class05.R

dtong

2019-10-17

# Class5 Data Visualization  
x <- rnorm(1000)  
# some summary stats  
mean(x)

## [1] -0.01334789

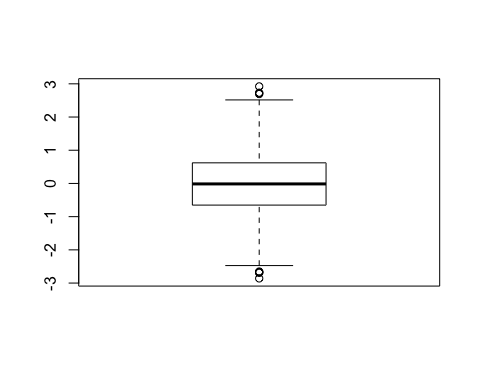
sd(x)

## [1] 0.9615213

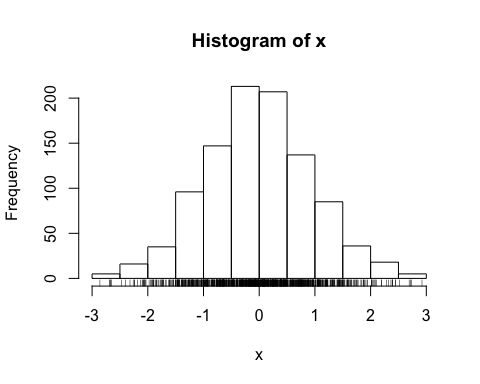
summary(x)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## -2.85948 -0.65141 -0.01425 -0.01335 0.61932 2.92235

# Summary of Graphs  
boxplot(x)



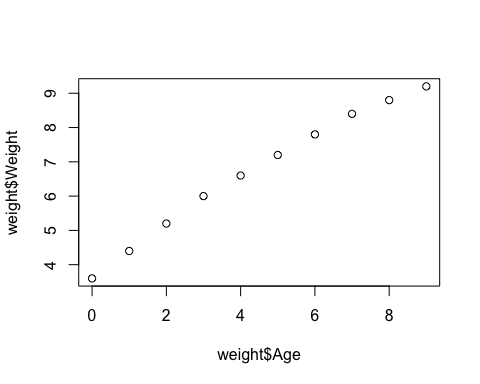
hist(x)  
rug(x)



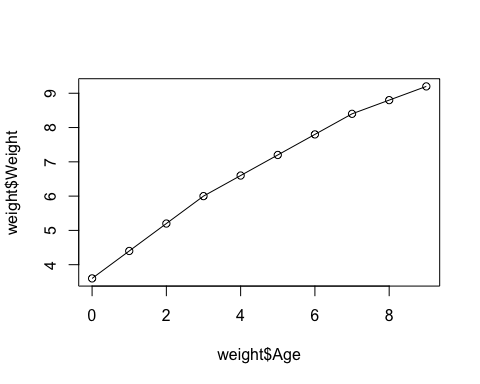
#Section 2 Scatterplots  
#lets read our input file first  
read.table("bimm143\_05\_rstats/weight\_chart.txt")

## V1 V2  
## 1 Age Weight  
## 2 0 3.6  
## 3 1 4.4  
## 4 2 5.2  
## 5 3 6  
## 6 4 6.6  
## 7 5 7.2  
## 8 6 7.8  
## 9 7 8.4  
## 10 8 8.8  
## 11 9 9.2

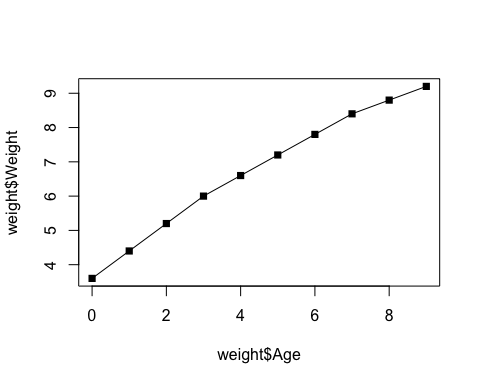
baby <- read.table("bimm143\_05\_rstats/weight\_chart.txt")  
baby <- read.table("bimm143\_05\_rstats/weight\_chart.txt", header = TRUE)  
weight <- read.table("bimm143\_05\_rstats/weight\_chart.txt", header=TRUE)  
#Exploring the plot()  
plot(weight$Age, weight$Weight)



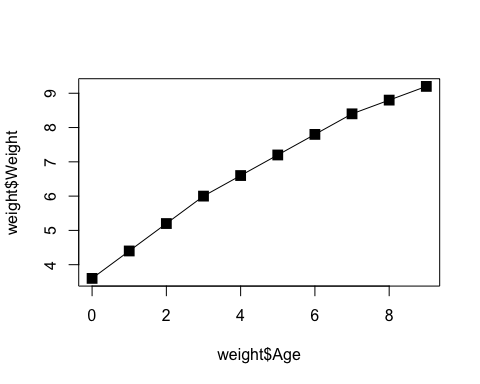
plot(weight$Age, weight$Weight, type = "o")



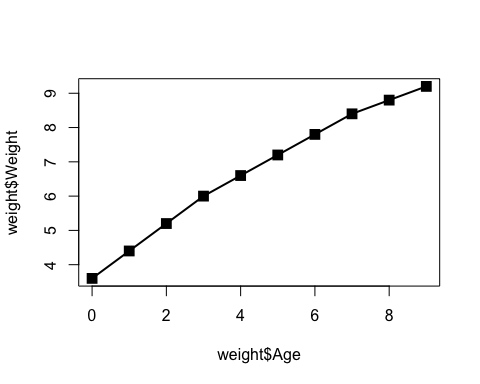
plot(weight$Age, weight$Weight, type = "o", pch=15)



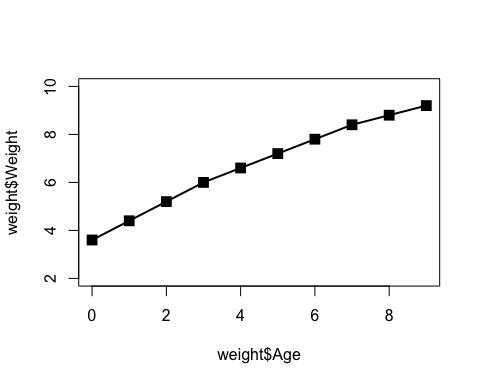
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5)



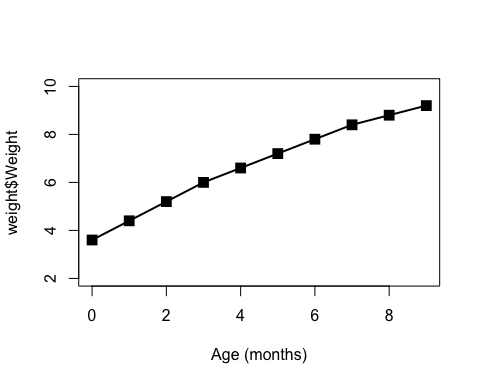
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2)



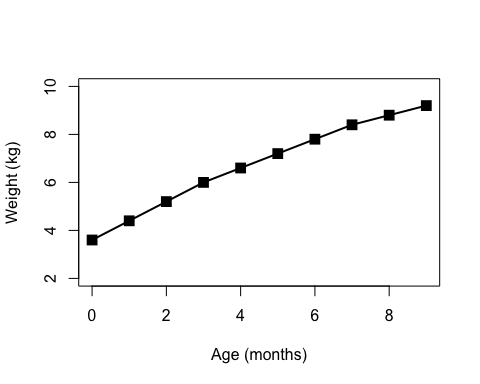
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2, ylim=c(2,10))



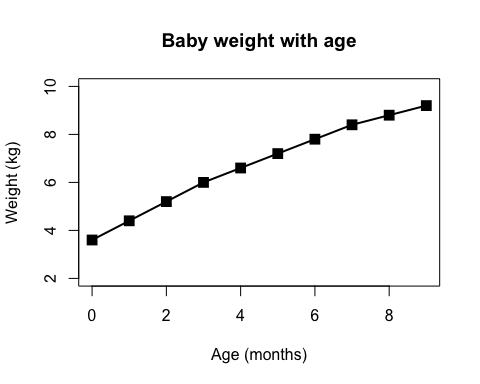
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2, ylim=c(2,10), xlab="Age (months)")



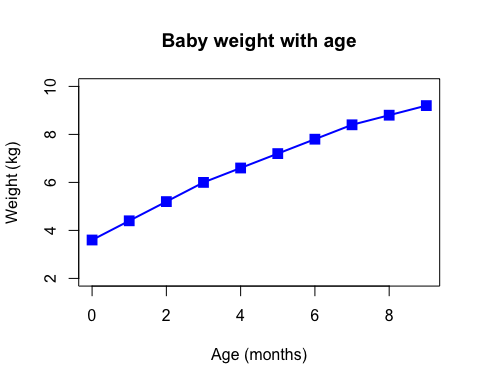
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2, ylim=c(2,10), xlab="Age (months)", ylab="Weight (kg)")



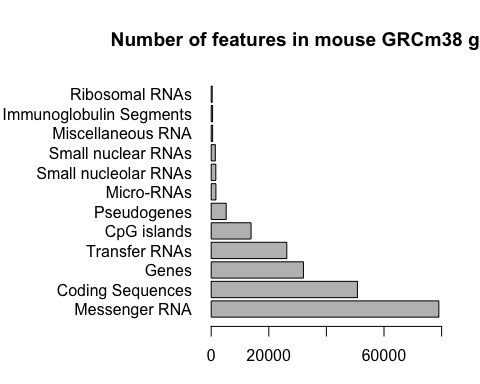
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2, ylim=c(2,10), xlab="Age (months)", ylab="Weight (kg)", main="Baby weight with age")



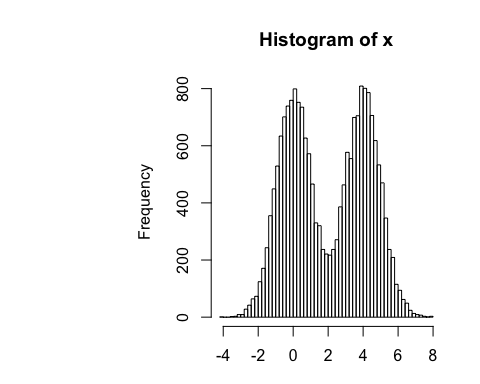
plot(weight$Age, weight$Weight, type = "o", pch=15, cex=1.5, lwd=2, ylim=c(2,10), xlab="Age (months)", ylab="Weight (kg)", main="Baby weight with age", col="blue")



# Section 2B Exploring Barplot (Example of mouse GRCm38)  
par(mar=c(3, 11, 4, 2))  
#Section 2B par(mar) = a way to customize the viewpoint of the graph for better visualization.  
mouseGRCm38 <- read.delim("bimm143\_05\_rstats/feature\_counts.txt")  
barplot(mouseGRCm38$Count, names.arg = mouseGRCm38$Feature, horiz=TRUE, ylab="", main="Number of features in mouse GRCm38 genome", las=1, xlim=c(0,80000))



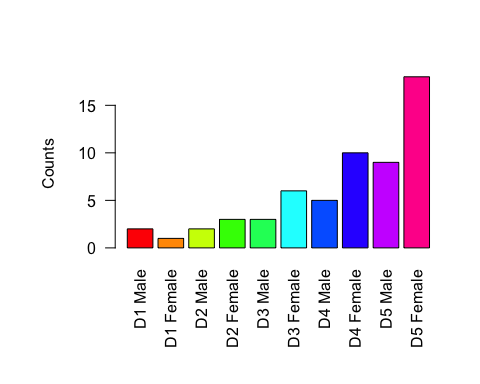
# Section 2C (optional) already had an overview in class  
x <- c(rnorm(10000), rnorm(10000) +4)  
hist(x, breaks = 80)



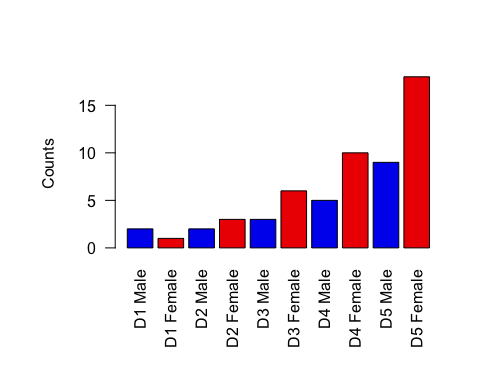
#Section 3 Providing Color Vectors  
read.delim("bimm143\_05\_rstats/male\_female\_counts.txt")

## Sample Count  
## 1 D1 Male 2  
## 2 D1 Female 1  
## 3 D2 Male 2  
## 4 D2 Female 3  
## 5 D3 Male 3  
## 6 D3 Female 6  
## 7 D4 Male 5  
## 8 D4 Female 10  
## 9 D5 Male 9  
## 10 D5 Female 18

Human <- read.delim("bimm143\_05\_rstats/male\_female\_counts.txt")  
par(mar=c(7,6,4,2))  
barplot(Human$Count, names.arg = Human$Sample, col= rainbow(nrow(Human)), las=2, ylab="Counts")  
#Could also able to give how much rainbow colors e.i  
barplot(Human$Count, names.arg = Human$Sample, col= rainbow(10), las=2, ylab="Counts")



#Section 4 Re-plot  
barplot(Human$Count, names.arg = Human$Sample, col = c("blue2", "red2"), las=2, ylab="Counts")



#Section 3B Coloring by Value  
read.delim("bimm143\_05\_rstats/up\_down\_expression.txt")

