 | MEN2  | 1.2   | 205579_at   | histamine receptor H1                                                    |
| 32 | MEN2  | 1.2   | 202908_at   | Wolfram syndrome 1 (wolframin)                                           |
| 33 | MEN2  | 1.19  | 200965_s_at | actin binding LIM protein 1                                              |
| 34 | MEN2  | 1.19  | 209883_at   | chromosome 1 open reading frame 17                                       |
| 35 | MEN2  | 1.17  | 219222_at   | ribokinase                                                               |
| 36 | MEN2  | 1.17  | 214046_at   | Homo sapiens mRNA; cDNA DKFZp686F1844 (from clone DKFZp686F1844          |
| 37 | MEN2  | 1.16  | 209448_at   | HIV-1 Tat interactive protein 2, 30kDa                                   |
| 38 | MEN2  | 1.16  | 207770_x_at | chorionic somatomammotropin hormone 2                                    |
| 39 | MEN2  | 1.15  | 202308_at   | sterol regulatory element binding transcription factor 1                 |
| 40 | MEN2  | 1.15  | 207981_s_at | estrogen-related receptor gamma                                          |
| 41 | MEN2  | 1.14  | 202597_at   | ESTs                                                                     |
| 42 | MEN2  | 1.13  | 210058_at   | mitogen-activated protein kinase 1:                                      |
| 43 | MEN2  | 1.12  | 203010_at   | signal transducer and activator of transcription 5f                      |
| 44 | MEN2  | 1.12  | 211421_s_at | ret proto-oncogene                                                       |
| 45 | MEN2  | 1.12  | 49679_s_at  | matrix metalloproteinase 24 (membrane-inserted)                          |
| 46 | MEN2  | 1.11  | 219806_s_at | FN5 protein                                                              |
| 47 | MEN2  | 1.11  | 205775_at   | DNA segment on chromosome 6(unique) 2654 expressed sequence              |
| 48 | MEN2  | 1.11  | 204400_at   | signal transduction protein (SH3 containing                              |
| 49 | MEN2  | 1.1   | 207260_at   | FEV protein                                                              |
| 50 | MEN2  | 1.08  | 204041_at   | monoamine oxidase B                                                      |
| 51 | MEN2  | 1.08  | 213183_s_at | cyclin-dependent kinase inhibitor 1C (p57, Kip2                          |
| 52 | MEN2  | 1.07  | 202718_at   | insulin-like growth factor binding protein 2, 36kDa                      |
| 53 | MEN2  | 1.07  | 218545_at   | hypothetical protein FLJ1108f                                            |
| 54 | MEN2  | 1.07  | 216938_x_at | dopamine receptor D2                                                     |
| 55 | MEN2  | 1.06  | 206478_at   | KIAA0125 gene product                                                    |
| 56 | MEN2  | 1.06  | 217118_s_at | KIAA0930 protein                                                         |
| 57 | MEN2  | 1.06  | 219143_s_at | hypothetical protein FLJ2037f                                            |
| 58 | MEN2  | 1.06  | 219463_at   | chromosome 20 open reading frame 103                                     |
| 59 | MEN2  | 1.05  | 207180_s_at | HIV-1 Tat interactive protein 2, 30kDa                                   |
| 60 | MEN2  | 1.05  | 215411_s_at | chromosome 6 open reading frame 4                                        |
| 61 | MEN2  | 1.04  | 220227_at   | hypothetical protein FLJ2220f                                            |
| 62 | MEN2  | 1.04  | 208404_x_at | potassium inwardly-rectifying channel, subfamily J, member 1             |
| 63 | MEN2  | 1.04  | 207240_s_at | luteinizing hormone/choriogonadotropin receptor                          |
| 64 | MEN2  | 1.03  | 218552_at   | hypothetical protein FLJ1094f                                            |
| 65 | MEN2  | 1.03  | 206793_at   | phenylethanolamine N-methyltransferase                                   |
| 66 | MEN2  | 1.03  | 205766_at   | titin-cap (telethonin)                                                   |
| 67 | MEN2  | 1.01  | 212240_s_at | phosphoinositide-3-kinase, regulatory subunit, polypeptide 1 (p85 alpha  |
| 68 | MEN2  | 1.01  | 204067_at   | sulfite oxidase                                                          |
| 69 | MEN2  | 1.01  | 213307_at   | SH3 and multiple ankyrin repeat domains 2                                |
| 70 | MEN2  | 1.01  | 222043_at   | clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2 |
| 71 | MEN2  | 1     | 205518_s_at | cytidine monophosphate-N-acetylneuraminic acid hydroxylase               |
| 72 | MEN2  | 1     | 208121_s_at | accession number NM_002848.2                                             |
| 73 | MEN2  | 0.99  | 219572_at   | hypothetical protein FLJ2076f                                            |
| 74 | MEN2  | 0.98  | 205575_at   | C1q-related factor                                                       |
| 75 | MEN2  | 0.98  | 204151_x_at | aldo-keto reductase family 1, member C1                                  |
