| VKORC1 ${ }^{\text { }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VKORC1 |  |  |  | Material Source |  |  |  |  |
| Genotype ${ }^{3}$ | Haplotype ${ }^{4}$ | Allele 1 | Allele 2 | Cell Bank | Human Variation Panel | Cell Line Number | DNA Number | Characterization ${ }^{2}$ <br> Methods (\# labs) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17201 | NA17201 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17202 | NA17202 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17203 | NA17203 | sequence (2) |
| AA | AA | $-1639 \mathrm{G}>\mathrm{A}$ | $-1639 G>A$ | Coriell | HD100CAU | GM17204 | NA17204 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17205 | NA17205 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17206 | NA17206 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17207 | NA17207 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17208 | NA17208 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17209 | NA17209 | sequence (2) |
| AA | AA | $-1639 \mathrm{G}>\mathrm{A}$ | $-1639 G>A$ | Coriell | HD100CAU | GM17210 | NA17210 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17211 | NA17211 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17212 | NA17212 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17213 | NA17213 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17214 | NA17214 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17215 | NA17215 | sequence (2) |
| AA | AA | $-1639 G>A$ | -1639G>A | Coriell | HD100CAU | GM17216 | NA17216 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17217 | NA17217 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17218 | NA17218 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17219 | NA17219 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17220 | NA17220 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17221 | NA17221 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17222 | NA17222 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17223 | NA17223 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17224 | NA17224 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17225 | NA17225 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17226 | NA17226 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17227 | NA17227 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17228 | NA17228 | sequence (2) |
| AA | AA | $-1639 \mathrm{G}>\mathrm{A}$ | -1639G>A | Coriell | HD100CAU | GM17229 | NA17229 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17230 | NA17230 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17231 | NA17231 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17232 | NA17232 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17233 | NA17233 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17234 | NA17234 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17235 | NA17235 | sequence (1) |
| GG | BB |  |  | Coriell | HD100CAU | GM17236 | NA17236 | sequence (2) |
| AA | AA | $-1639 \mathrm{G}>\mathrm{A}$ | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17237 | NA17237 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17238 | NA17238 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17239 | NA17239 | sequence (2) |
| AA | AA | $-1639 \mathrm{G}>\mathrm{A}$ | -1639G>A | Coriell | HD100CAU | GM17240 | NA17240 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17241 | NA17241 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17242 | NA17242 | sequence (2) |
| AA | AA | $-1639 G>A$ | -1639G>A | Coriell | HD100CAU | GM17243 | NA17243 | sequence (2) |
| AA | AA | $-1639 G>A$ | -1639G>A | Coriell | HD100CAU | GM17244 | NA17244 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17245 | NA17245 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17246 | NA17246 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17247 | NA17247 | sequence (2) |


| VKORC1 |  |  |  | Material Source |  |  |  | Characterization ${ }^{2}$ <br> Methods (\# labs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Genotype ${ }^{3}$ | Haplotype ${ }^{4}$ | Allele 1 | Allele 2 | Cell Bank | Human Variation Panel | Cell Line Number | DNA Number |  |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17249 | NA17249 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17250 | NA17250 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17251 | NA17251 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17252 | NA17252 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17253 | NA17253 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17254 | NA17254 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17525 | NA17255 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17526 | NA17256 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17257 | NA17257 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17258 | NA17258 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17259 | NA17259 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17260 | NA17260 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17261 | NA17261 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17262 | NA17262 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17263 | NA17263 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17264 | NA17264 | sequence (2) |
| AA | AA | $-1639 G>A$ | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17265 | NA17265 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17266 | NA17266 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17267 | NA17267 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17268 | NA17268 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17269 | NA17269 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17270 | NA17270 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17271 | NA17271 | sequence (2) |
| AA | AA | -1639G>A | -1639G>A | Coriell | HD100CAU | GM17272 | NA17272 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17273 | NA17273 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17274 | NA17274 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17275 | NA17275 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17276 | NA17276 | sequence (2) |
| AA | AA | $-1639 G>A$ | -1639G>A | Coriell | HD100CAU | GM17277 | NA17277 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17278 | NA17278 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17279 | NA17279 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17280 | NA17280 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17281 | NA17281 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17282 | NA17282 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17283 | NA17283 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17284 | NA17284 | sequence (2) |
| AA | AA | $-1639 G>A$ | $-1639 G>A$ | Coriell | HD100CAU | GM17285 | NA17285 | sequence (1) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17286 | NA17286 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17287 | NA17287 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17288 | NA17288 | sequence (2) |
| AA | AA | -1639G>A | -1639G>A | Coriell | HD100CAU | GM17289 | NA17289 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17290 | NA17290 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17291 | NA17291 | sequence (2) |
| GA | BA |  | -1639G>A | Coriell | HD100CAU | GM17292 | NA17292 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17293 | NA17293 | sequence (2) |
| GG | BB |  |  | Coriell | HD100CAU | GM17294 | NA17294 | sequence (2) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | HD100CAU | GM17295 | NA17295 | sequence (2) |
| GA | BA |  | $-1639 G>A$ | Coriell | HD100CAU | GM17296 | NA17296 | sequence (1) |