## Gene Condition1 Condition2 State  
## 1 A4GNT -3.68086100 -3.44013550 unchanging  
## 2 AAAS 4.54795800 4.38641260 unchanging  
## 3 AASDH 3.71906950 3.47872760 unchanging  
## 4 AATF 5.07847200 5.01519160 unchanging  
## 5 AATK 0.47114208 0.55986420 unchanging  
## 6 AB015752.4 -3.68086100 -3.59213900 unchanging  
## 7 ABCA7 3.44842200 3.82665090 unchanging  
## 8 ABCA9-AS1 -3.68086100 -3.59213900 unchanging  
## 9 ABCC11 -3.52885800 -1.85517320 unchanging  
## 10 ABCC3 0.93057376 3.26030400 up  
## 11 ABCC5 4.60042520 5.49944350 up  
## 12 ABCC5-AS1 -3.68086100 -3.44013550 unchanging  
## 13 ABCC6P1 -0.72150310 -0.27021074 unchanging  
## 14 ABCD1 2.68059560 3.38004300 unchanging  
## 15 ABHD11 4.41365600 3.95218160 unchanging  
## 16 ABI3BP -1.20692980 -3.59213900 unchanging  
## 17 ABL1 6.35836200 6.08146500 unchanging  
## 18 ABLIM2 -1.94389530 -1.11820770 unchanging  
## 19 ABO -3.68086100 -3.59213900 unchanging  
## 20 ABP1 -3.68086100 -3.59213900 unchanging  
## 21 ABTB2 0.55860496 0.46675485 unchanging  
## 22 AC000036.4 -3.68086100 -3.59213900 unchanging  
## 23 AC000123.4 -2.52885800 -2.44013570 unchanging  
## 24 AC002064.5 -3.68086100 -3.59213900 unchanging  
## 25 AC002115.7 -3.68086100 -3.59213900 unchanging  
## 26 AC002306.1 -3.68086100 -1.85517320 unchanging  
## 27 AC002401.1 0.86345950 1.01929580 unchanging  
## 28 AC002456.2 -3.68086100 -3.59213900 unchanging  
## 29 AC002467.7 -1.52885800 -1.44013570 unchanging  
## 30 AC002472.13 -3.68086100 -3.59213900 unchanging  
## 31 AC002472.9 -1.94389530 0.01929582 unchanging  
## 32 AC002480.4 -3.68086100 -3.59213900 unchanging  
## 33 AC002553.1 -3.68086100 -3.59213900 unchanging  
## 34 AC002992.4 -3.68086100 -3.59213900 unchanging  
## 35 AC003077.1 -3.68086100 -3.59213900 unchanging  
## 36 AC003084.2 -3.68086100 -3.59213900 unchanging  
## 37 AC003088.1 -3.68086100 -3.59213900 unchanging  
## 38 AC003665.1 0.27849698 0.55986420 unchanging  
## 39 AC004009.3 -3.68086100 -3.59213900 unchanging  
## 40 AC004012.1 -3.68086100 -3.59213900 unchanging  
## 41 AC004014.3 -3.68086100 -3.59213900 unchanging  
## 42 AC004051.2 -3.68086100 -3.59213900 unchanging  
## 43 AC004054.1 -3.68086100 -3.59213900 unchanging  
## 44 AC004223.1 2.19906260 2.05171730 unchanging  
## 45 AC004231.2 0.37803268 -1.11820770 unchanging  
## 46 AC004383.5 -3.68086100 -3.59213900 unchanging  
## 47 AC004448.6 -3.68086100 -3.59213900 unchanging  
## 48 AC004741.4 -3.52885800 -3.44013550 unchanging  
## 49 AC004744.3 -3.68086100 -3.59213900 unchanging  
## 50 AC004837.4 -3.68086100 -3.59213900 unchanging  
## 51 AC004837.5 -3.68086100 -3.59213900 unchanging  
## 52 AC004862.6 -3.68086100 -3.59213900 unchanging  
## 53 AC004869.3 -3.68086100 -3.59213900 unchanging  
## 54 AC004870.4 -0.20692979 -3.44013550 unchanging  
## 55 AC004876.1 -3.68086100 -3.59213900 unchanging  
## 56 AC005003.1 0.27849698 0.88179230 unchanging  
## 57 AC005008.2 -3.68086100 -3.59213900 unchanging  
## 58 AC005029.1 -3.68086100 -3.59213900 unchanging  
## 59 AC005154.5 -1.94389530 -1.44013570 unchanging  
## 60 AC005276.1 -3.68086100 -3.59213900 unchanging  
## 61 AC005281.2 -3.68086100 -3.59213900 unchanging  
## 62 AC005304.1 -3.68086100 -3.59213900 unchanging  
## 63 AC005304.2 -1.20692980 -1.11820770 unchanging  
## 64 AC005484.5 2.35378530 2.41784500 unchanging  
## 65 AC005519.4 -1.20692980 -0.11820772 unchanging  
## 66 AC005522.7 -3.52885800 -3.59213900 unchanging  
## 67 AC005534.8 -3.68086100 -1.85517320 unchanging  
## 68 AC005550.3 -3.68086100 -3.59213900 unchanging  
## 69 AC005592.1 -3.68086100 -3.59213900 unchanging  
## 70 AC005594.1 0.99470407 1.14482670 unchanging  
## 71 AC005609.17 -2.52885800 -3.44013550 unchanging  
## 72 AC005703.2 -3.68086100 -3.59213900 unchanging  
## 73 AC005895.4 -3.68086100 -3.59213900 unchanging  
## 74 AC006116.1 -3.52885800 -1.85517320 unchanging  
## 75 AC006156.1 -3.68086100 -3.59213900 unchanging  
## 76 AC006156.2 -3.68086100 -3.59213900 unchanging  
## 77 AC006157.2 -3.68086100 -3.59213900 unchanging  
## 78 AC006159.3 -3.68086100 -3.59213900 unchanging  
## 79 AC006262.2 -3.52885800 -3.44013550 unchanging  
## 80 AC006271.2 -3.68086100 -3.59213900 unchanging  
## 81 AC006372.1 -3.68086100 -3.59213900 unchanging  
## 82 AC006378.3 -3.68086100 -3.59213900 unchanging  
## 83 AC006445.1 -3.68086100 -3.59213900 unchanging  
## 84 AC006482.1 -3.68086100 -3.59213900 unchanging  
## 85 AC006547.13 0.47114208 1.14482670 unchanging  
## 86 AC006946.15 -3.52885800 -3.44013550 unchanging  
## 87 AC007099.2 -3.68086100 -3.59213900 unchanging  
## 88 AC007163.6 -3.68086100 -3.59213900 unchanging  
## 89 AC007255.7 -0.35893290 -1.11820770 unchanging  
## 90 AC007275.2 -3.68086100 -3.59213900 unchanging  
## 91 AC007278.3 -3.68086100 -3.59213900 unchanging  
## 92 AC007285.6 -3.52885800 -3.59213900 unchanging  
## 93 AC007365.3 -3.68086100 -3.59213900 unchanging  
## 94 AC007403.2 -3.68086100 -3.59213900 unchanging  
## 95 AC007405.8 -2.52885800 -3.59213900 unchanging  
## 96 AC007563.5 0.17158182 0.95218160 unchanging  
## 97 AC007731.1 -3.68086100 -0.85517323 unchanging  
## 98 AC007879.2 -3.68086100 -3.59213900 unchanging  
## 99 AC007879.3 -3.68086100 -3.59213900 unchanging  
## 100 AC007879.7 -3.68086100 -3.59213900 unchanging  
## 101 AC007920.1 -3.68086100 -3.59213900 unchanging  
## 102 AC007952.1 -3.68086100 -3.59213900 unchanging  
## 103 AC007952.5 -3.52885800 -3.59213900 unchanging  
## 104 AC007956.1 0.79307020 0.88179230 unchanging  
## 105 AC007970.1 -3.68086100 -3.44013550 unchanging  
## 106 AC008069.1 -3.68086100 -3.59213900 unchanging  
## 107 AC008069.3 -3.68086100 -3.59213900 unchanging  
## 108 AC008073.9 -3.68086100 -3.59213900 unchanging  
## 109 AC008103.5 1.05610470 1.41784510 unchanging  
## 110 AC008163.4 -3.68086100 -3.59213900 unchanging  
## 111 AC008268.1 -3.68086100 -3.59213900 unchanging  
## 112 AC008278.3 -3.68086100 -3.59213900 unchanging  
## 113 AC008440.5 2.25250170 2.62595340 unchanging  
## 114 AC009110.1 -3.68086100 -3.59213900 unchanging  
## 115 AC009113.1 3.30403180 3.11445300 unchanging  
## 116 AC009133.1 5.74726700 5.79587840 unchanging  
## 117 AC009229.6 -3.68086100 -3.59213900 unchanging  
## 118 AC009232.2 -3.68086100 -3.59213900 unchanging  
## 119 AC009312.1 -3.68086100 -3.59213900 unchanging  
## 120 AC009505.4 -3.68086100 -3.59213900 unchanging  
## 121 AC009508.1 -3.68086100 -3.59213900 unchanging  
## 122 AC009784.3 -3.68086100 -3.59213900 unchanging  
## 123 AC010105.1 -3.68086100 -3.59213900 unchanging  
## 124 AC010136.2 -3.68086100 -3.59213900 unchanging  
## 125 AC010336.2 3.75654440 3.63668000 unchanging  
## 126 AC010547.1 -3.52885800 -3.44013550 unchanging  
## 127 AC010606.1 -3.68086100 -3.59213900 unchanging  
## 128 AC010723.1 -3.68086100 -3.59213900 unchanging  
## 129 AC010729.1 -3.68086100 -3.59213900 unchanging  
## 130 AC010733.4 -3.52885800 -3.59213900 unchanging  
## 131 AC010883.5 -0.52885790 -3.44013550 unchanging  
## 132 AC010894.3 -1.94389530 -1.44013570 unchanging  
## 133 AC010974.3 -3.68086100 -3.59213900 unchanging  
## 134 AC010997.1 -3.68086100 -3.59213900 unchanging  
## 135 AC011193.1 -3.68086100 -3.59213900 unchanging  
## 136 AC011325.1 -3.68086100 -3.44013550 unchanging  
## 137 AC011995.3 -3.68086100 -3.59213900 unchanging  
## 138 AC011998.1 -3.68086100 -3.59213900 unchanging  
## 139 AC012074.2 -3.68086100 -3.44013550 unchanging  
## 140 AC012123.1 2.60042520 2.82665090 unchanging  
## 141 AC012215.1 2.22602960 1.95218160 unchanging  
## 142 AC012307.2 -3.68086100 -3.59213900 unchanging  
## 143 AC012368.1 -3.68086100 -3.59213900 unchanging  
## 144 AC012506.3 -3.68086100 -3.59213900 unchanging  
## 145 AC012652.1 6.89635750 6.68010200 unchanging  
## 146 AC012668.3 -3.68086100 -3.59213900 unchanging  
## 147 AC013401.1 -3.52885800 -3.59213900 unchanging  
## 148 AC013413.1 -3.68086100 -3.59213900 unchanging  
## 149 AC013727.2 -3.68086100 -3.59213900 unchanging  
## 150 AC015804.1 -3.68086100 -3.59213900 unchanging  
## 151 AC015813.1 -3.68086100 -3.59213900 unchanging  
## 152 AC015871.2 0.17158182 0.55986420 unchanging  
## 153 AC015987.1 7.23019800 7.28948450 unchanging  
## 154 AC016683.6 4.02573100 4.61514660 unchanging  
## 155 AC016689.1 -3.68086100 -3.59213900 unchanging  
## 156 AC016710.1 -3.68086100 -3.59213900 unchanging  
## 157 AC016722.1 -3.68086100 -3.59213900 unchanging  
## 158 AC016722.2 -3.68086100 -3.59213900 unchanging  
## 159 AC016722.3 -3.68086100 -3.59213900 unchanging  
## 160 AC016722.4 2.22602960 2.39275430 unchanging  
## 161 AC016751.2 -3.68086100 -3.59213900 unchanging  
## 162 AC016831.7 -3.68086100 -3.44013550 unchanging  
## 163 AC016903.1 -3.68086100 -3.59213900 unchanging  
## 164 AC017053.1 -3.68086100 -3.59213900 unchanging  
## 165 AC017076.5 -3.68086100 -3.44013550 unchanging  
## 166 AC017104.6 -3.68086100 -3.59213900 unchanging  
## 167 AC017116.11 -1.20692980 -0.63278085 unchanging  
## 168 AC018642.1 0.27849698 1.01929580 unchanging  
## 169 AC018705.5 -3.68086100 -3.59213900 unchanging  
## 170 AC018730.3 -3.52885800 -3.44013550 unchanging  
## 171 AC018878.3 -3.68086100 -3.44013550 unchanging  
## 172 AC019100.3 -3.52885800 -3.59213900 unchanging  
## 173 AC019186.1 -3.68086100 -3.59213900 unchanging  
## 174 AC019294.1 -3.68086100 -3.59213900 unchanging  
## 175 AC019330.1 -3.68086100 -3.59213900 unchanging  
## 176 AC019349.2 -3.68086100 -3.59213900 unchanging  
## 177 AC020743.2 -3.68086100 -3.59213900 unchanging  
## 178 AC020763.1 -1.52885800 -0.63278085 unchanging  
## 179 AC021016.8 -3.68086100 -3.59213900 unchanging  
## 180 AC021066.1 0.47114208 0.36721915 unchanging  
## 181 AC021188.4 -3.68086100 -3.59213900 unchanging  
## 182 AC021593.1 2.08585200 1.64732710 unchanging  
## 183 AC022182.1 -3.68086100 -3.59213900 unchanging  
## 184 AC022201.5 -0.94389530 0.14482673 unchanging  
## 185 AC022431.2 -3.52885800 -3.59213900 unchanging  
## 186 AC022431.3 -3.68086100 -3.59213900 unchanging  
## 187 AC022596.1 1.05610470 1.64732710 unchanging  
## 188 AC022884.1 -3.68086100 -3.59213900 unchanging  
## 189 AC023469.2 -3.68086100 -3.59213900 unchanging  
## 190 AC023672.2 -3.68086100 -3.59213900 unchanging  
## 191 AC023797.1 -3.68086100 -3.44013550 unchanging  
## 192 AC024580.1 -1.52885800 1.01929580 unchanging  
## 193 AC024592.1 -3.68086100 -3.59213900 unchanging  
## 194 AC026188.1 -3.68086100 -3.59213900 unchanging  
## 195 AC026703.1 0.37803268 0.64732707 unchanging  
## 196 AC034207.1 -1.20692980 -0.85517323 unchanging  
## 197 AC034220.3 0.55860496 0.46675485 unchanging  
## 198 AC058791.2 -2.52885800 -0.27021074 unchanging  
## 199 AC062020.1 -3.68086100 -3.59213900 unchanging  
## 200 AC062021.1 -3.68086100 -3.59213900 unchanging  
## 201 AC062032.1 -3.68086100 -3.59213900 unchanging  
## 202 AC064834.1 -3.68086100 -3.59213900 unchanging  
## 203 AC064871.3 -0.94389530 -1.11820770 unchanging  
## 204 AC064874.1 -3.68086100 -3.59213900 unchanging  
## 205 AC067959.1 -3.68086100 -3.59213900 unchanging  
## 206 AC067960.1 -3.68086100 -3.59213900 unchanging  
## 207 AC068057.2 -3.68086100 -3.59213900 unchanging  
## 208 AC068280.1 -3.68086100 -3.59213900 unchanging  
## 209 AC068542.1 -3.68086100 -3.59213900 unchanging  
## 210 AC068580.5 -3.68086100 -3.59213900 unchanging  
## 211 AC068831.8 4.29769040 3.95218160 unchanging  
## 212 AC069277.2 -3.52885800 -2.44013570 unchanging  
## 213 AC069363.1 -3.68086100 -3.59213900 unchanging  
## 214 AC069394.1 -3.68086100 -3.59213900 unchanging  
## 215 AC069513.3 2.53723120 2.44250750 unchanging  
## 216 AC072062.3 -3.68086100 -3.59213900 unchanging  
## 217 AC073071.1 -3.68086100 -3.59213900 unchanging  
## 218 AC073072.5 -3.52885800 -3.59213900 unchanging  
## 219 AC073130.3 -3.68086100 -3.44013550 unchanging  
## 220 AC073133.2 -3.68086100 -3.59213900 unchanging  
## 221 AC073218.1 -3.68086100 -3.59213900 unchanging  
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## 225 AC073626.2 -3.68086100 -3.59213900 unchanging  
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## 228 AC074286.1 0.99470407 1.01929580 unchanging  
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## 231 AC078799.1 -3.68086100 -0.27021074 unchanging  
## 232 AC078851.1 -3.68086100 -3.59213900 unchanging  
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## 235 AC079062.1 4.36595960 4.27411000 unchanging  
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## 238 AC079612.2 -3.68086100 -3.59213900 unchanging  
## 239 AC079767.2 3.21260900 3.28778480 unchanging  
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## 241 AC079807.4 -3.68086100 -3.59213900 unchanging  
## 242 AC083862.1 -3.68086100 -3.59213900 unchanging  
## 243 AC083864.3 -3.68086100 -3.59213900 unchanging  
## 244 AC084018.1 -3.68086100 -3.59213900 unchanging  
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## 249 AC087590.3 4.47114200 4.84063500 unchanging  
## 250 AC087859.1 -3.52885800 -2.44013570 unchanging  
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## 255 AC090952.5 -3.68086100 -3.59213900 unchanging  
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## 264 AC092117.1 -3.52885800 -0.85517323 unchanging  
## 265 AC092159.2 -1.20692980 -0.27021074 unchanging  
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## 267 AC092275.1 -3.68086100 -3.44013550 unchanging  
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## 273 AC093162.2 -3.52885800 -1.44013570 unchanging  
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## 276 AC093639.1 -3.68086100 -3.59213900 unchanging  
## 277 AC093734.14 -1.94389530 -0.63278085 unchanging  
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## 279 AC093838.7 -3.68086100 -0.44013572 unchanging  
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## 286 AC097468.5 -3.68086100 -3.59213900 unchanging  