| 76 | MEN2  | 0.98  | 218168_s_at | chaperone, ABC1 activity of bc1 complex like (S. pombe                   |
| 77 | MEN2  | 0.97  | 211653_x_at | aldo-keto reductase family 1, member C2                                  |
| 78 | MEN2  | 0.97  | 201990_s_at | cAMP responsive element binding protein-like 1                           |
| 79 | MEN2  | 0.97  | 221861_at   | Homo sapiens mRNA; cDNA DKFZp762M127 (from clone DKFZp762M127            |
| 80 | MEN2  | 0.97  | 219310_at   | chromosome 20 open reading frame 3f                                      |
| 81 | MEN2  | 0.97  | 219945_at   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 2f                          |
| 82 | MEN2  | 0.96  | 213572_s_at | serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member   |
| 83 | MEN2  | 0.96  | 203962_s_at | nebulectin                                                               |
| 84 | MEN2  | 0.96  | 209699_x_at | aldo-keto reductase family 1, member C2                                  |
| 85 | MEN2  | 0.96  | 206189_at   | unc-5 homolog B (C. elegans)                                             |
| 86 | MEN2  | 0.96  | 205051_s_at | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog            |
| 87 | MEN2  | 0.96  | 219714_s_at | calcium channel, voltage-dependent, alpha 2/delta 3 subunit              |
| 88 | MEN2  | 0.96  | 207426_s_at | tumor necrosis factor (ligand) superfamily, member 4                     |
| 89 | MEN2  | 0.95  | 205589_at   | myosin, light polypeptide 3, alkali; ventricular, skeletal, slow         |
| 90 | MEN2  | 0.95  | 58916_at    | hypothetical protein MGC237f                                             |
| 91 | MEN2  | 0.95  | 215056_at   | Human clone 23695 mRNA sequence                                          |
| 92 | MEN2  | 0.94  | 219505_at   | cat eye syndrome chromosome region, candidate 1                          |
| 93 | MEN2  | 0.94  | 216376_x_at | accession number AC006371                                                |
| 94 | MEN2  | 0.94  | 206433_s_at | testican 3                                                               |
| 95 | MEN2  | 0.94  | 57540_at    | ribokinase                                                               |
| 96 | MEN2  | 0.94  | 207725_at   | POU domain, class 4, transcription factor 2                              |
| 97 | MEN2  | 0.94  | 206547_s_at | protein phosphatase, EF hand calcium-binding domain                      |
| 98 | MEN2  | 0.93  | 210579_s_at | tripartite motif-containing 1f                                           |

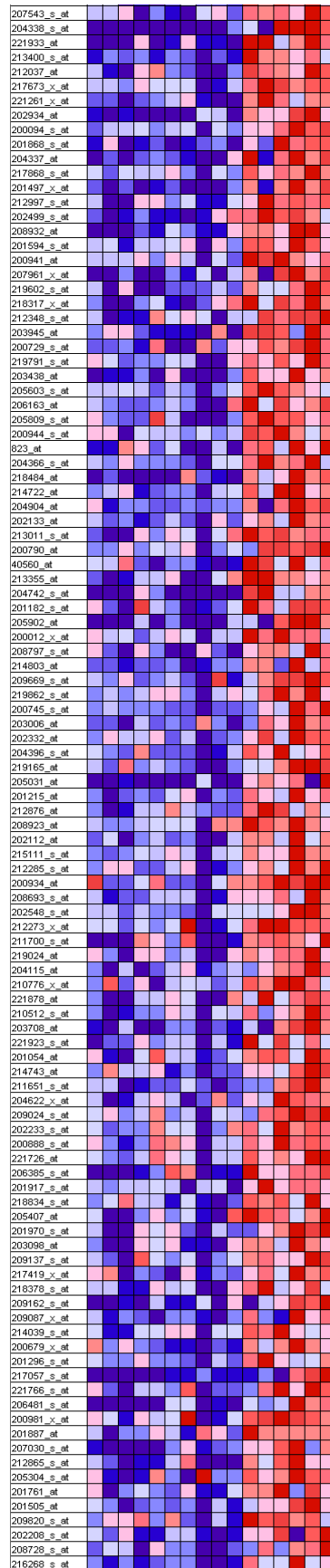


99 MEN2 0.93 219230\_at hypothetical protein FLJ10970  
100 MEN2 0.93 220462\_at hypothetical protein FLJ11703  
101 MEN2 0.93 207110\_at potassium inwardly-rectifying channel, subfamily J, member 1  
102 MEN2 0.93 220153\_at lysosomal apyrase-like protein 1  
103 MEN2 0.93 209035\_at midkine (neurite growth-promoting factor 2  
104 MEN2 0.93 214247\_s\_a dickkopf homolog 3 (Xenopus laevis  
105 MEN2 0.92 216259\_at Human clone IMAGE:35527 unknown protein mRNA, partial cd  
106 MEN2 0.92 215028\_at sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6  
107 MEN2 0.91 214608\_s\_a eyes absent homolog 1 (Drosophila)  
108 MEN2 0.91 206051\_at ELAV (embryonic lethal, abnormal vision, Drosophila)-like 4 (Hu antigen C  
109 MEN2 0.91 204142\_at rTS beta protein  
110 MEN2 0.91 202196\_s\_a dickkopf homolog 3 (Xenopus laevis  
111 MEN2 0.91 217606\_at Homo sapiens mRNA; cDNA DKFZp686P24158 (from clone DKFZp686P24158  
112 MEN2 0.9 202366\_at acyl-Coenzyme A dehydrogenase, C-2 to C-3 short chain  
113 MEN2 0.9 203671\_at thiopurine S-methyltransferase  
114 MEN2 0.9 214582\_at phosphodiesterase 3B, cGMP-inhibitec  
115 MEN2 0.9 213197\_at astroctactin  
116 MEN2 0.9 208426\_x\_a killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, <  
117 MEN2 0.9 217561\_at ESTs, Highly similar to 1005250A calcitonin gene related peptide  
118 MEN2 0.9 214529\_at thyroid stimulating hormone, beta  
119 MEN2 0.9 214322\_at calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma  
120 MEN2 0.89 221328\_at claudin 17  
121 MEN2 0.89 215174\_at ESTs, Weakly similar to FMO3\_HUMAN Dimethylaniiline monooxygenase  
122 MEN2 0.89 208065\_at sialyltransferase 8C (alpha2,3Galbeta1,4GlcNAcalpha 2,8-sialyltransferase  
123 MEN2 0.88 205150\_s\_a KIAA0644 gene produc  
124 MEN2 0.88 213963\_s\_a sin3-associated polypeptide, 30kDa  
125 MEN2 0.88 221500\_s\_a ESTs, Moderately similar to hypothetical protein FLJ20489 [Homo sapiens  
126 MEN2 0.88 202974\_at membrane protein, palmitoylated 1, 55kDa  
127 MEN2 0.88 207382\_at tumor protein p63  
128 MEN2 0.88 206119\_at betaine-homocysteine methyltransferase  
129 MEN2 0.88 204417\_at galactosylceramidase (Krabbe disease)  
130 MEN2 0.88 205481\_at adenosine A1 receptor  
131 MEN2 0.88 215496\_at KIAA1053 protein  
132 MEN2 0.87 213448\_at Homo sapiens cDNA FLJ31688 fis, clone NT2R1200552  