| VKORC1 |  |  |  | Material Source |  |  |  | Characterization ${ }^{2}$ <br> Methods (\# labs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Genotype ${ }^{3}$ | Haplotype ${ }^{4}$ | Allele 1 | Allele 2 | Cell Bank | Variation Panel | Cell Line Number | DNA Number |  |
| AA | AA | -1639G>A | -1639G>A | Coriell | EUR-CAU24 | GM12547 | NA12547 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM10845 | NA10845 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | EUR-CAU24 | GM10853 | NA10853 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | EUR-CAU24 | GM10860 | NA10860 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | EUR-CAU24 | GM10830 | NA10830 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM10842 | NA10842 | sequence (1) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | EUR-CAU24 | GM10851 | NA10851 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | EUR-CAU24 | GM07349 | NA07349 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM10857 | NA10857 | sequence (1) |
| AA | AA | -1639G>A | -1639G>A | Coriell | EUR-CAU24 | GM10858 | NA10858 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM10848 | NA10848 | sequence (1) |
| GA | BA |  | $-1639 G>A$ | Coriell | EUR-CAU24 | GM10844 | NA10844 | sequence (1) |
| GA | BA |  | $-1639 G>A$ | Coriell | EUR-CAU24 | GM10854 | NA10854 | sequence (1) |
| GA | BA |  | $-1639 G>A$ | Coriell | EUR-CAU24 | GM10861 | NA10861 | sequence (1) |
| AA | AA | -1639G>A | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | EUR-CAU24 | GM10831 | NA10831 | sequence (1) |
| AA | AA | $-1639 G>A$ | $-1639 G>A$ | Coriell | EUR-CAU24 | GM10843 | NA10843 | sequence (1) |
| GA | BA |  | $-1639 \mathrm{G}>\mathrm{A}$ | Coriell | EUR-CAU24 | GM10850 | NA10850 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM07348 | NA07348 | sequence (1) |
| GA | BA |  | -1639G>A | Coriell | EUR-CAU24 | GM10852 | NA10852 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM06990 | NA06990 | sequence (1) |
| GG | BB |  |  | Coriell | EUR-CAU24 | GM07019 | NA07019 | sequence (1) |
| $\begin{aligned} & { }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \\ & \hline \end{aligned}$ | BB | 3730G>A | 3730G>A | ParagonDx |  |  | 004-GGCCAA | $\begin{gathered} \text { sequence (1), Real } \\ \text { Time } \text { PCR }^{6}(1) \\ \hline \end{gathered}$ |
| $\begin{aligned} & \hline{ }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \\ & \hline \end{aligned}$ | BB |  | 3730G>A | ParagonDx |  |  | 004-GGCCGA | sequence (1), Real Time PCR ${ }^{6}$ (1) |
| $\begin{aligned} & { }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \end{aligned}$ | BB |  |  | ParagonDx |  |  | 004-GGCCGG | $\begin{gathered} \text { sequence (1), Real } \\ \text { Time PCR }{ }^{6}(1) \\ \hline \end{gathered}$ |
| $\begin{aligned} & \hline{ }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \\ & \hline \end{aligned}$ | AB |  | $\begin{gathered} -1639 G>A ; \\ 1173 C>T \end{gathered}$ | ParagonDx |  |  | 004-GACTGG | $\begin{gathered} \text { sequence (1), Real } \\ \text { Time } \text { PCR }^{6}(1) \\ \hline \end{gathered}$ |
| $\begin{aligned} & { }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \\ & \hline \end{aligned}$ | AA | $\begin{array}{\|c\|} \hline-1639 G>A ; \\ 1173 C>T \end{array}$ | $\begin{gathered} -1639 G>A ; \\ 1173 C>T \end{gathered}$ | ParagonDx |  |  | 004-AATTGG | $\begin{gathered} \text { sequence (1), Real } \\ \text { Time } \text { PCR }^{6}(1) \\ \hline \end{gathered}$ |
| $\begin{aligned} & { }^{5} \mathrm{GG} \\ & \mathrm{CC} \\ & \mathrm{AA} \end{aligned}$ | AB | $\begin{array}{\|c\|} \hline-1639 G>A ; \\ \text { 1173C }>\mathrm{T} ; \\ 3730 \mathrm{G}>\mathrm{A} \end{array}$ | $\begin{gathered} -1639 G>A ; \\ \text { 1173C>T; } \\ 3730 G>A \end{gathered}$ | ParagonDx |  |  | 004-GACTGA | sequence (1), Real Time $\mathrm{PCR}^{6}$ (1) |
|  |  |  |  |  |  |  |  | last updated 02-25-200 |

${ }^{1}$ Information provided with permission from Institute of Biomedical Sciences, Academia Sinica, Taiwan; Dept. of Genome Sciences, University of Washington, Seattle, WA
${ }^{2}$ Yuan H-Y et al. 2005 Human Molecular Genetics 14:1745, Rieder et al. 2005 New England Journal of Medicine 352:2287.
${ }^{3} \mathrm{G}=-1639 \mathrm{G} ; \mathrm{A}=-1639 \mathrm{G}>\mathrm{A}, \mathrm{rs} 1787836$
${ }^{4}$ Haplotype A $(\mathrm{H} 1, \mathrm{H} 2)$ defined by -1639 A allele and Haplotype B (H7, H8, H9) defined by -1639 G allele as reported by Reider et al. 2005 NEJM 352:2285-2293.
${ }^{5}$ Genotypes presented for polymorphisms -1639G>A, $+1173 C>T$, and $+3730 G>A$, respectively.
${ }^{6}$ Only $1173 \mathrm{C}>$ T and $3730 \mathrm{G}>\mathrm{A}$ SNPs tested using Real-time PCR.