## 287 AC097468.7 -3.68086100 -3.59213900 unchanging  
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## 291 AC097713.4 -3.68086100 -3.59213900 unchanging  
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## 293 AC098617.2 -3.68086100 -3.44013550 unchanging  
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## 300 AC100830.3 -3.68086100 -1.85517320 unchanging  
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## 305 AC104076.3 -3.52885800 -3.59213900 unchanging  
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## 307 AC104135.4 -3.52885800 -2.44013570 unchanging  
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## 310 AC104655.3 -1.94389530 -3.44013550 unchanging  
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## 342 AC116366.6 -1.52885800 -1.11820770 unchanging  
## 343 AC116609.2 -3.68086100 -3.59213900 unchanging  
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## 345 AC118754.4 -3.68086100 -3.59213900 unchanging  
## 346 AC120498.2 -3.68086100 -3.59213900 unchanging  
## 347 AC123023.1 -3.68086100 -3.59213900 unchanging  
## 348 AC124789.1 -3.68086100 -3.59213900 unchanging  
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## 351 AC130689.5 -3.68086100 -3.59213900 unchanging  
## 352 AC131971.3 5.06733200 4.92180820 unchanging  
## 353 AC133485.1 2.25250170 1.14482670 unchanging  
## 354 AC133528.2 -2.52885800 -1.11820770 unchanging  
## 355 AC133633.2 -3.68086100 -3.59213900 unchanging  
## 356 AC133680.1 -2.52885800 -3.59213900 unchanging  
## 357 AC135050.2 -3.52885800 -0.63278085 unchanging  
## 358 AC136940.1 -3.68086100 -3.59213900 unchanging  
## 359 AC144525.1 -3.68086100 -3.59213900 unchanging  
## 360 AC217773.1 -2.52885800 -3.59213900 unchanging  
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## 362 ACAT1 5.77948100 5.30805700 unchanging  
## 363 ACBD4 1.17158190 1.14482670 unchanging  
## 364 ACBD6 4.29769040 4.07556400 unchanging  
## 365 ACCN1 -3.68086100 -3.59213900 unchanging  
## 366 ACE 0.55860496 0.72978930 unchanging  
## 367 ACHE -3.68086100 -3.59213900 unchanging  
## 368 ACIN1 6.95596500 6.92290350 unchanging  
## 369 ACLY 6.94078350 7.01107550 unchanging  
## 370 ACOT1 -2.52885800 -1.85517320 unchanging  
## 371 ACPT -3.68086100 -3.59213900 unchanging  
## 372 ACRBP 0.17158182 -0.85517323 unchanging  
## 373 ACRV1 -1.52885800 -1.11820770 unchanging  
## 374 ACSF2 3.57966640 3.82665090 unchanging  
## 375 ACSL4 6.72617050 7.54428240 unchanging  
## 376 ACSM2A -3.68086100 -3.59213900 unchanging  
## 377 ACSM3 3.96299530 3.40535430 unchanging  
## 378 ACSS1 4.97893670 3.92618630 down  
## 379 ACTL7A -3.68086100 -3.59213900 unchanging  
## 380 ACTL9 -3.68086100 -3.59213900 unchanging  
## 381 ACTN1 6.48516230 6.79468150 unchanging  
## 382 ACTR1B 4.88053270 4.62056000 unchanging  
## 383 ACVR1B 5.56389900 5.79348370 unchanging  
## 384 ACY1 2.49351000 2.55986430 unchanging  
## 385 ADAM17 6.10049800 6.12019730 unchanging  
## 386 ADAM19 4.99861900 5.01929570 unchanging  
## 387 ADAM32 -1.94389530 -0.63278085 unchanging  
## 388 ADAM6 -3.68086100 -3.59213900 unchanging  
## 389 ADAMTS1 3.04099750 2.98612880 unchanging  
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## 391 ADAMTS20 -3.68086100 -3.59213900 unchanging  
## 392 ADAMTS5 0.37803268 -1.11820770 unchanging  
## 393 ADAMTS7 2.82869400 2.08342620 unchanging  
## 394 ADAMTSL4 -2.52885800 0.26030394 unchanging  
## 395 ADCK4 3.47114200 3.43022900 unchanging  
## 396 ADCY5 4.22602940 1.88179220 down  
## 397 ADH1B -3.52885800 -3.59213900 unchanging  
## 398 ADH4 -3.68086100 -3.59213900 unchanging  
## 399 ADIPOR2 7.03719660 7.01313450 unchanging  
## 400 ADM2 3.64106700 3.95218160 unchanging  
## 401 ADSS 5.57443000 5.56267930 unchanging  
## 402 AE000661.37 -2.52885800 -3.44013550 unchanging  
## 403 AF003626.1 -3.68086100 -3.59213900 unchanging  
## 404 AF015720.3 -3.68086100 -3.59213900 unchanging  
## 405 AF064858.8 -2.52885800 -3.59213900 unchanging  
## 406 AF131216.6 1.60042510 1.20372030 unchanging  
## 407 AF131217.1 -3.68086100 -3.59213900 unchanging  
## 408 AF178030.2 -3.68086100 -3.59213900 unchanging  
## 409 AF196972.9 -3.52885800 -3.44013550 unchanging  
## 410 AF240627.2 -3.68086100 -3.59213900 unchanging  
## 411 AFG3L2 6.17677400 5.91080400 unchanging  
## 412 AGAP10 3.72853000 4.08342650 unchanging  
## 413 AGAP6 3.31663200 3.30133100 unchanging  
## 414 AGBL5-AS1 -3.68086100 -3.59213900 unchanging  
## 415 AGRN 7.79813300 8.03407800 unchanging  
## 416 AGTR2 -3.68086100 -3.59213900 unchanging  
## 417 AGTRAP 3.51553630 3.34122400 unchanging  
## 418 AHDC1 3.88053300 3.73977350 unchanging  
## 419 AHI1 4.07105500 4.26722340 unchanging  
## 420 AHNAK 6.62848950 7.61175250 up  
## 421 AHNAK2 3.65105100 5.18191600 up  
## 422 AIG1 5.30403200 4.95218200 unchanging  
## 423 AIRE -3.68086100 -3.59213900 unchanging  
## 424 AJ239322.3 -3.68086100 -3.59213900 unchanging  
## 425 AKAP11-IT1 -3.68086100 -3.59213900 unchanging  
## 426 AKAP17A 3.61069350 3.62595320 unchanging  
## 427 AKIRIN1 6.29927870 6.35428000 unchanging  
## 428 AKTIP 4.67571300 4.73977330 unchanging  
## 429 AL031780.1 -3.52885800 -1.44013570 unchanging  
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## 431 AL034548.1 4.69514370 4.64732740 unchanging  
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## 433 AL049840.1 -0.35893290 0.64732707 unchanging  
## 434 AL078611.1 1.82869410 1.26030390 unchanging  
## 435 AL078621.3 -3.68086100 -3.59213900 unchanging  
## 436 AL096869.5 -3.68086100 -3.59213900 unchanging  
## 437 AL109616.1 -3.52885800 -2.44013570 unchanging  
## 438 AL109761.5 -0.35893290 -0.85517323 unchanging  
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## 440 AL117340.1 -3.68086100 -3.59213900 unchanging  
## 441 AL121656.5 -3.68086100 -3.59213900 unchanging  
## 442 AL132709.5 -3.68086100 -3.59213900 unchanging  
## 443 AL132709.7 -3.68086100 -3.59213900 unchanging  
## 444 AL132709.8 -3.68086100 -3.59213900 unchanging  
## 445 AL136307.2 -2.52885800 -2.44013570 unchanging  
## 446 AL139035.1 -1.94389530 -1.11820770 unchanging  
## 447 AL157871.2 1.11499820 1.08342620 unchanging  
## 448 AL158821.1 -1.52885800 -0.85517323 unchanging  
## 449 AL158835.1 -3.68086100 -3.59213900 unchanging  
## 450 AL161668.12 -3.68086100 -3.59213900 unchanging  
## 451 AL162853.2 1.32912310 1.84526660 unchanging  
## 452 AL163195.3 -3.68086100 -3.59213900 unchanging  
## 453 AL353997.3 -3.68086100 -3.59213900 unchanging  
## 454 AL354696.2 -2.52885800 -3.44013550 unchanging  
## 455 AL354733.1 -3.68086100 -3.59213900 unchanging  
## 456 AL354889.1 -3.68086100 -3.59213900 unchanging  
## 457 AL355390.1 -3.68086100 -3.59213900 unchanging  
## 458 AL355490.1 -3.68086100 -3.59213900 unchanging  
## 459 AL356356.4 0.93057376 1.01929580 unchanging  
## 460 AL358976.1 -3.68086100 -3.59213900 unchanging  
## 461 AL360001.1 -3.68086100 -2.44013570 unchanging  
## 462 AL390763.1 -3.68086100 -3.59213900 unchanging  
## 463 AL391137.1 -3.68086100 -3.59213900 unchanging  
## 464 AL391244.1 -3.68086100 -3.44013550 unchanging  
## 465 AL450226.2 -3.68086100 -3.59213900 unchanging  
## 466 AL513122.1 -3.68086100 -1.85517320 unchanging  
## 467 AL513497.1 3.29132100 3.46675470 unchanging  
## 468 AL583842.1 -3.68086100 -3.59213900 unchanging  
## 469 AL583842.6 2.08585200 2.78868300 unchanging  
## 470 AL589842.1 -3.52885800 -3.59213900 unchanging  
## 471 AL589988.1 6.15939240 5.84988300 unchanging  
## 472 AL590303.1 -3.52885800 -3.59213900 unchanging  
## 473 AL591845.1 -0.35893290 -1.44013570 unchanging  
## 474 AL592528.1 -3.68086100 -3.59213900 unchanging  
## 475 AL593851.1 13.17332900 12.87306700 unchanging  
## 476 AL596225.1 -3.68086100 -3.59213900 unchanging  
## 477 AL627171.1 -3.68086100 -3.59213900 unchanging  
## 478 AL627443.1 -3.68086100 -3.59213900 unchanging  
## 479 AL645730.2 -3.68086100 -3.59213900 unchanging  
## 480 AL669918.1 4.60556840 4.43022900 unchanging  
## 481 AL671710.1 2.62088920 2.44250750 unchanging  
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## 484 ALDH1L1 3.35378530 1.31475160 down  
## 485 ALDH1L1-AS1 -3.52885800 -3.59213900 unchanging  
## 486 ALDH1L1-AS2 -0.94389530 -3.59213900 unchanging  
## 487 ALDH5A1 4.88899470 4.75953670 unchanging  
## 488 ALDH6A1 6.48516230 6.18739800 unchanging  
## 489 ALDOB -3.68086100 -2.44013570 unchanging  
## 490 ALKBH7 2.53723120 2.74968890 unchanging  
## 491 ALKBH8 3.80205900 3.64732720 unchanging  
## 492 ALOX12B -3.68086100 -3.44013550 unchanging  
## 493 ALOX15 -3.68086100 -0.63278085 unchanging  
## 494 ALOX5AP -3.68086100 -3.59213900 unchanging  
## 495 ALPP -0.94389530 1.46675490 unchanging  
## 496 ALPPL2 0.55860496 2.62595340 up  
## 497 ALX4 -1.20692980 -3.44013550 unchanging  
## 498 AMELX -3.68086100 -3.59213900 unchanging  
## 499 AMIGO1 3.82869390 3.62595320 unchanging  
## 500 AMIGO2 3.14356730 4.81725200 up  
## 501 AMMECR1-IT1 -3.68086100 -3.59213900 unchanging  
## 502 AMN 4.10049870 3.80779200 unchanging  
## 503 AMOTL2 5.31663230 6.64201300 up  
## 504 AMY2B 3.59008310 3.45468190 unchanging  
## 505 ANAPC10 3.76576280 3.28778480 unchanging  
## 506 ANAPC2 4.09319400 3.93490360 unchanging  
## 507 ANGEL1 4.47676660 4.54285760 unchanging  
## 508 ANGPTL1 2.60042520 3.63668000 unchanging  
## 509 ANGPTL5 -3.68086100 -3.59213900 unchanging  
## 510 ANGPTL7 -3.52885800 -3.59213900 unchanging  
## 511 ANKRD10-IT1 -1.52885800 0.64732707 unchanging  
## 512 ANKRD11 6.24921940 6.38323160 unchanging  
## 513 ANKRD28 7.44555660 7.00177050 unchanging  
## 514 ANKRD30B -3.68086100 -3.59213900 unchanging  
## 515 ANKRD31 0.47114208 -0.85517323 unchanging  
## 516 ANKRD43 3.26555800 2.70961120 unchanging  
## 517 ANKRD44 1.60042510 1.31475160 unchanging  
## 518 ANKRD5 4.09319400 3.96074370 unchanging  
## 519 ANKRD53 -3.68086100 -1.85517320 unchanging  
## 520 ANKZF1 3.60042520 3.40535430 unchanging  
## 521 ANO8 2.88053320 2.68914720 unchanging  
## 522 ANTXR1 6.86667630 6.41005130 unchanging  
## 523 ANTXRL -3.68086100 -3.59213900 unchanging  
## 524 ANXA1 7.99813030 7.02543070 down  
## 525 ANXA2 7.52371000 8.28480400 up  
## 526 ANXA3 4.93057350 5.83365960 unchanging  
## 527 ANXA8L2 -3.68086100 -1.44013570 unchanging  
## 528 AOAH -3.68086100 -3.59213900 unchanging  
## 529 AOC3 -0.52885790 -0.44013572 unchanging  
## 530 AP000221.2 -3.68086100 -3.59213900 unchanging  
## 531 AP000253.1 -3.68086100 -2.44013570 unchanging  
## 532 AP000266.7 -3.68086100 -3.59213900 unchanging  
## 533 AP000295.7 2.91408560 2.89971420 unchanging  
## 534 AP000304.12 5.35072500 5.12591800 unchanging  
## 535 AP000320.6 -3.68086100 -3.59213900 unchanging  
## 536 AP000322.54 -2.52885800 -1.44013570 unchanging  
## 537 AP000346.2 -1.52885800 -0.63278085 unchanging  
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## 539 AP000442.1 0.71906954 0.01929582 unchanging  
## 540 AP000442.4 -3.68086100 -3.59213900 unchanging  
## 541 AP000459.4 -3.68086100 -3.59213900 unchanging  
## 542 AP000462.2 -3.68086100 -3.59213900 unchanging  
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## 548 AP000692.9 -3.68086100 -1.85517320 unchanging  
## 549 AP000867.1 -0.72150310 0.14482673 unchanging  
## 550 AP000936.3 -1.94389530 -1.85517320 unchanging  
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## 558 AP001347.6 0.27849698 0.46675485 unchanging  
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## 560 AP001434.2 -3.68086100 -3.59213900 unchanging  
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## 562 AP001476.3 -3.68086100 -3.59213900 unchanging  
## 563 AP001476.4 -3.68086100 -3.59213900 unchanging  
## 564 AP001604.3 -3.68086100 -3.59213900 unchanging  
## 565 AP001619.1 -3.52885800 -2.44013570 unchanging  
## 566 AP001625.5 -3.68086100 -3.59213900 unchanging  
## 567 AP001626.1 -3.68086100 -3.59213900 unchanging  
## 568 AP001628.7 -3.68086100 -3.59213900 unchanging  
## 569 AP001885.1 -3.68086100 -3.59213900 unchanging  
## 570 AP001891.1 -3.68086100 -3.59213900 unchanging  
## 571 AP002008.1 -3.68086100 -3.59213900 unchanging  
## 572 AP002856.6 -3.68086100 -3.59213900 unchanging  
## 573 AP002954.3 -3.52885800 -2.44013570 unchanging  
## 574 AP003068.12 -3.52885800 -3.44013550 unchanging  
## 575 AP003419.11 2.22602960 2.82665090 unchanging  
## 576 AP003419.15 -3.68086100 -3.59213900 unchanging  
## 577 AP003716.1 1.32912310 0.95218160 unchanging  
## 578 AP003774.4 -3.68086100 -3.59213900 unchanging  
## 579 AP003774.6 -3.68086100 -3.59213900 unchanging  
## 580 AP003774.7 -3.68086100 -3.59213900 unchanging  
## 581 AP006216.11 -1.52885800 -3.59213900 unchanging  
## 582 AP006216.12 -3.68086100 -3.44013550 unchanging  
## 583 AP006285.6 -3.68086100 -3.59213900 unchanging  
## 584 AP1S1 4.54795800 4.46675500 unchanging  
## 585 AP1S3 3.88053300 4.39906800 unchanging  
## 586 AP2A2 4.31034560 4.09902330 unchanging  
## 587 AP3S2 5.30403200 5.12971970 unchanging  
## 588 APAF1 6.78402470 6.83831360 unchanging  
## 589 APBA2 3.85484620 3.80779200 unchanging  
## 590 APBB2 5.50180900 5.85907170 unchanging  
## 591 APCDD1 0.37803268 -0.63278085 unchanging  
## 592 APIP 3.55860470 3.47872760 unchanging  
## 593 APITD1 2.71906970 1.76931760 unchanging  
## 594 APLF 1.47114200 1.51406050 unchanging  
## 595 APLP1 5.20585160 5.01929570 unchanging  
## 596 APOA2 -3.68086100 -3.59213900 unchanging  
## 597 APOC3 -3.68086100 -3.59213900 unchanging  
## 598 APOC4 -3.68086100 -3.59213900 unchanging  
## 599 APOE 3.48236940 3.23228980 unchanging  
## 600 APOH -3.68086100 -3.59213900 unchanging  
## 601 APOL1 -3.68086100 -0.63278085 unchanging  
## 602 APOL4 -1.94389530 -3.59213900 unchanging  
## 603 APOLD1 3.82869390 4.05171730 unchanging  
## 604 APPBP2 6.38253400 7.01313450 