133 MEN2 0.87 202321\_at geranylgeranyl diphosphate synthase  
134 MEN2 0.87 214920\_at Homo sapiens cDNA FLJ11022 fis, clone PLACE100377  
135 MEN2 0.87 204675\_at steroid-5-alpha-reductase, alpha polypeptide 1  
136 MEN2 0.87 216614\_at Homo sapiens mRNA; cDNA DKFZp564F212 (from clone DKFZp564F212  
137 MEN2 0.87 203911\_at RAP1, GTPase activating protein 1  
138 MEN2 0.87 205117\_at fibroblast growth factor 1 (acidic)  
139 MEN2 0.87 220751\_s\_a chromosome 5 open reading frame 4  
140 MEN2 0.86 209966\_x\_a estrogen-related receptor gamma  
141 MEN2 0.86 215856\_at Homo sapiens cDNA FLJ38113 fis, clone D3OST200241  
142 MEN2 0.86 207221\_at coagulation factor II (thrombin) receptor-like  
143 MEN2 0.86 210078\_s\_a potassium voltage-gated channel, shaker-related subfamily, beta member  
144 MEN2 0.86 213479\_at neuronal pentraxin I  
145 MEN2 0.86 217501\_at WD40 protein C101  
146 MEN2 0.86 218900\_at cyclin M4  
147 MEN2 0.85 206590\_x\_a dopamine receptor D2  
148 MEN2 0.85 211184\_s\_a PDZ-73 protein  
149 MEN2 0.85 221394\_at G protein-coupled receptor 58  
150 MEN2 0.85 216467\_s\_a Homo sapiens mRNA; cDNA DKFZp564L102 (from clone DKFZp564L102  
151 MEN2 0.85 208369\_s\_a glutaryl-Coenzyme A dehydrogenase  
152 MEN2 0.85 221953\_s\_a matrix metalloproteinase 24 (membrane-inserted)  
153 MEN2 0.85 47069\_at Rho GTPase activating protein 1  
154 MEN2 0.85 205264\_at CD3-epsilon-associated protein; antisense to ERCC-1  
155 MEN2 0.85 221209\_s\_a otoraplin  
156 MEN2 0.85 220739\_s\_a cyclin M3  
157 MEN2 0.85 208227\_x\_a a disintegrin and metalloproteinase domain 2  
158 MEN2 0.85 203168\_at cAMP responsive element binding protein-like  
159 MEN2 0.85 206730\_at glutamate receptor, ionotropic, AMPA  
160 MEN2 0.84 217124\_at hypothetical protein DKFZp434P121f  
161 MEN2 0.84 213894\_at KIAA0960 protein  
162 MEN2 0.84 214735\_at phosphoinositide-binding protein PIP3-1  
163 MEN2 0.84 200884\_at creatine kinase, brain  
164 MEN2 0.84 210311\_at fibroblast growth factor 5  
165 MEN2 0.84 219561\_at COP22 for nonclathrin coat protein zeta-COF  
166 MEN2 0.84 214643\_x\_a bridging integrator 1  
167 MEN2 0.83 205471\_s\_a dachshund homolog (Drosophila  
168 MEN2 0.83 215715\_at solute carrier family 6 (neurotransmitter transporter, noradrenalin), member  
169 MEN2 0.83 211975\_at zinc finger protein 289, ID1 regulatec  
170 MEN2 0.83 205600\_x\_a homeo box B5  
171 MEN2 0.83 206833\_s\_a acylphosphatase 2, muscle type  
172 MEN2 0.83 204685\_s\_a ATPase, Ca++ transporting, plasma membrane  
173 MEN2 0.83 211691\_x\_a accession number AF293339.1  
174 MEN2 0.83 220405\_at syntrophin, gamma 1  
175 MEN2 0.83 213695\_at paraoxonase 3  
176 MEN2 0.83 204973\_at gap junction protein, beta 1, 32kDa (connexin 32  
177 MEN2 0.83 43511\_s\_at Homo sapiens mRNA; cDNA DKFZp762M127 (from clone DKFZp762M127  
178 MEN2 0.83 219263\_at hypothetical protein FLJ2351f  
179 MEN2 0.83 201989\_s\_a cAMP responsive element binding protein-like  
180 MEN2 0.82 208448\_x\_a interferon, alpha 1f  
181 MEN2 0.82 206506\_s\_a suppressor of Ty 3 homolog (S. cerevisiae)  
182 MEN2 0.82 33197\_at myosin VIIA (Usher syndrome 1B (autosomal recessive, severe)  
183 MEN2 0.82 216366\_x\_a accession number AF047245.1  
184 MEN2 0.82 214140\_at hypothetical protein MGC39851  
185 MEN2 0.82 47571\_at zinc finger protein 236  
186 MEN2 0.82 209933\_s\_a leukocyte membrane antigen  
187 MEN2 0.82 208844\_at voltage-dependent anion channel  
188 MEN2 0.81 206298\_at hypothetical protein from clones 23549 and 2376  
189 MEN2 0.81 210686\_x\_a solute carrier family 25 (mitochondrial carrier), member 1f  
190 MEN2 0.81 213343\_s\_a hypothetical protein PPI66f  
191 MEN2 0.81 213992\_at collagen, type IV, alpha 1  
192 MEN2 0.81 209057\_x\_a CDC5 cell division cycle 5-like (S. pombe)  
193 MEN2 0.81 203159\_at glutaminase  
194 MEN2 0.81 221324\_at taste receptor, type 2, member 1  
195 MEN2 0.81 210739\_x\_a solute carrier family 4, sodium bicarbonate cotransporter, member  
196 MEN2 0.81 203077\_s\_a MAD, mothers against decapentaplegic homolog 2 (Drosophila  
197 MEN2 0.81 209500\_x\_a tumor necrosis factor (ligand) superfamily, member 1c  
198 MEN2 0.81 203328\_x\_a insulin-degrading enzyme  
199 MEN2 0.81 214180\_at Homo sapiens mRNA; cDNA DKFZp564H203 (from clone DKFZp564H203  
200 MEN2 0.8 219255\_x\_a interleukin 17B receptor  
201 SDH 2.57 204597\_x\_a stanniocalcin 1  
202 SDH 1.96 209392\_at ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin  
203 SDH 1.73 201867\_s\_a transducin (beta)-like 1X-linker  
204 SDH 1.68 218546\_at hypothetical protein FLJ1414f  
205 SDH 1.47 214096\_s\_a serine hydroxymethyltransferase 2 (mitochondrial

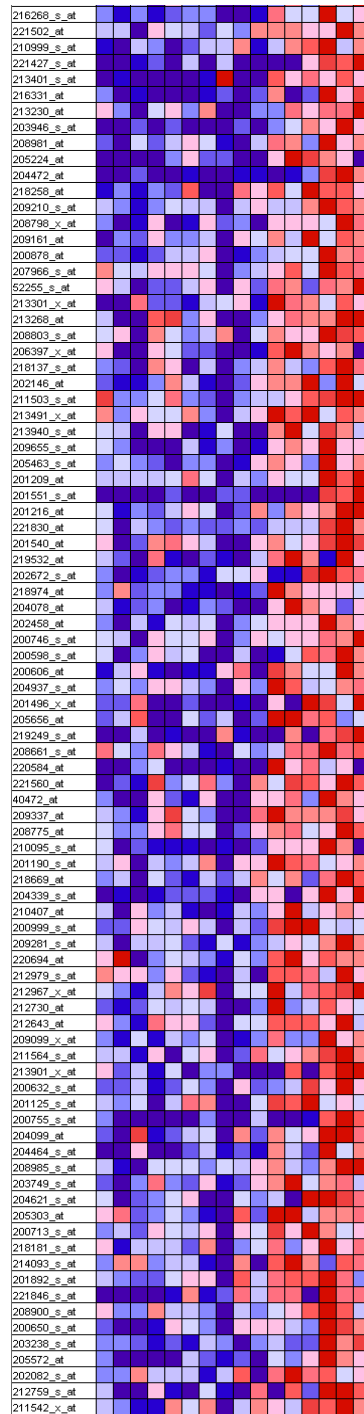




206 SDH 1.32 207543\_s\_a procollagen-proline, 2-oxoglutarate 4-dioxygenase alpha polypeptide  
 207 SDH 1.31 204338\_s\_a regulator of G-protein signalling 4  
 208 SDH 1.29 221933\_at neuruligin  