unchanging  
## 605 AQP5 -3.68086100 -1.11820770 unchanging  
## 606 AQR 6.30719300 6.04166360 unchanging  
## 607 ARAP1-AS2 -0.52885790 0.14482673 unchanging  
## 608 ARC -3.52885800 -3.44013550 unchanging  
## 609 ARCN1 7.88159300 7.80363270 unchanging  
## 610 ARFGAP2 5.43403800 5.39906800 unchanging  
## 611 ARGFX -3.68086100 -3.59213900 unchanging  
## 612 ARGLU1 5.59526350 5.99449250 unchanging  
## 613 ARHGAP22-IT1 -3.68086100 -3.59213900 unchanging  
## 614 ARHGAP27 3.05610440 3.12971970 unchanging  
## 615 ARHGAP31-AS1 -2.52885800 -3.59213900 unchanging  
## 616 ARHGAP5 6.25414000 6.40535400 unchanging  
## 617 ARHGAP9 -3.52885800 -3.44013550 unchanging  
## 618 ARHGDIG -0.94389530 -0.11820772 unchanging  
## 619 ARHGEF10 4.84618140 5.02338840 unchanging  
## 620 ARHGEF11 5.63101340 5.70452260 unchanging  
## 621 ARHGEF19-AS1 0.86345950 0.80779165 unchanging  
## 622 ARHGEF4 2.53723120 2.86364480 unchanging  
## 623 ARHGEF7 5.47114200 5.26030400 unchanging  
## 624 ARHGEF7-IT1 -3.68086100 -3.59213900 unchanging  
## 625 ARID1A 6.95697100 6.74473900 unchanging  
## 626 ARID2 7.35302070 7.20281840 unchanging  
## 627 ARID3C -3.68086100 -3.44013550 unchanging  
## 628 ARL1 7.32912300 7.08734100 unchanging  
## 629 ARL17B 1.55860500 1.88179220 unchanging  
## 630 ARL2 4.44268560 4.34776700 unchanging  
## 631 ARL4A 5.14002700 5.67880540 unchanging  
## 632 ARL4C 8.12084800 7.35671470 down  
## 633 ARL9 -2.52885800 -2.44013570 unchanging  
## 634 ARMC5 2.32912300 2.44250750 unchanging  
## 635 ARMC8 5.03338500 4.77903270 unchanging  
## 636 ARNT2 5.47957100 5.14106460 unchanging  
## 637 ARPC1B 5.80653240 5.81253000 unchanging  
## 638 ARPC2 6.84073930 6.81016300 unchanging  
## 639 ARPC5 7.66958700 7.50091170 unchanging  
## 640 ARPC5L 5.15764300 5.15232130 unchanging  
## 641 ARR3 -2.52885800 -3.44013550 unchanging  
## 642 ARV1 4.29769040 3.87274720 unchanging  
## 643 ASB1 5.17850100 4.96074340 unchanging  
## 644 ASB10 -3.68086100 -3.59213900 unchanging  
## 645 ASB11 -3.68086100 -3.59213900 unchanging  
## 646 ASB4 -3.68086100 -3.59213900 unchanging  
## 647 ASB7 4.69996070 4.43638130 unchanging  
## 648 ASB8 5.02188870 4.97349200 unchanging  
## 649 ASCC3 5.94078350 6.33465150 unchanging  
## 650 ASCL2 -3.68086100 -3.59213900 unchanging  
## 651 ASF1A 5.54795800 5.50530800 unchanging  
## 652 ASF1B 6.56785730 6.21807530 unchanging  
## 653 ASH1L 6.72498940 6.97031600 unchanging  
## 654 ASH2L 5.69031050 5.36399560 unchanging  
## 655 ASMTL-AS1 -1.20692980 0.46675485 unchanging  
## 656 ASMTL-AS1 -1.20692980 0.46675485 unchanging  
## 657 ASPH 7.38328270 7.43791530 unchanging  
## 658 ASPSCR1 2.51553630 2.46675500 unchanging  
## 659 ASS1 5.77263830 5.58500400 unchanging  
## 660 ATAD1 6.17331460 6.04770470 unchanging  
## 661 ATAD3C 1.96299520 2.14482670 unchanging  
## 662 ATF7IP2 1.82869410 2.28778460 unchanging  
## 663 ATG10 6.34612300 6.18374540 unchanging  
## 664 ATP11A-AS1 -3.68086100 -3.59213900 unchanging  
## 665 ATP11B 6.34304760 6.48021700 unchanging  
## 666 ATP13A3 8.33494100 8.43446200 unchanging  
## 667 ATP1A1 10.80597400 9.97203700 down  
## 668 ATP1A1OS 6.82208100 5.97771640 down  
## 669 ATP1A3 -0.52885790 0.72978930 unchanging  
## 670 ATP2A1 -0.06942624 0.36721915 unchanging  
## 671 ATP2A3 4.77035000 4.70452260 unchanging  
## 672 ATP2B3 -0.35893290 -3.44013550 unchanging  
## 673 ATP5E 6.51690200 6.55280260 unchanging  
## 674 ATP5H 6.32756760 5.99449250 unchanging  
## 675 ATP5J 5.65601730 5.48170500 unchanging  
## 676 ATP6AP1L 1.42533850 1.55986430 unchanging  
## 677 ATP6V0A1 5.85700460 5.51114900 unchanging  
## 678 ATP6V0D2 -3.68086100 -3.44013550 unchanging  
## 679 ATP6V1G1 5.71906950 5.95218200 unchanging  
## 680 ATP8A2 -3.68086100 -3.44013550 unchanging  
## 681 ATRNL1 3.55860470 2.74968890 unchanging  
## 682 ATXN1 1.75654420 2.31475160 unchanging  
## 683 ATXN10 6.70236350 6.54570630 unchanging  
## 684 ATXN1L 5.93057400 5.78145100 unchanging  
## 685 ATXN2 5.89950230 5.76198800 unchanging  
## 686 ATXN3 4.41365600 4.05171730 unchanging  
## 687 ATXN7 4.48236940 4.54854900 unchanging  
## 688 ATXN7L1 3.07105500 2.78868300 unchanging  
## 689 AURKAIP1 3.93874760 3.61514640 unchanging  
## 690 AURKC -1.94389530 -1.44013570 unchanging  
## 691 AY269186.1 -3.68086100 -3.59213900 unchanging  
## 692 B2M 6.91304900 6.89301900 unchanging  
## 693 B3GALNT2 5.83527660 5.93707500 unchanging  
## 694 B3GNT2 4.73323700 4.31475160 unchanging  
## 695 B3GNT5 6.41804840 6.56689100 unchanging  
## 696 B3GNTL1 0.17158182 0.26030394 unchanging  
## 697 B4GALNT3 3.89740680 3.72978900 unchanging  
## 698 B4GALT4 4.26555820 4.15977700 unchanging  
## 699 B4GALT7 2.66096660 2.44250750 unchanging  
## 700 BACH1-IT2 -3.68086100 -3.59213900 unchanging  
## 701 BACH2 1.47114200 0.64732707 unchanging  
## 702 BAG3 3.05610440 3.90859220 unchanging  
## 703 BAIAP2L1 5.23601400 5.24285900 unchanging  
## 704 BARD1 6.23435450 6.06963900 unchanging  
## 705 BARHL1 -3.68086100 -3.59213900 unchanging  
## 706 BATF2 -3.68086100 -3.59213900 unchanging  
## 707 BAX 4.61069350 4.37364530 unchanging  
## 708 BBC3 0.47114208 0.95218160 unchanging  
## 709 BBS1 4.74726700 4.51986600 unchanging  
## 710 BBS10 4.87628360 4.75953670 unchanging  
## 711 BBX 6.85376600 7.06468340 unchanging  
## 712 BCAM 6.39000500 6.37684770 unchanging  
## 713 BCAS1 -3.68086100 1.60425830 up  
## 714 BCAS3 4.07105500 4.38641260 unchanging  
## 715 BCAS4 5.96699700 5.86820360 unchanging  
## 716 BCAT2 4.16462900 3.97771640 unchanging  
## 717 BCDIN3D 3.43692640 3.12971970 unchanging  
## 718 BCHE 3.29132100 1.41784510 down  
## 719 BCL2 4.17158170 4.48467700 unchanging  
## 720 BCL3 -0.94389530 -0.44013572 unchanging  
## 721 BCL7B 4.57443000 4.29457400 unchanging  
## 722 BCR 6.62848950 6.26030400 unchanging  
## 723 BDKRB2 -3.68086100 -1.11820770 unchanging  
## 724 BDNF -1.52885800 -3.44013550 unchanging  
## 725 BEND5 1.82869410 1.31475160 unchanging  
## 726 BEST3 -3.68086100 -3.59213900 unchanging  
## 727 BHLHA15 -1.20692980 -0.27021074 unchanging  
## 728 BHLHA9 -3.68086100 -3.59213900 unchanging  
## 729 BLID -3.68086100 -3.59213900 unchanging  
## 730 BLK -3.68086100 -3.59213900 unchanging  
## 731 BMI1 6.33532800 6.47125600 unchanging  
## 732 BMP3 3.17158200 -0.85517323 down  
## 733 BMP7 -3.68086100 2.39275430 up  
## 734 BMS1 6.09502360 6.07556400 unchanging  
## 735 BNIPL -0.35893290 0.95218160 unchanging  
## 736 BOC 5.79981700 6.89190050 up  
## 737 BOP1 4.16462900 4.47275350 unchanging  
## 738 BPTF 7.44699000 7.22874930 unchanging  
## 739 BPY2B -3.68086100 -3.59213900 unchanging  
## 740 BRCA1 5.79081400 5.93272920 unchanging  
## 741 BRCA2 5.43692640 5.63667960 unchanging  
## 742 BRD9 4.16462900 4.09902330 unchanging  
## 743 BRF2 3.66096690 3.45468190 unchanging  
## 744 BRI3 4.41365600 4.06765900 unchanging  
## 745 BRIP1 5.78175450 5.48467700 unchanging  
## 746 BRMS1 4.15764300 3.96925500 unchanging  
## 747 BRMS1L 3.77492280 3.75953650 unchanging  
## 748 BRWD1-AS1 -3.68086100 -3.59213900 unchanging  
## 749 BRWD1-IT2 -3.68086100 -3.59213900 unchanging  
## 750 BSCL2 4.57966660 4.75462100 unchanging  
## 751 BSN-AS1 -3.68086100 -3.59213900 unchanging  
## 752 BSPRY 3.50456500 3.55986450 unchanging  
## 753 BTBD2 5.53723100 5.29795650 unchanging  
## 754 BTBD9 3.99470400 4.15232130 unchanging  
## 755 BTF3 7.51894700 7.41784500 unchanging  
## 756 BTG2 4.27849700 3.34122400 unchanging  
## 757 BTG3 5.52913400 5.42095100 unchanging  
## 758 BTG4 -2.52885800 -2.44013570 unchanging  
## 759 BTN1A1 -3.68086100 -3.59213900 unchanging  
## 760 BTNL8 -3.68086100 -3.59213900 unchanging  
## 761 BUB1 6.70356300 6.53571220 unchanging  
## 762 BUD31 5.36595960 5.30133100 unchanging  
## 763 BX004987.6 -3.68086100 -3.59213900 unchanging  
## 764 BX255923.1 -3.52885800 -3.59213900 unchanging  
## 765 BX255925.1 -0.94389530 -0.11820772 unchanging  
## 766 BZW1 8.06172900 8.11013000 unchanging  
## 767 C10orf103 3.91408560 3.89971420 unchanging  
## 768 C10orf105 -1.20692980 -3.59213900 unchanging  
## 769 C10orf113 -3.68086100 -3.59213900 unchanging  
## 770 C10orf128 1.42533850 -3.44013550 down  
## 771 C10orf129 -3.68086100 -3.44013550 unchanging  
## 772 C10orf2 3.71906950 4.09902330 unchanging  
## 773 C10orf46 7.17418050 7.20912080 unchanging  
## 774 C10orf54 -2.52885800 -1.44013570 unchanging  
## 775 C10orf57 5.43403800 5.03559800 unchanging  
## 776 C10orf71 -3.68086100 -3.59213900 unchanging  
## 777 C10orf93 -2.52885800 -2.44013570 unchanging  
## 778 C10orf95 3.69031050 3.55986450 unchanging  
## 779 C10orf96 -3.68086100 -3.59213900 unchanging  
## 780 C11orf2 4.37803270 4.27411000 unchanging  
## 781 C11orf24 3.80205900 3.81725200 unchanging  
## 782 C11orf30 5.51280100 5.41161350 unchanging  
## 783 C11orf35 0.37803268 0.64732707 unchanging  
## 784 C11orf40 -3.68086100 -3.59213900 unchanging  
## 785 C11orf46 5.08216670 4.74473950 unchanging  
## 786 C11orf54 5.20246120 5.10289570 unchanging  
## 787 C11orf58 7.36520200 7.16811940 unchanging  
## 788 C11orf72 -3.68086100 -3.44013550 unchanging  
## 789 C11orf73 3.78402500 3.99449250 unchanging  
## 790 C11orf75 2.66096660 3.27410980 unchanging  
## 791 C11orf93 2.14356730 1.14482670 unchanging  
## 792 C12orf24 1.64106700 1.88179220 unchanging  
## 793 C12orf29 5.24921940 5.13729300 unchanging  
## 794 C12orf32 5.63856030 5.31140850 unchanging  
## 795 C12orf35 6.66096640 5.95003270 down  
## 796 C12orf44 4.76576300 4.74473950 unchanging  
## 797 C12orf56 0.79307020 0.80779165 unchanging  
## 798 C12orf68 -3.52885800 -1.85517320 unchanging  
## 799 C12orf70 -3.52885800 -2.44013570 unchanging  
## 800 C12orf77 -3.68086100 -3.59213900 unchanging  
## 801 C13orf44-AS1 -3.68086100 -3.59213900 unchanging  
## 802 C14orf105 -3.68086100 -3.59213900 unchanging  
## 803 C14orf119 5.10049870 4.87727700 unchanging  
## 804 C14orf132 4.51553630 3.63668000 unchanging  
## 805 C14orf162 -3.68086100 -3.59213900 unchanging  
## 806 C14orf21 5.08216670 4.99865630 unchanging  
## 807 C14orf28 0.93057376 1.91741620 unchanging  
## 808 C14orf43 5.19565630 5.19648900 unchanging  
## 809 C14orf49 -0.72150310 1.01929580 unchanging  
## 810 C15orf24 5.41365600 5.45770930 unchanging  
## 811 C15orf43 -3.68086100 -3.59213900 unchanging  
## 812 C15orf54 -3.68086100 -3.59213900 unchanging  
## 813 C15orf58 2.05610470 1.98612890 unchanging  
## 814 C15orf63 3.90577030 3.88179230 unchanging  
## 815 C16orf45 -2.52885800 -0.44013572 unchanging  
## 816 C16orf57 5.01417400 4.87274740 unchanging  
## 817 C16orf7 2.44842200 2.58223200 unchanging  
## 818 C16orf79 0.37803268 0.26030394 unchanging  
## 819 C17orf106 2.96299530 2.91741630 unchanging  
## 820 C17orf109 0.64106710 0.95218160 unchanging  
## 821 C17orf48 1.51553620 1.01929580 unchanging  
## 822 C17orf57 1.60042510 2.20372030 unchanging  
## 823 C17orf72 1.05610470 0.26030394 unchanging  
## 824 C17orf80 5.48795030 5.29457400 unchanging  
## 825 C17orf99 -3.68086100 -3.59213900 unchanging  
## 826 C18orf26 -2.52885800 -3.59213900 unchanging  
## 827 C19orf25 2.93057370 2.51406050 unchanging  
## 828 C19orf33 1.17158190 1.84526660 unchanging  
## 829 C19orf39 0.17158182 0.14482673 unchanging  
## 830 C19orf46 1.64106700 2.17457410 unchanging  
## 831 C19orf55 3.47114200 3.65789630 unchanging  
## 832 C19orf60 0.79307020 0.95218160 unchanging  
## 833 C19orf63 6.82869430 6.61920830 unchanging  
## 834 C19orf68 1.55860500 2.01929570 unchanging  
## 835 C19orf71 -0.06942624 0.14482673 unchanging  
## 836 C19orf76 -3.52885800 -1.85517320 unchanging  
## 837 C1orf106 2.89740680 2.86364480 unchanging  
## 838 C1orf123 3.99470400 4.01107550 unchanging  
## 839 C1orf129 -3.68086100 -3.59213900 unchanging  
## 840 C1orf150 -3.68086100 -3.59213900 unchanging  
## 841 C1orf168 3.56917430 4.70452260 unchanging  
## 842 C1orf170 -3.68086100 -3.59213900 unchanging  
## 843 C1orf177 -3.68086100 -3.59213900 unchanging  
## 844 C1orf185 -3.68086100 -3.59213900 unchanging  
## 845 C1orf187 -2.52885800 -3.44013550 unchanging  
## 846 C1orf190 0.71906954 -0.85517323 unchanging  
## 847 C1orf216 4.11499830 4.07556400 unchanging  
## 848 C1orf31 3.37803270 3.53714420 unchanging  
## 849 C1orf38 1.51553620 0.46675485 unchanging  
## 850 C1orf50 2.51553630 2.41784500 unchanging  
## 851 C1orf54 2.37803270 2.01929570 unchanging  
## 852 C1QA -3.68086100 -3.59213900 unchanging  
## 853 C1QL3 -0.52885790 0.64732707 unchanging  
## 854 C1QL4 -0.06942624 0.46675485 unchanging  
## 855 C1QTNF2 -2.52885800 -3.44013550 unchanging  
## 856 C1QTNF4 -3.68086100 -3.59213900 unchanging  
## 857 C20orf103 -3.68086100 -3.59213900 unchanging  
## 858 C20orf123 -3.68086100 -3.59213900 unchanging  
## 859 C20orf151 1.64106700 1.08342620 unchanging  
## 860 C20orf195 -0.35893290 -1.85517320 unchanging  
## 861 C20orf27 3.45982700 3.65789630 unchanging  
## 862 C20orf46 -3.52885800 -2.44013570 unchanging  
## 863 C20orf62 -3.68086100 -3.59213900 unchanging  
## 864 C21orf2 2.64106700 2.53714420 unchanging  
## 865 C21orf33 5.24592900 5.10289570 unchanging  
## 866 C21orf49 -3.68086100 -3.44013550 unchanging  
## 867 C22orf24 -3.52885800 -3.59213900 unchanging  
## 868 C22orf31 -3.68086100 -3.59213900 unchanging  
## 869 C22orf32 4.01803640 3.72978900 unchanging  
## 870 C22orf33 -3.68086100 -3.59213900 unchanging  
## 871 C22orf43 -3.52885800 -1.85517320 unchanging  
## 872 C2CD3 5.36595960 5.24636460 unchanging  
## 873 C2CD4B -3.68086100 -3.59213900 unchanging  
## 874 C2orf16 2.44842200 2.46675500 unchanging  
## 875 C2orf40 -3.68086100 -3.59213900 unchanging  
## 876 C2orf42 3.05610440 2.96925500 unchanging  
## 877 C2orf47 3.60042520 4.03559800 unchanging  
## 878 C2orf51 -3.68086100 -3.59213900 unchanging  
## 879 C2orf62 -0.35893290 -0.11820772 unchanging  
## 880 C2orf65 3.60042520 3.58223220 unchanging  
## 881 C2orf68 5.04478930 4.81252960 unchanging  
## 882 C2orf73 -3.52885800 -2.44013570 unchanging  
## 883 C2orf74 -3.68086100 -3.44013550 unchanging  
## 884 C2orf77 1.55860500 0.64732707 unchanging  
## 885 C3 -0.35893290 0.88179230 unchanging  
## 886 C3orf36 -3.68086100 -3.59213900 unchanging  
## 887 C3orf39 4.62596000 4.54285760 unchanging  
## 888 C3orf52 2.82869400 2.91741630 unchanging  
## 889 C3orf80 0.71906954 -0.44013572 unchanging  
## 890 C4A 0.47114208 1.36721920 unchanging  
## 891 C4BPA -3.68086100 -3.59213900 unchanging  
## 892 C4orf21 4.43114380 4.20372000 unchanging  
## 893 C4orf37 -2.52885800 -3.59213900 unchanging  
## 894 C4orf40 -3.68086100 -3.59213900 unchanging  
## 895 C4orf44 -1.52885800 -1.11820770 unchanging  
## 896 C4orf50 -3.68086100 -3.59213900 unchanging  
## 897 C5AR1 -0.06942624 -0.27021074 unchanging  
## 898 C5orf15 6.86453250 6.71847400 unchanging  
## 899 C5orf25 3.80205900 3.53714420 unchanging  
## 900 C5orf32 4.30403200 4.15977700 unchanging  
## 901 C5orf50 -3.68086100 -3.59213900 unchanging  
## 902 C5orf54 3.36596000 2.91741630 unchanging  
## 903 C6orf1 1.55860500 1.72978930 unchanging  
## 904 C6orf112 -1.94389530 -1.85517320 unchanging  
## 905 C6orf123 -3.68086100 -3.59213900 unchanging  
## 906 C6orf132 3.35378530 3.98612880 unchanging  
## 907 C6orf145 2.37803270 2.31475160 unchanging  
## 908 C6orf186 -0.72150310 -0.85517323 unchanging  
## 909 C6orf203 2.99470400 2.95218160 unchanging  
## 910 C6orf221 -3.68086100 -3.59213900 unchanging  
## 911 C6orf226 0.27849698 0.26030394 unchanging  
## 912 C6orf3 -0.20692979 -1.44013570 unchanging  
## 913 C6orf35 3.61069350 3.54854900 unchanging  
## 914 C6orf47 4.07105500 3.98612880 unchanging  
## 915 C6orf52 0.71906954 0.14482673 unchanging  
## 916 C6orf62 7.73792900 7.83015970 unchanging  
## 917 C6orf97 2.71906970 2.49060150 unchanging  
## 918 C7orf28B 6.37049870 6.29118300 unchanging  
## 919 C7orf46 2.71906970 2.08342620 unchanging  
## 920 C7orf57 1.27849700 0.26030394 unchanging  
## 921 C7orf61 -3.52885800 -3.44013550 unchanging  
## 922 C7orf62 -3.68086100 -3.59213900 unchanging  
## 923 C7orf63 1.05610470 1.55986430 unchanging  
## 924 C8B -3.68086100 -3.59213900 unchanging  
## 925 C8orf44 0.71906954 1.14482670 unchanging  
## 926 C8orf75 -3.68086100 -3.44013550 unchanging  
## 927 C9orf102 4.95495800 4.97771640 unchanging  
## 928 C9orf103 1.17158190 0.72978930 unchanging  
## 929 C9orf106 -3.68086100 -3.44013550 unchanging  
## 930 C9orf116 1.93057370 2.08342620 unchanging  
## 931 C9orf140 5.07105500 5.41161350 unchanging  
## 932 C9orf167 -0.35893290 0.95218160 unchanging  
## 933 C9orf171 -3.68086100 -2.44013570 unchanging  
## 934 C9orf35 -3.68086100 -3.59213900 unchanging  
## 935 C9orf38 -2.52885800 -3.44013550 unchanging  
## 936 C9orf40 4.40187930 3.87274720 unchanging  
## 937 C9orf5 7.66835900 7.90027100 unchanging  
## 938 C9orf66 0.27849698 -0.44013572 unchanging  
## 939 C9orf69 4.12219400 4.39275460 unchanging  
## 940 C9orf80 4.67081450 4.45468200 unchanging  
## 941 C9orf95 2.73792860 2.46675500 unchanging  
## 942 C9orf96 -1.52885800 -2.44013570 unchanging  
## 943 CA12 -0.72150310 2.20372030 unchanging  
## 944 CA8 3.26555800 1.68914720 unchanging  
## 945 CABIN1 6.07105500 6.01724500 unchanging  
## 946 CACNA1C-AS1 -3.68086100 -3.59213900 unchanging  
## 947 CACNA1E -3.68086100 -3.59213900 unchanging  
## 948 CACNA2D4 -3.68086100 -2.44013570 unchanging  
## 949 CACNG4 -0.06942624 2.86364480 up  
## 950 CACNG5 -3.68086100 -3.59213900 unchanging  
## 951 CADM4 4.32912300 4.53140800 unchanging  
## 952 CADPS -3.68086100 -3.59213900 unchanging  
## 953 CADPS2 2.88053320 3.30133100 unchanging  
## 954 CALB1 -3.52885800 -3.44013550 unchanging  
## 955 CALCA -3.68086100 -3.59213900 unchanging  
## 956 CALCB -1.20692980 -1.44013570 unchanging  
## 957 CALML3 -3.68086100 -3.59213900 unchanging  
## 958 CALML6 -3.52885800 -3.59213900 unchanging  
## 959 CAMK1D 2.55860500 2.58223200 unchanging  
## 960 CAMK2N2 2.51553630 1.41784510 unchanging  
## 961 CAMLG 5.11138700 4.85907200 unchanging  
## 962 CAMSAP2 5.81543800 6.00694750 unchanging  
## 963 CANX 10.14047000 10.13256500 unchanging  
## 964 CAP2 3.76576280 3.97771640 unchanging  
## 965 CAPN1 6.10957770 6.05771600 unchanging  
## 966 CAPN11 -3.68086100 -3.59213900 unchanging  
## 967 CAPN5 1.75654420 2.84526660 unchanging  
## 968 CAPN7 6.10776660 6.00487900 unchanging  
## 969 CAPN8 -3.68086100 -3.44013550 unchanging  
## 970 CAPS 3.18538760 4.54285760 up  
## 971 CAPZA3 -3.68086100 -3.59213900 unchanging  
## 972 CARD16 -3.68086100 -3.59213900 unchanging  
## 973 CARD17 -3.68086100 -3.59213900 unchanging  
## 974 CARD9 0.55860496 0.36721915 unchanging  
## 975 CARKD 4.51006100 4.66838840 unchanging  
## 976 CASP10 3.77492280 1.91741620 down  
## 977 CASP4 -3.52885800 -3.59213900 unchanging  
## 978 CAT 5.94890070 5.51114900 unchanging  
## 979 CATSPER2 1.32912310 1.68914720 unchanging  
## 980 CATSPER3 -1.52885800 -0.63278085 unchanging  
## 981 CATSPERB 0.27849698 -1.44013570 unchanging  
## 982 CBLN3 1.42533850 0.88179230 unchanging  
## 983 CBX7 2.62088920 2.64732700 unchanging  
## 984 CCBE1 -3.68086100 -3.59213900 unchanging  
## 985 CCBP2 2.96299530 1.76931760 unchanging  
## 986 CCDC102A 1.55860500 1.46675490 unchanging  
## 987 CCDC109B 4.56389900 4.63667960 unchanging  
## 988 CCDC11 0.86345950 0.46675485 unchanging  
## 989 CCDC114 -0.35893290 -1.11820770 unchanging  
## 990 CCDC115 4.68546100 4.60425800 unchanging  
## 991 CCDC116 -3.68086100 -3.59213900 unchanging  
## 992 CCDC122 1.79307010 2.08342620 unchanging  
## 993 CCDC132 5.10776660 4.99449250 unchanging  
## 994 CCDC138 3.88053300 3.99449250 unchanging  
## 995 CCDC144B -1.52885800 -0.85517323 unchanging  
## 996 CCDC160 0.71906954 0.64732707 unchanging  
## 997 CCDC168 -1.52885800 -1.44013570 unchanging  
## 998 CCDC169-SOHLH2 1.42533850 1.60425830 unchanging  
## 999 CCDC19 1.79307010 1.84526660 unchanging  
## 1000 CCDC24 1.96299520 2.05171730 unchanging  
## 1001 CCDC25 5.75885440 5.39275460 unchanging  
## 1002 CCDC38 -3.52885800 -1.85517320 unchanging  
## 1003 CCDC48 -2.52885800 -1.85517320 unchanging  
## 1004 CCDC59 4.64106700 4.39906800 unchanging  
## 1005 CCDC6 7.51006130 7.21986000 unchanging  
## 1006 CCDC68 2.25250170 2.23228960 unchanging  
## 1007 CCDC70 -3.68086100 -3.59213900 unchanging  
## 1008 CCDC85A 1.11499820 1.01929580 unchanging  
## 1009 CCDC85C 5.94890070 5.65526100 unchanging  
## 1010 CCDC88C 4.91408600 5.07161700 unchanging  
## 1011 CCL11 -3.68086100 -3.59213900 unchanging  
## 1012 CCL20 -3.68086100 -3.59213900 unchanging  
## 1013 CCL28 2.75654440 2.23228960 unchanging  
## 1014 CCL4L2 -3.68086100 -3.59213900 unchanging  
## 1015 CCNB1IP1 5.61834700 5.35428000 unchanging  
## 1016 CCNE2 6.05985700 5.80541660 unchanging  
## 1017 CCNG2 7.34227700 7.24723960 unchanging  
## 1018 CCNJ 4.68546100 4.23229000 unchanging  
## 1019 CCNL1 4.62088900 5.35102750 unchanging  
## 1020 CCR7 -3.52885800 -3.59213900 unchanging  
## 1021 CCT8L2 -3.68086100 -3.59213900 unchanging  
## 1022 CD14 -3.68086100 -3.59213900 unchanging  
## 1023 CD160 -2.52885800 0.72978930 unchanging  
## 1024 CD180 -3.68086100 -3.59213900 unchanging  
## 1025 CD1E -3.68086100 -3.59213900 unchanging  
## 1026 CD209 -3.52885800 -2.44013570 unchanging  
## 1027 CD276 6.15589050 6.09124570 unchanging  
## 1028 CD2AP 6.95998670 7.03153940 unchanging  
## 1029 CD2BP2 5.14709900 5.08734130 unchanging  
## 1030 CD3EAP 3.48236940 3.75953650 unchanging  
## 1031 CD4 0.37803268 -0.44013572 unchanging  
## 1032 CD52 -3.68086100 -3.59213900 unchanging  
## 1033 CD68 -1.20692980 -2.44013570 unchanging  
## 1034 CD70 -3.68086100 -3.59213900 unchanging  
## 1035 CD79B -3.68086100 -3.59213900 unchanging  
## 1036 CD86 -3.68086100 -3.59213900 unchanging  
## 1037 CD9 7.56456000 7.54499440 unchanging  
## 1038 CDC23 6.00252340 5.98822450 unchanging  
## 1039 CDC25C 4.72853000 4.45468200 unchanging  
## 1040 CDC42 8.05610500 7.92673250 unchanging  
## 1041 CDC42-IT1 -3.68086100 -3.59213900 unchanging  
## 1042 CDC73 6.29450940 6.29964450 unchanging  
## 1043 CDCA2 6.09319400 5.90416000 unchanging  
## 1044 CDCA5 5.83527660 5.78386600 unchanging  
## 1045 CDCA7L 5.78629160 5.55421730 unchanging  
## 1046 CDH16 -3.68086100 -3.59213900 unchanging  
## 1047 CDH2 6.89004850 5.52276040 down  
## 1048 CDH23-AS1 -3.68086100 -3.59213900 unchanging  
## 1049 CDH3 6.42824460 6.19830040 unchanging  
## 1050 CDH6 5.39595460 7.70388500 up  
## 1051 CDH9 -3.68086100 -3.59213900 unchanging  
## 1052 CDHR1 -3.52885800 -3.59213900 unchanging  
## 1053 CDK1 7.24510570 7.15512130 unchanging  
## 1054 CDK11A 5.25904460 5.06369000 unchanging  
## 1055 CDK5 2.97893670 2.91741630 unchanging  
## 1056 CDK5RAP1 3.89740680 3.60425830 unchanging  
## 1057 CDK6 5.73323700 6.70452200 up  
## 1058 CDK7 3.44842200 3.62595320 unchanging  
## 1059 CDK9 4.69031050 4.58223200 unchanging  
## 1060 CDKL5 2.05610470 1.68914720 unchanging  
## 1061 CDKN2A 4.99470400 5.30133100 unchanging  
## 1062 CDON 4.42533870 5.57109170 up  
## 1063 CDRT15 -1.52885800 -1.85517320 unchanging  
## 1064 CDV3 7.71966270 7.98035050 unchanging  
## 1065 CDX2 -0.35893290 -3.44013550 unchanging  
## 1066 CDX4 -3.68086100 -3.59213900 unchanging  
## 1067 CEACAM5 -3.68086100 3.57109140 up  
## 1068 CEACAM6 -3.68086100 4.11445330 up  
## 1069 CEBPB 2.51553630 3.15977700 unchanging  
## 1070 CELA2B -3.68086100 -3.59213900 unchanging  
## 1071 CELF2 4.37803270 2.60425830 down  
## 1072 CEMP1 1.22602960 1.20372030 unchanging  
## 1073 CENPE 6.65353630 6.78868300 unchanging  
## 1074 CENPL 4.37803270 4.39275460 unchanging  
## 1075 CEP350 6.64356950 6.75708060 unchanging  
## 1076 CEP55 6.43259200 6.25683200 unchanging  
## 1077 CEP68 4.49904780 4.36721900 unchanging  
## 1078 CEP72 2.64106700 2.36721900 unchanging  
## 1079 CERKL 0.86345950 0.36721915 unchanging  
## 1080 CERS2 7.09958740 7.12115200 unchanging  
## 1081 CERS4 6.05045750 4.72978930 down  
## 1082 CERS6 7.57639550 7.40692140 unchanging  
## 1083 CETN3 4.31034560 4.32804870 unchanging  
## 1084 CFC1 -3.68086100 -3.59213900 unchanging  
## 1085 CFD -0.35893290 0.46675485 unchanging  
## 1086 CGB1 -1.20692980 -2.44013570 unchanging  
## 1087 CGB2 -1.52885800 -3.59213900 unchanging  
## 1088 CGGBP1 7.38702150 7.35184050 unchanging  
## 1089 CHCHD10 1.79307010 1.51406050 unchanging  
## 1090 CHCHD5 2.51553630 2.11445300 unchanging  
## 1091 CHD3 7.30324130 7.17733140 unchanging  
## 1092 CHD6 6.30403230 6.38958700 unchanging  
## 1093 CHD7 5.79081400 5.58777050 unchanging  
## 1094 CHDH 3.82869390 3.59328720 unchanging  
## 1095 CHGB -3.52885800 -3.59213900 unchanging  
## 1096 CHI3L2 -3.52885800 -3.44013550 unchanging  
## 1097 CHID1 4.67571300 4.73479000 unchanging  
## 1098 CHML 5.63101340 5.41473300 unchanging  
## 1099 CHN1 2.96299530 3.30133100 unchanging  
## 1100 CHPF2 4.71906950 4.58777050 unchanging  
## 1101 CHRAC1 4.69031050 4.87727700 unchanging  
## 1102 CHRDL1 2.66096660 2.64732700 unchanging  
## 1103 CHRNA9 -0.72150310 -3.44013550 unchanging  
## 1104 CHRNB3 -3.68086100 -3.59213900 unchanging  
## 1105 CHST10 3.75654440 4.02746960 unchanging  
## 1106 CHST11 4.57443000 4.51986600 unchanging  
## 1107 CHST12 1.86345960 1.51406050 unchanging  
## 1108 CHST6 6.62596040 5.78868300 down  
## 1109 CHTOP 6.62722500 6.38163850 unchanging  
## 1110 CIAPIN1 5.40778000 5.24986200 unchanging  
## 1111 CIDEB 3.87202140 3.84526660 unchanging  
## 1112 CITED2 4.06359900 4.59878300 unchanging  
## 1113 CKMT1B 3.74726680 3.40535430 unchanging  
## 1114 CLASRP 2.37803270 2.51406050 unchanging  
## 1115 CLCA2 -3.68086100 -3.59213900 unchanging  
## 1116 CLCC1 6.31192000 6.43022900 unchanging  
## 1117 CLCN1 -3.52885800 -3.59213900 unchanging  
## 1118 CLCN5 4.50456520 4.35428000 unchanging  
## 1119 CLDN10-AS1 -3.68086100 -3.59213900 unchanging  
## 1120 CLDN2 -1.52885800 -0.63278085 unchanging  
## 1121 CLDN23 1.17158190 0.72978930 unchanging  
## 1122 CLDN6 -3.52885800 -3.59213900 unchanging  
## 1123 CLDND2 -3.68086100 -3.59213900 unchanging  
## 1124 CLEC4A -1.94389530 -1.85517320 unchanging  
## 1125 CLEC4GP1 -3.68086100 -3.59213900 unchanging  
## 1126 CLEC7A -3.68086100 -2.44013570 unchanging  
## 1127 CLIC6 3.30403180 1.51406050 down  
## 1128 CLINT1 7.46690940 7.27668400 unchanging  
## 1129 CLK1 5.63604900 4.98192930 unchanging  
## 1130 CLLU1OS -3.68086100 -3.59213900 unchanging  
## 1131 CLN6 5.16462900 5.11828470 unchanging  
## 1132 CLPS -3.68086100 -3.59213900 unchanging  
## 1133 CLPTM1L 5.89110200 6.08342600 unchanging  
## 1134 CLU 2.79307000 4.21091600 up  
## 1135 CMA1 -3.68086100 -2.44013570 unchanging  
## 1136 CMPK1 7.39298300 7.25596240 unchanging  
## 1137 CMPK2 1.51553620 1.08342620 unchanging  
## 1138 CMTM8 1.60042510 2.17457410 unchanging  
## 1139 CNOT10 5.41950940 5.38958700 unchanging  
## 1140 CNOT10-AS1 -0.35893290 -0.85517323 unchanging  
## 1141 CNOT6L 5.88688370 5.78868300 unchanging  
## 1142 CNPPD1 5.22936530 4.93490360 unchanging  
## 1143 CNRIP1 -1.52885800 -2.44013570 unchanging  
## 1144 CNTLN 5.01417400 4.51406050 unchanging  
## 1145 CNTN1 5.89740700 6.15232100 unchanging  
## 1146 CNTN4-AS2 -3.68086100 -3.59213900 unchanging  
## 1147 CNTNAP5 -3.52885800 -3.59213900 unchanging  
## 1148 COG5 5.72853000 5.59328700 unchanging  
## 1149 COL11A2 -0.72150310 0.64732707 unchanging  
## 1150 COL12A1 7.71610070 7.02543070 down  
## 1151 COL1A1 4.87202170 5.86592600 up  
## 1152 COL1A2 6.94586200 2.53714420 down  
## 1153 COL3A1 7.09502360 2.70961120 down  
## 1154 COL4A1 4.73323700 3.74968890 unchanging  
## 1155 COL4A2-AS1 -1.20692980 -1.85517320 unchanging  
## 1156 COL6A1 6.38253400 5.52853100 down  
## 1157 COL9A1 -3.52885800 -2.44013570 unchanging  
## 1158 COL9A3 0.93057376 3.11445300 up  
## 1159 COLEC12 1.51553620 0.26030394 unchanging  
## 1160 COMMD6 4.83308600 4.81725200 unchanging  
## 1161 COMMD9 4.60556840 4.45468200 unchanging  
## 1162 COMTD1 1.27849700 1.46675490 unchanging  
## 1163 COPS6 5.69514370 5.63667960 unchanging  
## 1164 COQ10B 4.28492300 4.12210660 unchanging  
## 1165 COQ9 5.03719600 4.87727700 unchanging  
## 1166 CORIN -2.52885800 -2.44013570 unchanging  
## 1167 CORO1A 0.37803268 1.20372030 unchanging  
## 1168 COTL1 5.51280100 6.40378500 up  
## 1169 COX4I1 6.13647800 6.25683200 unchanging  
## 1170 COX6A2 -3.68086100 -3.59213900 unchanging  
## 1171 COX6B2 -3.52885800 -3.44013550 unchanging  
## 1172 COX8C -2.52885800 -3.59213900 unchanging  
## 1173 CPB1 -3.68086100 -3.59213900 unchanging  
## 1174 CPLX2 -3.68086100 -3.59213900 unchanging  
## 1175 CPLX3 -3.68086100 -3.59213900 unchanging  
## 1176 CPM 5.57180450 5.09124570 unchanging  
## 1177 CPO -3.52885800 -3.44013550 unchanging  
## 1178 CPSF2 7.09410900 6.79707430 unchanging  
## 1179 CPSF6 7.07384100 7.07556400 unchanging  
## 1180 CPSF7 6.69514370 6.55845450 unchanging  
## 1181 CPVL 5.23269300 4.79826900 unchanging  
## 1182 CPXM2 -3.68086100 -3.59213900 unchanging  
## 1183 CRABP2 1.71906960 4.14482640 up  
## 1184 CRBN 3.31663200 3.23228980 unchanging  
## 1185 CREB3 4.85052000 4.99865630 unchanging  
## 1186 CRIM1 4.51553630 6.22342200 up  
## 1187 CRISPLD2 5.26230500 4.87274740 unchanging  
## 1188 CRLF2 -3.68086100 -3.59213900 unchanging  
## 1189 CRNKL1 5.43980900 5.19285900 unchanging  
## 1190 CRNN -3.68086100 -3.59213900 unchanging  
## 1191 CRTAM -3.68086100 -3.59213900 unchanging  
## 1192 CRX -3.68086100 -3.59213900 unchanging  
## 1193 CSF2RB -3.68086100 -3.59213900 unchanging  
## 1194 CSN2 -3.68086100 -3.59213900 unchanging  
## 1195 CSNK1E 5.48236940 5.20010900 unchanging  
## 1196 CSPP1 4.30403200 4.41161350 unchanging  
## 1197 CST9L -3.68086100 -3.59213900 unchanging  
## 1198 CSTA -1.94389530 -2.44013570 unchanging  
## 1199 CSTF2T 6.05610470 5.92837050 unchanging  
## 1200 CT45A3 2.99470400 2.49060150 unchanging  
## 1201 CT45A5 3.73792860 3.01929570 unchanging  
## 1202 CT47A10 -3.68086100 -3.59213900 unchanging  
## 1203 CT47A3 -3.68086100 -3.59213900 unchanging  
## 1204 CT47A5 -3.68086100 -3.59213900 unchanging  
## 1205 CTA-204B4.6 6.01417400 6.18557360 unchanging  
## 1206 CTA-211A9.5 -0.94389530 -1.85517320 unchanging  
## 1207 CTA-250D10.19 -1.94389530 -0.44013572 unchanging  
## 1208 CTA-286B10.7 -2.52885800 -3.44013550 unchanging  
## 1209 CTA-392C11.2 -3.68086100 -3.59213900 unchanging  
## 1210 CTA-398F10.1 -3.68086100 -3.59213900 unchanging  
## 1211 CTA-398F10.2 -3.68086100 -3.44013550 unchanging  
## 1212 CTA-407F11.8 -3.68086100 -3.59213900 unchanging  
## 1213 CTA-503F6.2 -3.68086100 -3.59213900 unchanging  
## 1214 CTA-520D8.2 -3.68086100 -3.59213900 unchanging  
## 1215 CTA-714B7.5 1.68059550 1.08342620 unchanging  
## 1216 CTA-929C8.5 -3.68086100 -3.59213900 unchanging  
## 1217 CTA-929C8.7 -3.68086100 -3.59213900 unchanging  
## 1218 CTA-992D9.7 -3.68086100 -3.59213900 unchanging  
## 1219 CTAG1B -3.68086100 -3.59213900 unchanging  
## 1220 CTAG2 -3.68086100 -3.59213900 unchanging  
## 1221 CTB-111F10.1 -3.68086100 -3.59213900 unchanging  
## 1222 CTB-113P19.3 -1.52885800 -1.11820770 unchanging  
## 1223 CTB-129O4.1 -2.52885800 -3.59213900 unchanging  
## 1224 CTB-12O2.1 -3.68086100 -3.59213900 unchanging  
## 1225 CTB-131B5.4 0.17158182 0.14482673 unchanging  
## 1226 CTB-134H23.2 2.93057370 3.43022900 unchanging  
## 1227 CTB-158E9.1 -3.68086100 -3.59213900 unchanging  
## 1228 CTB-161M19.4 -3.68086100 -3.59213900 unchanging  
## 1229 CTB-164N12.1 -1.94389530 -2.44013570 unchanging  
## 1230 CTB-178M22.2 -1.52885800 -1.11820770 unchanging  
## 1231 CTB-28J9.2 -3.68086100 -3.59213900 unchanging  
## 1232 CTB-35F21.2 -3.68086100 -3.59213900 unchanging  
## 1233 CTB-37A13.1 -3.68086100 -3.59213900 unchanging  
## 1234 CTB-47B11.3 -3.68086100 -3.59213900 unchanging  
## 1235 CTB-57H20.1 -3.68086100 -3.59213900 unchanging  
## 1236 CTB-89H12.4 7.35454900 7.49797400 unchanging  
## 1237 CTBP1 6.16984650 6.16349100 unchanging  
## 1238 CTBS 4.51553630 4.55986450 unchanging  
## 1239 CTC-228N24.2 -3.68086100 -3.59213900 unchanging  
## 1240 CTC-231O11.1 -3.68086100 -3.59213900 unchanging  
## 1241 CTC-235G5.3 -3.68086100 -3.59213900 unchanging  
## 1242 CTC-260F20.3 4.97496800 4.54854900 unchanging  
## 1243 CTC-276P9.3 -3.68086100 -3.59213900 unchanging  
## 1244 CTC-286N12.1 -3.68086100 -3.59213900 unchanging  
## 1245 CTC-321K16.1 -3.68086100 -3.59213900 unchanging  
## 1246 CTC-321K16.4 -3.68086100 -3.59213900 unchanging  
## 1247 CTC-325J23.3 -3.68086100 -3.59213900 unchanging  
## 1248 CTC-327F10.4 -3.68086100 -3.59213900 unchanging  
## 1249 CTC-338M12.2 -3.68086100 -3.59213900 unchanging  
## 1250 CTC-340A15.2 -3.52885800 -3.59213900 unchanging  
## 1251 CTC-349C3.2 -3.68086100 -3.59213900 unchanging  
## 1252 CTC-359M8.1 -3.68086100 -3.44013550 unchanging  
## 1253 CTC-369A16.3 -3.68086100 -3.59213900 unchanging  
## 1254 CTC-378H22.2 -3.68086100 -3.59213900 unchanging  
## 1255 CTC-426B10.1 4.68059540 4.38641260 unchanging  
## 1256 CTC-436K13.2 -3.68086100 -3.59213900 unchanging  
## 1257 CTC-436K13.5 -3.68086100 -3.59213900 unchanging  
## 1258 CTC-441N14.1 -3.68086100 -3.59213900 unchanging  
## 1259 CTC-458G6.4 -3.68086100 -3.59213900 unchanging  
## 1260 CTC-493P15.3 -3.68086100 -3.59213900 unchanging  
## 1261 CTC-497E21.3 -3.52885800 -3.59213900 unchanging  
## 1262 CTC-499J9.1 -3.68086100 -3.59213900 unchanging  
## 1263 CTC-529L17.1 -3.68086100 -3.59213900 unchanging  
## 1264 CTC-548H10.2 -3.68086100 -3.59213900 unchanging  
## 1265 CTC-551A13.1 -3.68086100 -3.59213900 unchanging  
## 1266 CTC-554D6.1 3.76576280 3.99449250 unchanging  
## 1267 CTC-558O19.1 -3.68086100 -3.59213900 unchanging  
## 1268 CTC-563A5.2 -3.68086100 -3.59213900 unchanging  
## 1269 CTC-573N18.1 -2.52885800 -3.59213900 unchanging  
## 1270 CTCF 6.19394970 6.01929570 unchanging  
## 1271 CTCFL -3.68086100 -1.85517320 unchanging  
## 1272 CTD-2001C12.1 -2.52885800 -3.44013550 unchanging  
## 1273 CTD-2002H8.2 -2.52885800 -1.85517320 unchanging  
## 1274 CTD-2033D15.1 0.05610465 2.84526660 up  
## 1275 CTD-2044J15.1 -3.68086100 -3.59213900 unchanging  
## 1276 CTD-2046I8.1 -3.68086100 -3.59213900 unchanging  
## 1277 CTD-2054N24.2 0.17158182 -0.44013572 unchanging  
## 1278 CTD-2116N17.1 4.82428900 4.70961140 unchanging  
## 1279 CTD-2134P3.1 -3.68086100 -3.59213900 unchanging  
## 1280 CTD-2151A2.1 -3.68086100 -3.59213900 unchanging  
## 1281 CTD-2170G1.2 -3.68086100 -3.59213900 unchanging  
## 1282 CTD-2184D3.4 -3.68086100 -3.59213900 unchanging  
## 1283 CTD-2201E9.1 -3.68086100 -3.59213900 unchanging  
## 1284 CTD-2210P24.1 -3.68086100 -3.59213900 unchanging  
## 1285 CTD-2228K2.5 3.34150700 3.34122400 unchanging  
## 1286 CTD-2270F17.1 -3.68086100 -3.59213900 unchanging  
## 1287 CTD-2275D24.2 -3.68086100 -3.59213900 unchanging  
## 1288 CTD-2283N19.1 -3.68086100 -3.59213900 unchanging  
## 1289 CTD-2284J15.1 -3.52885800 -3.59213900 unchanging  
## 1290 CTD-2288O8.1 -3.68086100 -2.44013570 unchanging  
## 1291 CTD-2292M14.1 -3.68086100 -3.59213900 unchanging  
## 1292 CTD-2292P10.2 0.17158182 -0.11820772 unchanging  
## 1293 CTD-2298J14.2 -3.68086100 -3.59213900 unchanging  
## 1294 CTD-2307P3.1 -3.68086100 -3.59213900 unchanging  
## 1295 CTD-2308B18.4 -3.68086100 -3.59213900 unchanging  
## 1296 CTD-2308G16.1 -3.68086100 -3.59213900 unchanging  
## 1297 CTD-2308N23.2 -3.68086100 -3.59213900 unchanging  
## 1298 CTD-2316B1.2 -3.68086100 -3.59213900 unchanging  
## 1299 CTD-2324F15.2 -3.68086100 -3.59213900 unchanging  
## 1300 CTD-2325B11.1 -3.68086100 -3.59213900 unchanging  
## 1301 CTD-2325P2.3 -3.68086100 -2.44013570 unchanging  
## 1302 CTD-2331D11.4 -3.68086100 -3.59213900 unchanging  
## 1303 CTD-2334D19.1 -3.68086100 -3.59213900 unchanging  
## 1304 CTD-2339F6.1 -3.68086100 -3.59213900 unchanging  
## 1305 CTD-2340D6.2 -3.52885800 -3.59213900 unchanging  
## 1306 CTD-2368P22.1 -0.06942624 0.88179230 unchanging  
## 1307 CTD-2371O3.2 -3.68086100 -3.59213900 unchanging  
## 1308 CTD-2377D24.4 -3.68086100 -3.59213900 unchanging  
## 1309 CTD-2501E16.2 -3.68086100 -3.59213900 unchanging  
## 1310 CTD-2516F10.2 -1.94389530 -2.44013570 unchanging  
## 1311 CTD-2516F10.4 -3.68086100 -3.44013550 unchanging  
## 1312 CTD-2523D13.1 -3.68086100 -3.59213900 unchanging  
## 1313 CTD-2525J15.2 -3.68086100 -3.44013550 unchanging  
## 1314 CTD-2540C19.1 -3.68086100 -3.59213900 unchanging  
## 1315 CTD-2540L5.5 2.37803270 2.41784500 unchanging  
## 1316 CTD-2544M6.1 -3.68086100 -3.59213900 unchanging  
## 1317 CTD-2547L16.1 -3.52885800 -2.44013570 unchanging  
## 1318 CTD-2555O16.1 -3.52885800 -3.59213900 unchanging  
## 1319 CTD-2561F5.1 -3.68086100 -3.59213900 unchanging  
## 1320 CTD-2566J3.1 -2.52885800 -3.59213900 unchanging  
## 1321 CTD-2589M5.4 -3.68086100 -3.59213900 unchanging  
## 1322 CTD-2609K8.3 -3.68086100 -3.59213900 unchanging  
## 1323 CTD-2611O12.2 -3.68086100 -3.59213900 unchanging  
## 1324 CTD-2647E9.2 -3.68086100 -3.59213900 unchanging  
## 1325 CTD-2647L4.4 0.93057376 1.26030390 unchanging  
## 1326 CTD-2653M23.2 1.64106700 0.64732707 unchanging  
## 1327 CTD-3023L14.2 -3.68086100 -3.59213900 unchanging  
## 1328 CTD-3028N15.1 -3.68086100 -3.59213900 unchanging  
## 1329 CTD-3074O7.11 4.83746430 4.58223200 unchanging  
## 1330 CTDNEP1 5.39298300 5.45468200 unchanging  
## 1331 CTDSPL 5.74493800 5.46374600 unchanging  
## 1332 CTDSPL2 6.19906230 6.00901270 unchanging  
## 1333 CTGF 1.71906960 3.96074370 up  
## 1334 CTSA 6.14002700 6.03964470 unchanging  
## 1335 CTSS -0.72150310 -2.44013570 unchanging  
## 1336 CUL4A 6.71074000 6.59466300 unchanging  
## 1337 CUL7 5.19906300 4.96925500 unchanging  
## 1338 CUTA 4.81543800 4.52564860 unchanging  
## 1339 CWC15 4.89320700 4.78868300 unchanging  
## 1340 CWF19L1 4.74726700 5.10675860 unchanging  
## 1341 CXCL10 -3.68086100 -3.59213900 unchanging  
## 1342 CXCL13 -3.68086100 -3.59213900 unchanging  
## 1343 CXCL6 -3.68086100 -3.59213900 unchanging  
## 1344 CXCL9 -3.68086100 -3.59213900 unchanging  
## 1345 CXCR2 -3.68086100 -3.59213900 unchanging  
## 1346 CXCR4 1.86345960 1.98612890 unchanging  
## 1347 CXorf1 -3.68086100 -3.59213900 unchanging  
## 1348 CXorf23 3.25250170 3.57109140 unchanging  
## 1349 CXorf40B 3.76576280 3.96074370 unchanging  
## 1350 CXorf56 4.30403200 4.76443530 unchanging  
## 1351 CYB5B 6.88793950 6.83132700 unchanging  
## 1352 CYBA 4.31663230 4.43638130 unchanging  
## 1353 CYLC2 -3.68086100 -3.59213900 unchanging  
## 1354 CYLD 5.34150700 5.39275460 unchanging  
## 1355 CYP17A1 -3.68086100 -3.59213900 unchanging  
## 1356 CYP1B1 4.62088900 5.58223200 up  
## 1357 CYP21A2 -2.52885800 -3.59213900 unchanging  
## 1358 CYP26B1 2.40187930 4.18922100 up  
## 1359 CYP26C1 -3.68086100 -3.59213900 unchanging  
## 1360 CYP27C1 -0.94389530 -1.85517320 unchanging  
## 1361 CYP2W1 -3.68086100 -3.59213900 unchanging  
## 1362 CYP3A5 -1.94389530 -1.11820770 unchanging  
## 1363 CYP46A1 0.17158182 0.26030394 unchanging  
## 1364 CYR61 4.65601730 6.49207900 up  
## 1365 D2HGDH 1.71906960 1.88179220 unchanging  
## 1366 DAB2IP 4.74260470 4.78868300 unchanging  
## 1367 DACT1 0.27849698 -3.59213900 unchanging  
## 1368 DAGLB 3.91408560 3.94356850 unchanging  
## 1369 DAK 5.01417400 4.91301060 unchanging  
## 1370 DAO -3.68086100 -3.59213900 unchanging  
## 1371 DAPK3 4.05610470 3.89971420 unchanging  
## 1372 DAZ1 -3.68086100 -3.59213900 unchanging  
## 1373 DAZAP2 7.81210470 7.49281700 unchanging  
## 1374 DBC1 -2.52885800 -2.44013570 unchanging  
## 1375 DBN1 6.52913330 6.35428000 unchanging  
## 1376 DCAF15 3.25250170 2.88179230 unchanging  
## 1377 DCAF16 6.69634960 6.37844660 unchanging  
## 1378 DCAF5 5.94078350 5.93924300 unchanging  
## 1379 DCAF6 5.94687500 5.87727640 unchanging  
## 1380 DCAKD 4.84183000 4.46675500 unchanging  
## 1381 DCDC5 0.17158182 0.14482673 unchanging  
## 1382 DCLRE1B 4.59526350 4.50823160 unchanging  
## 1383 DCLRE1C 4.11499830 4.26030400 unchanging  
## 1384 DCP1B 3.65105100 3.38004300 unchanging  
## 1385 DCST1 -2.52885800 -3.44013550 unchanging  
## 1386 DCUN1D1 6.93466660 7.00487900 unchanging  
## 1387 DDN -1.52885800 -1.11820770 unchanging  
## 1388 DDX17 8.18624600 8.20462200 unchanging  
## 1389 DDX18 6.11138700 6.14857860 unchanging  
## 1390 DDX24 7.27930200 6.84642200 unchanging  
## 1391 DDX39A 5.65353630 5.50530800 unchanging  
## 1392 DDX39B-AS1 -3.68086100 -3.44013550 unchanging  
## 1393 DDX3Y -0.06942624 -3.44013550 unchanging  
## 1394 DDX43 3.52642440 3.17457410 unchanging  
## 1395 DDX60L -3.68086100 -3.44013550 unchanging  
## 1396 DEFA3 -3.68086100 -3.59213900 unchanging  
## 1397 DEFB105B -3.68086100 -3.59213900 unchanging  
## 1398 DEFB106A -3.68086100 -3.59213900 unchanging  
## 1399 DEFB110 -3.68086100 -3.59213900 unchanging  
## 1400 DEFB112 -3.68086100 -3.59213900 unchanging  
## 1401 DEFB123 -3.68086100 -3.59213900 unchanging  
## 1402 DEFB129 -3.68086100 -3.59213900 unchanging  
## 1403 DEFB4B -3.68086100 -3.59213900 unchanging  
## 1404 DENND2A 1.05610470 1.08342620 unchanging  
## 1405 DENND4C 6.31192000 6.22164250 unchanging  
## 1406 DEPDC5 3.44842200 3.09902300 unchanging  
## 1407 DEXI 3.01030060 3.01929570 unchanging  
## 1408 DGAT1 3.72853000 3.41784520 unchanging  
## 1409 DGCR14 3.86345960 3.21807580 unchanging  
## 1410 DGCR8 4.60042520 4.59328700 unchanging  
## 1411 DGKK -0.72150310 -0.63278085 unchanging  
## 1412 DHCR24 9.65213900 9.43273200 unchanging  
## 1413 DHDH 0.37803268 0.55986420 unchanging  
## 1414 DHFRL1 3.26555800 3.06765900 unchanging  
## 1415 DHODH 2.37803270 