 209 SDH 1.28 213400\_s\_a transducin (beta)-like 1X-linker  
 210 SDH 1.25 212037\_at pinin, desmosome associated protein  
 211 SDH 1.23 217673\_x\_a accession number AA65055f  
 212 SDH 1.22 221261\_x\_a MAGE-E1 protein  
 213 SDH 1.21 202934\_at hexokinase 2  
 214 SDH 1.21 200094\_s\_a eukaryotic translation elongation factor 1  
 215 SDH 1.21 201868\_s\_a transducin (beta)-like 1X-linker  
 216 SDH 1.2 204337\_at regulator of G-protein signalling 4  
 217 SDH 1.19 217868\_s\_a CGI-81 protein  
 218 SDH 1.18 201497\_x\_a myosin, heavy polypeptide 11, smooth muscle  
 219 SDH 1.17 212997\_s\_a tousled-like kinase 2  
 220 SDH 1.16 202499\_s\_a solute carrier family 2 (facilitated glucose transporter), member 2  
 221 SDH 1.16 208932\_at protein phosphatase 4 (formerly X), catalytic subunit  
 222 SDH 1.14 201594\_s\_a protein phosphatase 4, regulatory subunit 1  
 223 SDH 1.14 200941\_at heat shock factor binding protein 1  
 224 SDH 1.13 207961\_x\_a myosin, heavy polypeptide 11, smooth muscle  
 225 SDH 1.13 219602\_s\_a hypothetical protein FLJ23403  
 226 SDH 1.12 218317\_x\_a hypothetical protein MGC517f  
 227 SDH 1.09 212348\_s\_a KIAA0601 protein  
 228 SDH 1.08 203945\_at arginase, type II  
 229 SDH 1.08 200729\_s\_a ARP2 actin-related protein 2 homolog (yeast)  
 230 SDH 1.08 219791\_s\_a hypothetical protein FLJ1153f  
 231 SDH 1.07 203438\_at stanniocalcin 2  
 232 SDH 1.07 205603\_s\_a diaphanous homolog 2 (Drosophila)  
 233 SDH 1.07 206163\_at mab-21-like 1 (C. elegans)  
 234 SDH 1.07 205809\_s\_a Wiskott-Aldrich syndrome-like  
 235 SDH 1.07 200944\_s\_a high-mobility group nucleosome binding domain 1  
 236 SDH 1.05 823\_at chemokine (C-X3-C motif) ligand 1  
 237 SDH 1.04 204366\_s\_a general transcription factor IIC, polypeptide 2, beta 110kD  
 238 SDH 1.04 218484\_at NADH:ubiquinone oxidoreductase MLRQ subunit homolog  
 239 SDH 1.04 214722\_at ESTs, Weakly similar to hypothetical protein FLJ2037f  
 240 SDH 1.03 204904\_at gap junction protein, alpha 4, 37kDa (connexin 37)  
 241 SDH 1.02 202133\_at transcriptional co-activator with PDZ-binding motif (TAZ)  
 242 SDH 1.02 213011\_s\_a triosephosphate isomerase 1  
 243 SDH 1.01 200790\_at ornithine decarboxylase 1  
 244 SDH 1.01 40560\_at T-box 2  
 245 SDH 1.01 213355\_at alpha2,3-sialyltransferase  
 246 SDH 1 204742\_s\_a androgen-induced prostate proliferative shutdown associated protein  
 247 SDH 1 201182\_s\_a chromodomain helicase DNA binding protein 4  
 248 SDH 0.98 205902\_at potassium intermediate/small conductance calcium-activated channel, subfamily  
 249 SDH 0.97 200012\_x\_a ribosomal protein L21  
 250 SDH 0.97 208797\_s\_a golgin-67  
 251 SDH 0.96 214803\_at Homo sapiens mRNA; cDNA DKFZp564N1116 (from clone DKFZp564N1116)  
 252 SDH 0.96 209669\_s\_a PAI-1 mRNA-binding protein  
 253 SDH 0.96 219862\_s\_a nuclear prelamin A recognition factor  
 254 SDH 0.96 200745\_s\_a guanine nucleotide binding protein (G protein), beta polypeptide  
 255 SDH 0.96 203006\_at inositol polyphosphate-5-phosphatase, 40kD  
 256 SDH 0.95 202332\_at casein kinase 1, epsilon  
 257 SDH 0.95 204396\_s\_a G protein-coupled receptor kinase 3  
 258 SDH 0.95 219165\_at PDZ-LIM protein mystique  
 259 SDH 0.95 205031\_at ephrin-B3  
 260 SDH 0.94 201215\_at plastin 3 (T isoform)  
 261 SDH 0.94 212876\_at UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 4  
 262 SDH 0.94 208923\_at cytoplasmic FMR1 interacting protein 1  
 263 SDH 0.94 202112\_at von Willebrand factor  
 264 SDH 0.94 215111\_s\_a transforming growth factor beta-stimulated protein TSC-2  
 265 SDH 0.94 212285\_s\_a agrin  
 266 SDH 0.94 200934\_at DEK oncogene (DNA binding)  
 267 SDH 0.93 208693\_s\_a glycyl-tRNA synthetase  
 268 SDH 0.93 202548\_s\_a Rho guanine nucleotide exchange factor (GEF)  
 269 SDH 0.93 212273\_x\_a GNAS complex locus  
 270 SDH 0.93 211700\_s\_a trophinin  
 271 SDH 0.93 219024\_at pleckstrin homology domain containing, family A member 1  
 272 SDH 0.92 204115\_at guanine nucleotide binding protein 1  
 273 SDH 0.91 210776\_x\_a transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E4)  
 274 SDH 0.91 221878\_at Homo sapiens cDNA FLJ35653 fis, clone SPLEN201369f  
 275 SDH 0.91 210512\_s\_a vascular endothelial growth factor  
 276 SDH 0.9 203708\_at phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 duncle homolog)  
 277 SDH 0.9 221923\_s\_a nucleophosmin (nucleolar phosphoprotein B23, numatrin)  
 278 SDH 0.9 201054\_at heterogeneous nuclear ribonucleoprotein A  
 279 SDH 0.9 214743\_at cut-like 1, CCAAT displacement protein (Drosophila)  
 280 SDH 0.9 211651\_s\_a accession number M20206.1  
 281 SDH 0.89 204622\_x\_a nuclear receptor subfamily 4, group A, member 2  
 282 SDH 0.89 209024\_s\_a NS1-associated protein 1  
 283 SDH 0.89 202233\_s\_a ubiquinol-cytochrome c reductase hinge protein  
 284 SDH 0.88 200888\_s\_a ribosomal protein L23  
 285 SDH 0.88 221726\_at ribosomal protein L22  