2.31475160 unchanging  
## 1416 DHRS7B 3.50456500 3.47872760 unchanging  
## 1417 DHX36 6.40187930 6.21628900 unchanging  
## 1418 DHX57 5.36595960 5.28778460 unchanging  
## 1419 DIMT1 5.23932650 5.27754070 unchanging  
## 1420 DIO1 -3.52885800 -3.59213900 unchanging  
## 1421 DKK2 -3.68086100 -3.59213900 unchanging  
## 1422 DLEU1 2.86345960 3.14482670 unchanging  
## 1423 DLG5 6.96499730 6.91411400 unchanging  
## 1424 DLGAP3 -1.20692980 -3.59213900 unchanging  
## 1425 DLX4 0.37803268 0.72978930 unchanging  
## 1426 DMAP1 3.66096690 3.71973560 unchanging  
## 1427 DMP1 -3.68086100 -3.59213900 unchanging  
## 1428 DMRT2 1.89740680 1.31475160 unchanging  
## 1429 DMRTC1 -3.68086100 -3.44013550 unchanging  
## 1430 DMRTC1B -3.68086100 -3.44013550 unchanging  
## 1431 DMWD 3.07105500 3.21807580 unchanging  
## 1432 DNA2 5.60556840 5.28437800 unchanging  
## 1433 DNAH12 -1.94389530 -1.11820770 unchanging  
## 1434 DNAH5 -0.06942624 0.46675485 unchanging  
## 1435 DNAJB8-AS1 -3.68086100 -3.59213900 unchanging  
## 1436 DNAJC16 5.24263200 4.92618660 unchanging  
## 1437 DNAJC19 4.22602940 4.22519970 unchanging  
## 1438 DNASE1 2.49351000 2.34122400 unchanging  
## 1439 DNASE1L2 -1.52885800 -0.11820772 unchanging  
## 1440 DNASE2 5.87202170 5.74225850 unchanging  
## 1441 DNASE2B -3.68086100 -3.59213900 unchanging  
## 1442 DNER 3.69996070 1.91741620 down  
## 1443 DNMBP 4.97098800 4.78868300 unchanging  
## 1444 DNMT1 7.40998650 7.20822200 unchanging  
## 1445 DNTTIP2 6.14179850 6.04166360 unchanging  
## 1446 DOC2A 0.86345950 1.36721920 unchanging  
## 1447 DOCK3 3.26555800 3.12971970 unchanging  
## 1448 DOK3 1.11499820 1.26030390 unchanging  
## 1449 DOK4 3.59008310 3.91741630 unchanging  
## 1450 DOK5 -3.68086100 -3.59213900 unchanging  
## 1451 DPH2 3.94687560 4.08342650 unchanging  
## 1452 DPM2 4.51553630 4.39275460 unchanging  
## 1453 DPP10 1.27849700 -2.44013570 unchanging  
## 1454 DPP4 -2.52885800 -2.44013570 unchanging  
## 1455 DPP9 4.52099040 4.49650240 unchanging  
## 1456 DPY19L1 6.69272900 6.74225850 unchanging  
## 1457 DPYD-IT1 -3.68086100 -3.44013550 unchanging  
## 1458 DRD4 -3.68086100 -3.59213900 unchanging  
## 1459 DROSHA 6.00447200 5.86136050 unchanging  
## 1460 DSC2 6.68667500 6.45468240 unchanging  
## 1461 DSCAM -3.68086100 1.55986430 up  
## 1462 DSCAM-AS1 -3.68086100 4.87274740 up  
## 1463 DSCR10 -3.68086100 -3.59213900 unchanging  
## 1464 DSCR8 -0.35893290 0.88179230 unchanging  
## 1465 DTHD1 -3.68086100 -3.59213900 unchanging  
## 1466 DUSP12 4.15764300 4.15232130 unchanging  
## 1467 DUSP19 2.96299530 3.30133100 unchanging  
## 1468 DUSP28 2.02573100 2.31475160 unchanging  
## 1469 DUSP7 2.77492280 2.60425830 unchanging  
## 1470 DUX4L5 -3.68086100 -3.44013550 unchanging  
## 1471 DUX4L6 -3.68086100 -3.44013550 unchanging  
## 1472 DUX4L7 -3.68086100 -3.44013550 unchanging  
## 1473 DYNC1H1 8.63636300 8.76045600 unchanging  
## 1474 DYNLT1 5.56389900 5.29118300 unchanging  
## 1475 DYRK3 2.17158170 2.46675500 unchanging  
## 1476 DYTN -3.68086100 -3.59213900 unchanging  
## 1477 DZANK1-AS1 -3.68086100 -3.59213900 unchanging  
## 1478 DZIP3 5.26880360 4.93490360 unchanging  
## 1479 E2F3 5.48795030 5.54854900 unchanging  
## 1480 E4F1 2.79307000 2.91741630 unchanging  
## 1481 EAF2 1.05610470 1.31475160 unchanging  
## 1482 EAPP 4.52642440 4.18191600 unchanging  
## 1483 ECD 5.03719600 4.97349200 unchanging  
## 1484 ECE2 3.07105500 2.76931760 unchanging  
## 1485 ECEL1 2.22602960 1.95218160 unchanging  
## 1486 ECH1 5.66835900 5.30805700 unchanging  
## 1487 EDARADD 7.07662150 7.33547400 unchanging  
## 1488 EDC3 5.75423000 5.36399560 unchanging  
## 1489 EDC4 5.42824400 5.31140850 unchanging  
## 1490 EDEM3 6.27849700 6.45012900 unchanging  
## 1491 EDNRA 0.64106710 0.01929582 unchanging  
## 1492 EEF1A2 0.55860496 4.66315200 up  
## 1493 EFCAB1 1.86345960 -2.44013570 down  
## 1494 EFCAB2 2.37803270 2.34122400 unchanging  
## 1495 EFCAB4B -3.52885800 0.01929582 unchanging  
## 1496 EFHD1 0.79307020 0.46675485 unchanging  
## 1497 EGFLAM-AS2 -3.68086100 -3.59213900 unchanging  
## 1498 EGFLAM-AS3 -3.68086100 -3.59213900 unchanging  
## 1499 EGLN1 5.68788800 5.56548900 unchanging  
## 1500 EGLN3 -0.20692979 0.64732707 unchanging  
## 1501 EGR1 4.31663230 3.01929570 down  
## 1502 EHF 5.50731560 3.12971970 down  
## 1503 EHMT2-AS1 -0.94389530 -0.44013572 unchanging  
## 1504 EID2B 1.37803270 0.36721915 unchanging  
## 1505 EIF1 7.87575150 7.84873000 unchanging  
## 1506 EIF1AX-AS1 -3.68086100 -3.59213900 unchanging  
## 1507 EIF2AK2 7.06172940 7.07753320 unchanging  
## 1508 EIF2B5-AS1 -3.68086100 -3.59213900 unchanging  
## 1509 EIF3A 8.72705600 8.73385300 unchanging  
## 1510 EIF4A3 6.66096640 6.49060200 unchanging  
## 1511 EIF4E3 5.21260930 5.18191600 unchanging  
## 1512 EIF4ENIF1 4.45413600 4.05171730 unchanging  
## 1513 EIF4H 7.86292300 7.99292800 unchanging  
## 1514 EIF5 7.98684200 8.12019700 unchanging  
## 1515 EIF6 5.32601070 5.37684770 unchanging  
## 1516 ELMO1 -0.94389530 -0.44013572 unchanging  
## 1517 ELMOD2 6.47957100 6.36560800 unchanging  
## 1518 ELP4 4.15764300 4.24636460 unchanging  
## 1519 EMILIN1 -1.20692980 -0.63278085 unchanging  
## 1520 EML1 4.86345960 4.86820300 unchanging  
## 1521 EML2 2.53723120 2.76931760 unchanging  
## 1522 EML3 3.48236940 3.43022900 unchanging  
## 1523 EMP1 6.03529170 7.41706750 up  
## 1524 ENC1 2.27849700 2.70961120 unchanging  
## 1525 ENDOG 2.62088920 2.55986430 unchanging  
## 1526 ENO1-IT1 -3.52885800 -3.44013550 unchanging  
## 1527 ENOX1-AS1 -3.68086100 -3.59213900 unchanging  
## 1528 ENPP1 5.64856150 5.33794160 unchanging  
## 1529 ENPP4 6.49766540 6.64334400 unchanging  
## 1530 ENTPD3-AS1 0.37803268 0.14482673 unchanging  
## 1531 ENTPD4 5.43980900 5.39275460 unchanging  
## 1532 EP400NL 3.01030060 2.89971420 unchanging  
## 1533 EPB41L3 -3.68086100 -3.59213900 unchanging  
## 1534 EPCAM 8.15150200 7.55351000 unchanging  
## 1535 EPHA3 5.76805830 5.11828470 unchanging  
## 1536 EPHA5 3.91408560 5.22164250 up  
## 1537 EPHA7 2.22602960 3.09902300 unchanging  
## 1538 EPOR 2.25250170 2.51406050 unchanging  
## 1539 EPRS 8.36368500 8.40731300 unchanging  
## 1540 EPS8 5.74026870 5.49650240 unchanging  
## 1541 EPS8L1 2.66096660 2.93490360 unchanging  
## 1542 EPYC -3.68086100 -3.59213900 unchanging  
## 1543 ERAL1 4.99470400 4.75953670 unchanging  
## 1544 ERAP1 4.21260930 4.80779170 unchanging  
## 1545 ERBB2IP 7.34458640 7.37123900 unchanging  
## 1546 ERBB4 3.14356730 4.36721900 up  
## 1547 ERC1 6.50318770 6.63400600 unchanging  
## 1548 ERC2 0.64106710 0.72978930 unchanging  
## 1549 ERCC5 5.71193360 5.61514660 unchanging  
## 1550 EREG -3.52885800 -3.59213900 unchanging  
## 1551 ERI1 5.35988500 5.22164250 unchanging  
## 1552 ERI2 5.07476850 4.82665060 unchanging  
## 1553 ERLEC1 6.26880360 6.34122370 unchanging  
## 1554 ERLIN1 6.25904400 6.34449900 unchanging  
## 1555 ERLIN2 7.13736600 6.80541660 unchanging  
## 1556 ERO1L 6.09319400 6.30973400 unchanging  
## 1557 ERO1LB 4.33532800 4.42405030 unchanging  
## 1558 ERP29 7.50456500 7.40142800 unchanging  
## 1559 ERVFRD-1 -2.52885800 -2.44013570 unchanging  
## 1560 ESAM 1.37803270 1.36721920 unchanging  
## 1561 ESCO1 5.36292550 5.20372000 unchanging  
## 1562 ESCO2 6.16984650 5.86136050 unchanging  
## 1563 ESPNL 0.27849698 0.36721915 unchanging  
## 1564 ESYT1 7.73851400 7.54285760 unchanging  
## 1565 ETFB 4.04857100 3.92618630 unchanging  
## 1566 ETV2 -3.68086100 -3.44013550 unchanging  
## 1567 EXD1 -3.68086100 -3.59213900 unchanging  
## 1568 EXO1 5.01803640 5.14482640 unchanging  
## 1569 EXOC6B 5.78855470 5.60698800 unchanging  
## 1570 EXOSC4 2.57966640 2.58223200 unchanging  
## 1571 EXOSC7 3.53723120 3.61514640 unchanging  
## 1572 EXOSC8 4.78855470 4.99865630 unchanging  
## 1573 EYA1 1.17158190 -1.44013570 unchanging  
## 1574 EYA3 5.52371030 5.27754070 unchanging  
## 1575 EYA3-IT1 -3.68086100 -3.44013550 unchanging  
## 1576 EZR 8.62501050 8.30217400 unchanging  
## 1577 F10 -1.52885800 -0.44013572 unchanging  
## 1578 F10-AS1 -3.52885800 -3.59213900 unchanging  
## 1579 F11 -3.52885800 -3.59213900 unchanging  
## 1580 F2R 4.89320700 4.61514660 unchanging  
## 1581 F2RL2 -3.68086100 -3.44013550 unchanging  
## 1582 F8 2.68059560 2.88179230 unchanging  
## 1583 FABP2 -3.68086100 -3.59213900 unchanging  
## 1584 FABP5 4.85915950 5.31140850 unchanging  
## 1585 FADS6 -3.68086100 -3.59213900 unchanging  
## 1586 FAHD2A 3.44842200 3.43022900 unchanging  
## 1587 FAHD2B 2.81099200 2.74968890 unchanging  
## 1588 FAIM 3.05610440 3.21807580 unchanging  
## 1589 FAM103A1 4.65105100 4.53714400 unchanging  
## 1590 FAM106A -3.68086100 -3.44013550 unchanging  
## 1591 FAM106B -3.68086100 -3.59213900 unchanging  
## 1592 FAM108A1 3.27849700 2.95218160 unchanging  
## 1593 FAM114A2 4.34150700 4.14482640 unchanging  
## 1594 FAM117B 5.70236350 5.26030400 unchanging  
## 1595 FAM120B 5.00641730 4.99865630 unchanging  
## 1596 FAM123A -0.94389530 -3.59213900 unchanging  
## 1597 FAM129A 3.23932620 2.41784500 unchanging  
## 1598 FAM129B 6.04668140 6.07161700 unchanging  
## 1599 FAM129C -3.52885800 -3.59213900 unchanging  
## 1600 FAM131C -3.52885800 -1.44013570 unchanging  
## 1601 FAM134C 5.55860470 5.46374600 unchanging  
## 1602 FAM150B -1.94389530 -3.44013550 unchanging  
## 1603 FAM151A 0.17158182 0.01929582 unchanging  
## 1604 FAM153B -3.68086100 -3.44013550 unchanging  
## 1605 FAM156B 3.23932620 3.20372030 unchanging  
## 1606 FAM157A -0.06942624 -1.11820770 unchanging  
## 1607 FAM160B2 3.82869390 3.95218160 unchanging  
## 1608 FAM163B -3.68086100 -3.59213900 unchanging  
## 1609 FAM165A -0.94389530 -0.27021074 unchanging  
## 1610 FAM166A 3.97893670 3.85448480 unchanging  
## 1611 FAM167B -2.52885800 -3.44013550 unchanging  
## 1612 FAM168A 6.54394500 6.46525100 unchanging  
## 1613 FAM169A 5.78402470 5.57667260 unchanging  
## 1614 FAM180A -3.68086100 -3.59213900 unchanging  
## 1615 FAM181B -3.68086100 -3.59213900 unchanging  
## 1616 FAM187B -3.68086100 -3.59213900 unchanging  
## 1617 FAM18B2-CDRT4 4.72380730 4.88179200 unchanging  
## 1618 FAM197Y2P -3.68086100 -3.59213900 unchanging  
## 1619 FAM197Y6 -3.68086100 -3.59213900 unchanging  
## 1620 FAM197Y8 -3.68086100 -3.59213900 unchanging  
## 1621 FAM19A1 -3.68086100 -3.59213900 unchanging  
## 1622 FAM19A4 0.05610465 -0.11820772 unchanging  
## 1623 FAM206A 4.27204200 4.59878300 unchanging  
## 1624 FAM21A 6.55993030 6.21986000 unchanging  
## 1625 FAM21D 4.97893670 4.65262130 unchanging  
## 1626 FAM22E 1.11499820 1.51406050 unchanging  
## 1627 FAM27A 0.64106710 0.55986420 unchanging  
## 1628 FAM35B 5.42824400 5.25683160 unchanging  
## 1629 FAM3A 2.97893670 3.17457410 unchanging  
## 1630 FAM41AY1 -3.68086100 -3.59213900 unchanging  
## 1631 FAM46A 4.43114380 4.59328700 unchanging  
## 1632 FAM46C 1.27849700 2.55986430 unchanging  
## 1633 FAM47B -3.68086100 -3.59213900 unchanging  
## 1634 FAM53B 4.32289100 4.47275350 unchanging  
## 1635 FAM54B 4.45413600 4.20372000 unchanging  
## 1636 FAM63A 2.27849700 2.82665090 unchanging  
## 1637 FAM65A 3.17158200 3.55986450 unchanging  
## 1638 FAM66B -3.68086100 -3.44013550 unchanging  
## 1639 FAM66C -0.94389530 -0.27021074 unchanging  
## 1640 FAM69B 3.51553630 3.08342650 unchanging  
## 1641 FAM69C -3.68086100 -3.59213900 unchanging  
## 1642 FAM71A -3.68086100 -3.59213900 unchanging  
## 1643 FAM73A 4.88053270 4.95646900 unchanging  
## 1644 FAM74A2 -3.68086100 -3.59213900 unchanging  
## 1645 FAM75A1 -3.68086100 -3.59213900 unchanging  
## 1646 FAM75D1 -3.68086100 -3.59213900 unchanging  
## 1647 FAM78A -0.52885790 -1.44013570 unchanging  
## 1648 FAM83A -3.68086100 0.64732707 unchanging  
## 1649 FAM83D 5.75654460 5.69172100 unchanging  
## 1650 FAM86A 4.04099750 4.11445330 unchanging  
## 1651 FAM86B2 0.79307020 0.46675485 unchanging  
## 1652 FAM90A1 -3.68086100 -3.59213900 unchanging  
## 1653 FAM99B -3.68086100 -3.59213900 unchanging  
## 1654 FANCL 4.80653240 4.79348370 unchanging  
## 1655 FANCM 4.27849700 3.80779200 unchanging  
## 1656 FARP1-AS1 -0.72150310 -0.11820772 unchanging  
## 1657 FARS2 3.07105500 3.08342650 unchanging  
## 1658 FASTKD1 4.49904780 4.33465100 unchanging  
## 1659 FBLN1 4.80653240 6.48912300 up  
## 1660 FBLN2 1.64106700 1.14482670 unchanging  
## 1661 FBN2 9.25945200 10.44040400 up  
## 1662 FBN3 3.69996070 3.77903300 unchanging  
## 1663 FBXL13 0.93057376 0.72978930 unchanging  
## 1664 FBXL14 3.01030060 2.68914720 unchanging  
## 1665 FBXL22 -1.20692980 -1.85517320 unchanging  
## 1666 FBXL4 4.36595960 4.31475160 unchanging  
## 1667 FBXO31 3.37803270 3.01929570 unchanging  
## 1668 FBXO32 -0.72150310 0.46675485 unchanging  
## 1669 FBXO41 3.79307000 3.99449250 unchanging  
## 1670 FBXO43 2.14356730 1.41784510 unchanging  
## 1671 FCER1G -1.94389530 -2.44013570 unchanging  
## 1672 FCER2 -3.68086100 -3.59213900 unchanging  
## 1673 FCGR2B -3.68086100 -3.59213900 unchanging  
## 1674 FCHO2 5.45698400 5.42405030 unchanging  
## 1675 FCHSD1 2.99470400 3.23228980 unchanging  
## 1676 FDFT1 8.09730700 7.61311150 unchanging  
## 1677 FECH 6.04857060 5.89301900 unchanging  
## 1678 FEM1B 6.45982650 6.36560800 unchanging  
## 1679 FERMT1 -2.52885800 -1.44013570 unchanging  
## 1680 FFAR3 -3.68086100 -3.59213900 unchanging  
## 1681 FGA -3.68086100 -3.59213900 unchanging  
## 1682 FGB -3.68086100 -3.59213900 unchanging  
## 1683 FGD2 -3.68086100 -3.44013550 unchanging  
## 1684 FGD3 1.05610470 1.31475160 unchanging  
## 1685 FGD5 -1.94389530 -3.44013550 unchanging  
## 1686 FGF7 -0.72150310 -0.27021074 unchanging  
## 1687 FGF9 1.82869410 1.80779170 unchanging  
## 1688 FGFBP2 0.71906954 0.64732707 unchanging  
## 1689 FGFR1 5.70715600 5.57109170 unchanging  
## 1690 FGFR3 0.71906954 1.14482670 unchanging  
## 1691 FHL2 