 286 SDH 0.88 206385\_s\_a ankyrin 3, node of Ranvier (ankyrin G)  
 287 SDH 0.88 201917\_s\_a hypothetical protein FLJ1061f  
 288 SDH 0.88 218834\_s\_a hypothetical protein FLJ2053f  
 289 SDH 0.87 205407\_at reversion-inducing-cysteine-rich protein with kazal motif  
 290 SDH 0.87 201970\_s\_a nuclear autoantigenic sperm protein (histone-binding)  
 291 SDH 0.87 203098\_at chromodomain protein, Y chromosome-like  
 292 SDH 0.86 209137\_s\_a ubiquitin specific protease 1f  
 293 SDH 0.86 217419\_x\_a agrin  
 294 SDH 0.85 218378\_s\_a hypothetical protein FLJ1390f  
 295 SDH 0.85 209162\_s\_a PRP4 pre-mRNA processing factor 4 homolog (yeast)  
 296 SDH 0.85 209087\_x\_a melanoma cell adhesion molecule  
 297 SDH 0.85 214039\_s\_a putative integral membrane transporter  
 298 SDH 0.85 200679\_x\_a high-mobility group box 1  
 299 SDH 0.85 201296\_s\_a SOCS box-containing WD protein SWIP-1  
 300 SDH 0.85 217057\_s\_a accession number AF10784f  
 301 SDH 0.85 221766\_s\_a chromosome 6 open reading frame 37  
 302 SDH 0.85 206481\_s\_a LIM domain binding 2  
 303 SDH 0.84 200981\_x\_a GNAS complex locus  
 304 SDH 0.84 201887\_at interleukin 13 receptor, alpha 1  
 305 SDH 0.84 207030\_s\_a cysteine and glycine-rich protein 2  
 306 SDH 0.84 212865\_s\_a collagen, type XIV, alpha 1 (undulin)  
 307 SDH 0.84 205304\_s\_a potassium inwardly-rectifying channel, subfamily J, member 1  
 308 SDH 0.84 201761\_at methylene tetrahydrofolate dehydrogenase (NAD+ dependent)  
 309 SDH 0.84 201505\_at laminin, beta 1  
 310 SDH 0.84 209820\_s\_a transducin (beta)-like 3  
 311 SDH 0.83 202208\_s\_a ADP-ribosylation factor-like 7  
 312 SDH 0.83 208728\_s\_a cell division cycle 42 (GTP binding protein, 25kDa)



313 SDH 0.83 216268\_s\_a jagged 1 (Alagille syndrome)  
314 SDH 0.83 221502\_at karyopherin alpha 3 (importin alpha 4  
315 SDH 0.82 210999\_s\_a growth factor receptor-bound protein 1f  
316 SDH 0.82 221427\_s\_a likely ortholog of mouse Paneth cell enhanced expression  
317 SDH 0.82 213401\_s\_a transducin (beta)-like 1X-linker  
318 SDH 0.82 216331\_at integrin, alpha 7  
319 SDH 0.82 213230\_at paraneoplastic antigen  
320 SDH 0.82 203946\_s\_a arginase, type II  
321 SDH 0.82 208981\_at platelet/endothelial cell adhesion molecule (CD31 antigen  
322 SDH 0.82 205224\_at surfactant 2  
323 SDH 0.82 204472\_at GTP binding protein overexpressed in skeletal muscle  
324 SDH 0.81 218258\_at RNA polymerase I 16 kDa subunit  
325 SDH 0.81 209210\_s\_a mitogen inducible 2  
326 SDH 0.81 208798\_x\_a golgin-67  
327 SDH 0.81 209161\_at PRP4 pre-mRNA processing factor 4 homolog (yeast  
328 SDH 0.81 200878\_at Homo sapiens clone 23698 mRNA sequence  
329 SDH 0.81 207966\_s\_a golgi apparatus protein 1  
330 SDH 0.81 52255\_s\_at collagen, type V, alpha 3  
331 SDH 0.81 213301\_x\_a transcriptional intermediary factor 1  
332 SDH 0.8 213268\_at accession number 298884  
333 SDH 0.8 208803\_s\_a signal recognition particle 72kDa  
334 SDH 0.8 206397\_x\_a growth differentiation factor 1  
335 SDH 0.8 218137\_s\_a stromal membrane-associated protein  
336 SDH 0.8 202146\_at interferon-related developmental regulator 1  
337 SDH 0.8 211503\_s\_a RAB14, member RAS oncogene family  
338 SDH 0.8 213491\_x\_a ribophorin II  
339 SDH 0.8 213940\_s\_a formin-binding protein 17  
340 SDH 0.8 209655\_s\_a brain cell membrane protein 1  
341 SDH 0.8 205463\_s\_a platelet-derived growth factor alpha polypeptide  
342 SDH 0.8 201209\_at histone deacetylase 1  
343 SDH 0.8 201551\_s\_a lysosomal-associated membrane protein 1  
344 SDH 0.8 201216\_at chromosome 12 open reading frame 8  
345 SDH 0.8 221830\_at Homo sapiens cDNA FLJ37267 fis, clone BRAMY201129  
346 SDH 0.79 201540\_at four and a half LIM domains 1  
347 SDH 0.79 219532\_at elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like  
348 SDH 0.79 202672\_s\_a activating transcription factor 2  
349 SDH 0.79 218974\_at hypothetical protein FLJ1015f  
350 SDH 0.79 204078\_at nucleolar autoantigen (55kD) similar to rat synaptonemal complex protein  
351 SDH 0.79 202458\_at protease, serine, 23  
352 SDH 0.79 200746\_s\_a guanine nucleotide binding protein (G protein), beta polypeptide  
353 SDH 0.78 200598\_s\_a tumor rejection antigen (gp96) 1  
354 SDH 0.78 200606\_at desmoplakin (DPI, DP1)  
355 SDH 0.78 204937\_s\_a zinc finger protein 274  
356 SDH 0.78 201496\_x\_a myosin, heavy polypeptide 11, smooth muscle  
357 SDH 0.78 205656\_at protocadherin 17  
358 SDH 0.78 219249\_s\_a FK506 binding protein 10, 65 kDa  
359 SDH 0.77 208661\_s\_a tetratricopeptide repeat domain 3  
360 SDH 0.77 220584\_at hypothetical protein FLJ2218f  
361 SDH 0.77 221560\_at MAP/microtubule affinity-regulating kinase 1  
362 SDH 0.77 40472\_at Homo sapiens clone 23763 unknown mRNA, partial cDNA  
363 SDH 0.77 209337\_at PC4 and SFRS1 interacting protein 2  
364 SDH 0.77 208775\_at exportin 1 (CRM1 homolog, yeast)  
365 SDH 0.77 210095\_s\_a insulin-like growth factor binding protein 3  
366 SDH 0.77 201190\_s\_a phosphatidylinositol transfer protein  
367 SDH 0.77 218669\_at hypothetical protein similar to small G proteins, especially RAP-2f  
368 SDH 0.77 204339\_s\_a regulator of G-protein signalling 4  
369 SDH 0.76 210407\_at protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform  
370 SDH 0.76 200999\_s\_a cytoskeleton-associated protein 4  
371 SDH 0.76 209281\_s\_a ATPase, Ca++ transporting, plasma membrane 1  
372 SDH 0.76 220694\_at HSPC054 protein  
373 SDH 0.76 212979\_s\_a KIAA0738 gene product  
374 SDH 0.76 212967\_x\_a nucleosome assembly protein 1-like 1  
375 SDH 0.76 212730\_at desmuslin  
376 SDH 0.75 212643\_at likely ortholog of mouse MAPK-interacting and spindle-stabilizing protein  
377 SDH 0.75 209099\_x\_a jagged 1 (Alagille syndrome)  
378 SDH 0.75 211564\_s\_a LIM domain protein  
379 SDH 0.75 213901\_x\_a RNA binding motif protein 5  
380 SDH 0.75 200632\_s\_a N-myc downstream regulated gene 1  
381 SDH 0.75 201125\_s\_a integrin, beta 5  
382 SDH 0.75 200755\_s\_a calumenin  
383 SDH 0.74 204099\_at SWI/SNF related, matrix associated, regulator of chromatin, subfamily d, member 1  
384 SDH 0.74 204464\_s\_a endothelin receptor type A  
385 SDH 0.74 208985\_s\_a eukaryotic translation initiation factor 3, subunit 1, alpha, 35kDa  
386 SDH 0.74 203749\_s\_a retinoic acid receptor, alpha  
387 SDH 0.74 204621\_s\_a nuclear receptor subfamily 4, group A, member 2  
388 SDH 0.74 205303\_at potassium inwardly-rectifying channel, subfamily J, member 1  
389 SDH 0.74 200713\_s\_a microtubule-associated protein, RPIEB family, member 1  
390 SDH 0.74 218181\_s\_a hypothetical protein FLJ2037f  
391 SDH 0.74 214093\_s\_a Homo sapiens mRNA; cDNA DKFZp564O0122 (from clone DKFZp564O0122  
392 SDH 0.74 201892\_s\_a IMP (inosine monophosphate) dehydrogenase  
393 SDH 0.74 221846\_s\_a cask-interacting protein 2  
394 SDH 0.73 208900\_s\_a topoisomerase (DNA) I  
395 SDH 0.73 200650\_s\_a lactate dehydrogenase A  
396 SDH 0.73 203238\_s\_a Notch homolog 3 (Drosophila)  
397 SDH 0.73 205572\_at angiotensinogen 2  
398 SDH 0.73 202082\_s\_a SEC14-like 1 (S. cerevisiae)  
399 SDH 0.73 212759\_s\_a transcription factor 7-like 2 (T-cell specific, HMG-box  
400 SDH 0.73 211542\_x\_a ribosomal protein S10



Application of the two-class prediction models to a test set made up of the entire dataset

| MEN2 vs. VHL model |           | MEN2 vs. SDH model |           | FPT vs. VHL model |           | FPT vs. SDH model |           | Observed | Cluster men |
|--------------------|-----------|--------------------|-----------|-------------------|-----------|-------------------|-----------|----------|-------------|
| Sample             | Predicted | Sample             | Predicted | Sample            | Predicted | Sample            | Predicted |          |             |
| P101               | VHL       | P101               | SDH       | P101              | VHL       | P101              | SDH       | B_SDHB   | 1           |
| P103               | MEN2      | P103               | MEN2      | P103              | FPT       | P103              | FPT       | MEN2A    | 2           |
| P105               | MEN2      | P105               | MEN2      | P105              | FPT       | P105              | FPT       | SPOR     | 2           |
| P106               | MEN2      | P106               | MEN2      | P106              | FPT       | P106              | FPT       | MEN2A    | 2           |
| P107               | VHL       | P107               | SDH       | P107              | VHL       | P107              | SDH       | B_SDHB   | 1           |
| P108               | MEN2      | P108               | MEN2      | P108              | FPT       | P108              | FPT       | SPOR     | 2           |
| P111               | MEN2      | P111               | MEN2      | P111              | FPT       | P111              | FPT       | SPOR     | 2           |
| P112               | VHL       | P112               | MEN2      | P112              | FPT       | P112              | FPT       | SPOR     | 2           |
| P115               | MEN2      | P115               | MEN2      | P115              | FPT       | P115              | FPT       | MEN2A    | 2           |
| P120               | VHL       | P120               | SDH       | P120              | VHL       | P120              | SDH       | SPOR     | 1           |
| P122               | MEN2      | P122               | MEN2      | P122              | FPT       | P122              | FPT       | SPOR     | 2           |
| P128               | VHL       | P128               | MEN2      | P128              | VHL       | P128              | SDH       | SPOR     | 1           |
| P136               | VHL       | P136               | SDH       | P136              | VHL       | P136              | SDH       | B_SDHB   | 1           |
| P140               | VHL       | P140               | SDH       | P140              | VHL       | P140              | SDH       | D_SDHD   | 1           |
| P142               | VHL       | P142               | SDH       | P142              | VHL       | P142              | SDH       | VHL      | 1           |
| P143               | MEN2      | P143               | MEN2      | P143              | FPT       | P143              | FPT       | NF1      | 2           |
| P144               | VHL       | P144               | SDH       | P144              | VHL       | P144              | FPT       | SPOR     | 2           |
| P145               | MEN2      | P145               | MEN2      | P145              | FPT       | P145              | FPT       | FP2      | 2           |
| P146               | MEN2      | P146               | MEN2      | P146              | FPT       | P146              | FPT       | SPOR     | 2           |
| P148               | MEN2      | P148               | MEN2      | P148              | FPT       | P148              | FPT       | SPOR     | 2           |
| P149               | MEN2      | P149               | MEN2      | P149              | FPT       | P149              | FPT       | FP2      | 2           |
| P150               | MEN2      | P150               | MEN2      | P150              | FPT       | P150              | FPT       | SPOR     | 2           |
| P152               | VHL       | P152               | SDH       | P152              | VHL       | P152              | SDH       | FP3      | 1           |
| P153               | VHL       | P153               | SDH       | P153              | VHL       | P153              | SDH       | VHL      | 1           |
| P154               | VHL       | P154               | SDH       | P154              | VHL       | P154              | SDH       | VHL      | 1           |
| P155               | VHL       | P155               | MEN2      | P155              | VHL       | P155              | SDH       | VHL      | 1           |
| P156               | VHL       | P156               | SDH       | P156              | VHL       | P156              | SDH       | VHL      | 1           |
| P157               | MEN2      | P157               | MEN2      | P157              | VHL       | P157              | FPT       | SPOR     | 2           |
| P158               | VHL       | P158               | SDH       | P158              | VHL       | P158              | SDH       | SPOR     | 1           |
| P16                | VHL       | P16                | SDH       | P16               | VHL       | P16               | SDH       | SPOR     | 1           |
| P166               | MEN2      | P166               | MEN2      | P166              | FPT       | P166              | FPT       | SPOR     | 2           |
| P167               | MEN2      | P167               | MEN2      | P167              | FPT       | P167              | FPT       | NF1      | 2           |
| P171               | MEN2      | P171               | MEN2      | P171              | FPT       | P171              | FPT       | FP1      | 2           |
| P172               | MEN2      | P172               | MEN2      | P172              | FPT       | P172              | FPT       | SPOR     | 2           |
| P173               | MEN2      | P173               | MEN2      | P173              | FPT       | P173              | FPT       | SPOR     | 2           |
| P174               | MEN2      | P174               | MEN2      | P174              | FPT       | P174              | FPT       | SPOR     | 2           |
| P175               | MEN2      | P175               | MEN2      | P175              | VHL       | P175              | FPT       | SPOR     | 2           |
| P176               | MEN2      | P176               | MEN2      | P176              | FPT       | P176              | FPT       | SPOR     | 2           |
| P177               | MEN2      | P177               | MEN2      | P177              | FPT       | P177              | FPT       | SPOR     | 2           |
| P178               | MEN2      | P178               | MEN2      | P178              | FPT       | P178              | FPT       | SPOR     | 2           |
| P181               | MEN2      | P181               | MEN2      | P181              | FPT       | P181              | FPT       | SPOR     | 2           |
| P182               | MEN2      | P182               | MEN2      | P182              | FPT       | P182              | FPT       | MEN2A    | 2           |
| P188               | MEN2      | P188               | MEN2      | P188              | FPT       | P188              | FPT       | SPOR     | 2           |
| P192               | VHL       | P192               | MEN2      | P192              | VHL       | P192              | SDH       | VHL      | 1           |
| P195               | MEN2      | P195               | MEN2      | P195              | FPT       | P195              | FPT       | FP2      | 2           |
| P196               | MEN2      | P196               | MEN2      | P196              | FPT       | P196              | FPT       | FP4      | 2           |
| P197               | MEN2      | P197               | MEN2      | P197              | FPT       | P197              | FPT       | FP4      | 2           |
| P198               | MEN2      | P198               | MEN2      | P198              | FPT       | P198              | FPT       | MEN2A    | 2           |
| P203               | VHL       | P203               | SDH       | P203              | VHL       | P203              | FPT       | SPOR     | 1           |
| P204               | MEN2      | P204               | MEN2      | P204              | FPT       | P204              | FPT       | SPOR     | 2           |
| P205               | MEN2      | P205               | MEN2      | P205              | FPT       | P205              | FPT       | MEN2A    | 2           |
| P207               | MEN2      | P207               | MEN2      | P207              | FPT       | P207              | FPT       | MEN2A    | 2           |
| P208               | VHL       | P208               | SDH       | P208              | VHL       | P208              | SDH       | SPOR     | 2           |
| P209               | VHL       | P209               | SDH       | P209              | VHL       | P209              | SDH       | SPOR     | 2           |
| P210               | MEN2      | P210               | MEN2      | P210              | FPT       | P210              | FPT       | MEN2A    | 2           |
| P215               | MEN2      | P215               | MEN2      | P215              | FPT       | P215              | FPT       | FP5      | 2           |
| P216               | MEN2      | P216               | SDH       | P216              | FPT       | P216              | SDH       | SPOR     | 1           |
| P218               | MEN2      | P218               | MEN2      | P218              | FPT       | P218              | FPT       | SPOR     | 2           |
| P219               | VHL       | P219               | SDH       | P219              | VHL       | P219              | SDH       | SPOR     | 1           |
| P220               | VHL       | P220               | SDH       | P220              | VHL       | P220              | SDH       | FP7      | 1           |
| P26                | MEN2      | P26                | MEN2      | P26               | FPT       | P26               | FPT       | FP1      | 2           |
| P27                | MEN2      | P27                | MEN2      | P27               | FPT       | P27               | FPT       | FP1      | 2           |
| P29                | VHL       | P29                | MEN2      | P29               | FPT       | P29               | FPT       | FP1      | 2           |
| P37                | VHL       | P37                | SDH       | P37               | VHL       | P37               | SDH       | SPOR     | 1           |
| P54                | MEN2      | P54                | MEN2      | P54               | FPT       | P54               | FPT       | SPOR     | 2           |
| P55                | MEN2      | P55                | MEN2      | P55               | FPT       | P55               | FPT       | SPOR     | 2           |
| P56                | MEN2      | P56                | MEN2      | P56               | FPT       | P56               | FPT       | SPOR     | 2           |
| P58                | VHL       | P58                | SDH       | P58               | VHL       | P58               | SDH       | B_SDHB   | 1           |
| P61                | MEN2      | P61                | MEN2      | P61               | FPT       | P61               | FPT       | MEN2A    | 2           |
| P76                | VHL       | P76                | MEN2      | P76               | FPT       | P76               | FPT       | FP6      | 2           |
| P85                | VHL       | P85                | SDH       | P85               | VHL       | P85               | SDH       | SPOR     | 1           |
| P87                | MEN2      | P87                | MEN2      | P87               | FPT       | P87               | FPT       | SPOR     | 2           |
| P89                | VHL       | P89                | SDH       | P89               | VHL       | P89               | SDH       | B_SDHB   | 1           |
| P91                | MEN2      | P91                | MEN2      | P91               | FPT       | P91               | FPT       | MEN2A    | 2           |
| P92                | VHL       | P92                | SDH       | P92               | VHL       | P92               | SDH       | FP3      | 1           |
| P93                | VHL       | P93                | SDH       | P93               | VHL       | P93               | SDH       | FP3      | 1           |
| % correct          |           | 92%                |           | 93%               |           | 93%               |           | 95%      |             |

Yellow highlight=incorrect predictions