2.17158170 3.63668000 up  
## 1692 FHOD1 3.43692640 3.18922100 unchanging  
## 1693 FIBCD1 -3.68086100 -1.11820770 unchanging  
## 1694 FIBP 5.52642440 5.44860740 unchanging  
## 1695 FIP1L1 5.65353630 5.38323100 unchanging  
## 1696 FKBP11 2.02573100 2.91741630 unchanging  
## 1697 FKBP1A-SDCBP2 0.79307020 1.01929580 unchanging  
## 1698 FKBP8 5.76576300 5.68656870 unchanging  
## 1699 FKBP9 6.89740700 6.71847400 unchanging  
## 1700 FLG 0.27849698 -1.11820770 unchanging  
## 1701 FLNC -0.72150310 0.64732707 unchanging  
## 1702 FLRT2 3.15764280 3.95218160 unchanging  
## 1703 FLT3LG -3.68086100 -3.59213900 unchanging  
## 1704 FLVCR1 5.63353350 5.55138600 unchanging  
## 1705 FMN1 4.63101340 6.18557360 up  
## 1706 FMNL2 5.35072500 5.43638130 unchanging  
## 1707 FMNL3 4.74726700 4.73977330 unchanging  
## 1708 FMO3 -3.68086100 -3.59213900 unchanging  
## 1709 FMO4 0.37803268 0.72978930 unchanging  
## 1710 FNDC3B 6.64731500 6.96074400 unchanging  
## 1711 FOLR3 -3.68086100 -3.59213900 unchanging  
## 1712 FOSL2 2.81099200 3.96074370 up  
## 1713 FOXL2 -1.20692980 -3.59213900 unchanging  
## 1714 FOXN2 5.43403800 5.21450040 unchanging  
## 1715 FPGT 5.28492300 5.09902330 unchanging  
## 1716 FPR2 -3.68086100 -3.59213900 unchanging  
## 1717 FPR3 -3.68086100 -3.59213900 unchanging  
## 1718 FRG1B 4.41365600 4.36721900 unchanging  
## 1719 FRS2 6.27688600 6.12591800 unchanging  
## 1720 FSCB -3.68086100 -2.44013570 unchanging  
## 1721 FSCN3 3.39000540 3.31475160 unchanging  
## 1722 FSIP2 0.64106710 -0.11820772 unchanging  
## 1723 FSTL4 1.86345960 -1.11820770 down  
## 1724 FSTL5 -2.52885800 -2.44013570 unchanging  
## 1725 FTSJ3 5.93057400 5.90637830 unchanging  
## 1726 FUBP3 5.56653930 5.37364530 unchanging  
## 1727 FUT2 -1.52885800 -0.63278085 unchanging  
## 1728 FUT4 2.89740680 2.86364480 unchanging  
## 1729 FXC1 5.17850100 4.93490360 unchanging  
## 1730 FXN 2.22602960 2.46675500 unchanging  
## 1731 FXYD3 1.96299520 4.05171730 up  
## 1732 FXYD5 4.15062200 4.05971050 unchanging  
## 1733 FZD1 4.72380730 4.13729300 unchanging  
## 1734 FZD10 -3.68086100 -3.59213900 unchanging  
## 1735 FZD6 7.44770570 7.36560800 unchanging  
## 1736 G2E3 5.99861960 5.99449250 unchanging  
## 1737 GABARAPL1 5.24592900 4.98192930 unchanging  
## 1738 GABRA2 -1.20692980 -3.59213900 unchanging  
## 1739 GABRA3 4.27849700 4.18191600 unchanging  
## 1740 GABRA4 -3.68086100 -3.59213900 unchanging  
## 1741 GAGE12C -3.52885800 -3.44013550 unchanging  
## 1742 GAGE12I -3.52885800 -3.44013550 unchanging  
## 1743 GAGE2D -2.52885800 -3.59213900 unchanging  
## 1744 GAL -1.52885800 -0.27021074 unchanging  
## 1745 GAL3ST2 -3.68086100 -3.59213900 unchanging  
## 1746 GALNS 3.40187930 3.53714420 unchanging  
## 1747 GALNT14 -3.68086100 -3.59213900 unchanging  
## 1748 GAPDH 10.02968200 9.95887500 unchanging  
## 1749 GAR1 4.65105100 4.54854900 unchanging  
## 1750 GAS2 1.17158190 -0.11820772 unchanging  
## 1751 GAS2L1 3.44842200 3.69941570 unchanging  
## 1752 GAS5 5.74726700 6.00901270 unchanging  
## 1753 GATA2 2.57966640 2.01929570 unchanging  
## 1754 GATA3 -3.68086100 4.98612900 up  
## 1755 GATSL3 0.05610465 -0.11820772 unchanging  
## 1756 GBAS 5.94484800 5.30133100 unchanging  
## 1757 GCFC1 5.66589900 5.92618660 unchanging  
## 1758 GCHFR 3.73792860 3.46675470 unchanging  
## 1759 GCNT2 3.37803270 1.51406050 down  
## 1760 GDA 4.75654460 3.20372030 down  
## 1761 GDAP1 4.18538760 3.76931760 unchanging  
## 1762 GDAP2 3.87202140 3.73977350 unchanging  
## 1763 GDF15 3.47114200 1.72978930 down  
## 1764 GDF7 -3.68086100 -3.44013550 unchanging  
## 1765 GDF9 1.37803270 1.46675490 unchanging  
## 1766 GDI1 5.37200900 5.34122370 unchanging  
## 1767 GDPD2 -3.68086100 -3.59213900 unchanging  
## 1768 GEMIN4 4.76116100 4.76931760 unchanging  
## 1769 GEMIN8 3.14356730 2.78868300 unchanging  
## 1770 GFOD1-AS1 -3.68086100 -2.44013570 unchanging  
## 1771 GFPT1 7.28171400 7.41939900 unchanging  
## 1772 GFRA1 1.64106700 4.54285760 up  
## 1773 GFRA2 -3.68086100 -3.59213900 unchanging  
## 1774 GGA1 4.11499830 3.89971420 unchanging  
## 1775 GGCT 5.81321670 5.75953670 unchanging  
## 1776 GGT7 3.07105500 2.51406050 unchanging  
## 1777 GH2 -3.68086100 -3.59213900 unchanging  
## 1778 GHRLOS -0.94389530 -1.44013570 unchanging  
## 1779 GHRLOS2 -1.94389530 -0.27021074 unchanging  
## 1780 GIMAP6 -3.68086100 -3.59213900 unchanging  
## 1781 GIPC2 -3.52885800 -3.59213900 unchanging  
## 1782 GJA10 -3.68086100 -3.59213900 unchanging  
## 1783 GJA5 -3.68086100 -3.59213900 unchanging  
## 1784 GJB3 0.55860496 0.80779165 unchanging  
## 1785 GJC1 1.60042510 0.26030394 unchanging  
## 1786 GLI2 -1.20692980 -1.44013570 unchanging  
## 1787 GLP1R -3.68086100 -3.59213900 unchanging  
## 1788 GLRA3 -3.68086100 1.46675490 up  
## 1789 GLRA4 -3.68086100 -3.59213900 unchanging  
## 1790 GLT25D2 2.64106700 3.05171730 unchanging  
## 1791 GLTPD2 -3.68086100 -3.44013550 unchanging  
## 1792 GLYATL1 -3.68086100 -3.59213900 unchanging  
## 1793 GMNC -1.20692980 -3.44013550 unchanging  
## 1794 GMPR 1.68059550 1.68914720 unchanging  
## 1795 GNA11 4.17850100 4.07556400 unchanging  
## 1796 GNA12 6.17331460 6.05171730 unchanging  
## 1797 GNA13 6.68910030 6.52276040 unchanging  
## 1798 GNAI3 6.87841000 6.81607300 unchanging  
## 1799 GNAT2 0.55860496 0.88179230 unchanging  
## 1800 GNAT3 -3.68086100 -3.59213900 unchanging  
## 1801 GNAZ 2.08585200 2.93490360 unchanging  
## 1802 GNB1L 0.71906954 0.55986420 unchanging  
## 1803 GNB2 6.21597580 6.04166360 unchanging  
## 1804 GNMT -1.20692980 -3.59213900 unchanging  
## 1805 GNPTAB 6.40187930 6.36076400 unchanging  
## 1806 GNPTG 3.26555800 3.26030400 unchanging  
## 1807 GNRH2 -3.68086100 -3.59213900 unchanging  
## 1808 GOLGA5 5.78175450 5.66052680 unchanging  
## 1809 GOLGA6A -2.52885800 -1.44013570 unchanging  
## 1810 GOLGA8A 4.50456520 5.02746960 unchanging  
## 1811 GOLPH3 6.58748600 6.50530770 unchanging  
## 1812 GON4L 6.17158170 6.05571900 unchanging  
## 1813 GORASP1 4.74260470 4.66315200 unchanging  
## 1814 GOSR2 4.77948100 4.99865630 unchanging  
## 1815 GOT1 6.18881850 5.94788170 unchanging  
## 1816 GP2 -3.68086100 -2.44013570 unchanging  
## 1817 GP9 -3.68086100 -3.59213900 unchanging  
## 1818 GPBP1 6.76116100 6.65921200 unchanging  
## 1819 GPC1 5.71906950 6.49207900 up  
## 1820 GPC3 2.88053320 2.26030400 unchanging  
## 1821 GPCPD1 4.64606760 5.85448460 up  
## 1822 GPER -1.94389530 1.98612890 up  
## 1823 GPHN 4.77948100 4.53140800 unchanging  
## 1824 GPNMB 2.73792860 2.08342620 unchanging  
## 1825 GPR125 5.79532300 5.80065540 unchanging  
## 1826 GPR126 5.67326600 5.83598850 unchanging  
## 1827 GPR128 -3.68086100 -3.59213900 unchanging  
## 1828 GPR133 -0.20692979 -0.85517323 unchanging  
## 1829 GPR137C 3.25250170 2.53714420 unchanging  
## 1830 GPR148 -3.68086100 -3.59213900 unchanging  
## 1831 GPR152 -3.68086100 -3.59213900 unchanging  
## 1832 GPR160 4.76116100 4.57109170 unchanging  
## 1833 GPR17 -3.68086100 -1.85517320 unchanging  
## 1834 GPR176 4.34150700 5.68139740 up  
## 1835 GPR18 -3.68086100 -3.59213900 unchanging  
## 1836 GPR45 -3.68086100 -3.59213900 unchanging  
## 1837 GPR65 -3.68086100 -3.59213900 unchanging  
## 1838 GPR83 0.05610465 0.95218160 unchanging  
## 1839 GPR88 -3.68086100 -3.59213900 unchanging  
## 1840 GPRASP2 4.33532800 4.39906800 unchanging  
## 1841 GPRC6A -3.68086100 -3.59213900 unchanging  
## 1842 GRAP -3.52885800 -3.59213900 unchanging  
## 1843 GRB2 6.92544130 6.87727640 unchanging  
## 1844 GREB1L 2.05610470 1.60425830 unchanging  
## 1845 GRIA3 -3.68086100 -3.59213900 unchanging  
## 1846 GRIFIN -3.68086100 -3.59213900 unchanging  
## 1847 GRIN2D -1.52885800 -0.85517323 unchanging  
## 1848 GRM4 1.05610470 0.88179230 unchanging  
## 1849 GRM7-AS2 -3.68086100 -3.59213900 unchanging  
## 1850 GRXCR1 -3.68086100 -3.59213900 unchanging  
## 1851 GS1-115G20.1 -3.68086100 -3.59213900 unchanging  
## 1852 GS1-174L6.4 -3.68086100 -3.59213900 unchanging  
## 1853 GS1-179L18.1 -2.52885800 -1.85517320 unchanging  
## 1854 GS1-211B7.1 -3.68086100 -3.44013550 unchanging  
## 1855 GS1-278J22.1 -3.68086100 -3.59213900 unchanging  
## 1856 GS1-542M4.4 -3.68086100 -3.59213900 unchanging  
## 1857 GSG1 -3.68086100 -3.59213900 unchanging  
## 1858 GSTA1 -1.52885800 -3.59213900 unchanging  
## 1859 GSTO2 2.64106700 2.93490360 unchanging  
## 1860 GTF2H3 6.03719660 6.09319400 unchanging  
## 1861 GTF2IRD2B 3.37803270 3.27410980 unchanging  
## 1862 GTF3C2 5.92235330 5.69941570 unchanging  
## 1863 GTF3C4 6.62722500 6.83132700 unchanging  
## 1864 GTPBP3 3.53723120 3.35428020 unchanging  
## 1865 GTPBP4 5.97297950 6.00280760 unchanging  
## 1866 GTPBP6 2.49351000 2.39275430 unchanging  
## 1867 GTSF1L -3.68086100 -3.59213900 unchanging  
## 1868 GUCA1C -3.68086100 -3.59213900 unchanging  
## 1869 GXYLT2 3.02573100 4.53714400 up  
## 1870 GYG2P1 -3.68086100 -3.59213900 unchanging  
## 1871 GYPA -3.68086100 -3.59213900 unchanging  
## 1872 GYPE -3.68086100 -3.44013550 unchanging  
## 1873 GZMH -3.68086100 -3.59213900 unchanging  
## 1874 H1FX 5.11499830 4.61514660 unchanging  
## 1875 H2AFJ -3.68086100 1.98612890 up  
## 1876 H2AFX 5.86345960 5.60152340 unchanging  
## 1877 HAO2-IT1 -3.68086100 -3.59213900 unchanging  
## 1878 HAP1 -1.94389530 -2.44013570 unchanging  
## 1879 HARBI1 2.57966640 2.36721900 unchanging  
## 1880 HAT1 6.74726700 6.54996820 unchanging  
## 1881 HAUS8 4.07105500 3.94356850 unchanging  
## 1882 HBA2 -1.94389530 -1.44013570 unchanging  
## 1883 HBG2 -3.52885800 -3.59213900 unchanging  
## 1884 HBP1 6.04289440 5.82665100 unchanging  
## 1885 HBXIP 4.98684200 4.66838840 unchanging  
## 1886 HBZ -3.68086100 -3.59213900 unchanging  
## 1887 HCAR3 -3.52885800 -3.44013550 unchanging  
## 1888 HCFC1R1 2.40187930 2.88179230 unchanging  
## 1889 HCG14 -3.68086100 -2.44013570 unchanging  
## 1890 HCG17 -3.68086100 -3.44013550 unchanging  
## 1891 HCG9 -3.68086100 -3.59213900 unchanging  
## 1892 HCRTR1 -2.52885800 -3.44013550 unchanging  
## 1893 HDAC11 2.94687560 3.00280790 unchanging  
## 1894 HDAC3 5.57705070 5.43944740 unchanging  
## 1895 HEATR8 3.78402500 3.79826880 unchanging  
## 1896 HECTD3 4.75654460 4.41784520 unchanging  
## 1897 HECW1-IT1 -3.68086100 -3.59213900 unchanging  
## 1898 HEG1 2.35378530 2.17457410 unchanging  
## 1899 HELT -3.68086100 -3.59213900 unchanging  
## 1900 HEMK1 2.37803270 2.44250750 unchanging  
## 1901 HERC2 6.88688370 6.96181000 unchanging  
## 1902 HERC5 3.02573100 2.53714420 unchanging  
## 1903 HERPUD1 5.11860100 5.27754070 unchanging  
## 1904 HES1 5.13292030 4.47275350 unchanging  
## 1905 HES5 -3.68086100 -3.59213900 unchanging  
## 1906 HGFAC -3.68086100 -3.59213900 unchanging  
## 1907 HHLA2 -3.68086100 -3.59213900 unchanging  
## 1908 HIAT1 6.72262430 6.73479000 unchanging  
## 1909 HIC1 -3.52885800 -3.59213900 unchanging  
## 1910 HIGD1A 7.11589960 6.76687800 unchanging  
## 1911 HIGD1B -0.52885790 -1.11820770 unchanging  
## 1912 HIGD1C -3.68086100 -3.59213900 unchanging  
## 1913 HIP1 5.84835240 5.77661040 unchanging  
## 1914 HIP1R 4.23932650 4.12210660 unchanging  
## 1915 HIRIP3 4.07105500 3.93490360 unchanging  
## 1916 HIST1H1B -3.68086100 -3.44013550 unchanging  
## 1917 HIST1H2AI -3.52885800 -1.44013570 unchanging  
## 1918 HIST1H2AL -3.68086100 -1.85517320 unchanging  
## 1919 HIST1H2BF 1.05610470 1.08342620 unchanging  
## 1920 HIST1H2BI -3.68086100 -3.59213900 unchanging  
## 1921 HIST1H2BJ 3.34150700 3.23228980 unchanging  
## 1922 HIST1H2BK 0.79307020 3.30133100 up  
## 1923 HIST1H3D 0.55860496 -0.11820772 unchanging  
## 1924 HIST1H4B -3.68086100 -3.44013550 unchanging  
## 1925 HIST2H4A -1.52885800 3.08342650 up  
## 1926 HIST2H4B -1.52885800 3.08342650 up  
## 1927 HIST3H2A 1.11499820 0.14482673 unchanging  
## 1928 HK2 4.67571300 4.94356800 unchanging  
## 1929 HLA-E 5.22268630 5.28778460 unchanging  
## 1930 HLCS-IT1 -3.68086100 -3.44013550 unchanging  
## 1931 HM13-IT1 -3.68086100 -3.44013550 unchanging  
## 1932 HMCN1 1.64106700 3.20372030 unchanging  
## 1933 HMCN2 -3.68086100 -3.59213900 unchanging  
## 1934 HMCN2 -0.35893290 -3.44013550 unchanging  
## 1935 HMGA1P4 -3.68086100 -3.59213900 unchanging  
## 1936 HMGA2 5.92235330 6.89413800 up  
## 1937 HMGB3 7.85484650 7.48690130 unchanging  
## 1938 HMGN1 8.54025600 8.51114900 unchanging  
## 1939 HMGN4 6.33532800 6.03964470 unchanging  
## 1940 HMGXB3 5.45413600 5.14482640 unchanging  
## 1941 HMHB1 -3.68086100 -3.59213900 unchanging  
## 1942 HMOX1 1.55860500 1.01929580 unchanging  
## 1943 HN1L 7.96499730 7.66969500 unchanging  
## 1944 HNRNPAB 7.40998650 7.34776700 unchanging  
## 1945 HOOK1 6.37502400 6.29118300 unchanging  
## 1946 HORMAD2 -3.68086100 -3.59213900 unchanging  
## 1947 HOXA3 0.86345950 0.55986420 unchanging  
## 1948 HOXA6 0.37803268 -0.85517323 unchanging  
## 1949 HOXB8 1.17158190 1.08342620 unchanging  
## 1950 HOXB9 -0.06942624 1.01929580 unchanging  
## 1951 HOXC12 -3.68086100 -3.59213900 unchanging  
## 1952 HOXC9 -3.68086100 -0.63278085 unchanging  
## 1953 HOXD9 3.05610440 2.98612880 unchanging  
## 1954 HPRT1 5.32912300 5.31140850 unchanging  
## 1955 HRC -3.68086100 -3.59213900 unchanging  
## 1956 HS1BP3 3.56917430 3.45468190 unchanging  
## 1957 HS3ST3A1 -3.68086100 -1.85517320 unchanging  
## 1958 HS6ST1 7.58292960 6.96074400 unchanging  
## 1959 HS6ST2-AS1 -3.68086100 -3.59213900 unchanging  
## 1960 HSD17B1 1.60042510 1.68914720 unchanging  
## 1961 HSD17B1P1 -3.68086100 -3.44013550 unchanging  
## 1962 HSD17B6 2.11499830 2.11445300 unchanging  
## 1963 HSFY2 -3.68086100 -3.59213900 unchanging  
## 1964 HSPA2 3.74726680 3.68914720 unchanging  
## 1965 HSPA8 10.03992900 9.90207800 unchanging  
## 1966 HSPB7 -1.94389530 -3.59213900 unchanging  
## 1967 HSPE1 6.23601400 6.07950070 unchanging  
## 1968 HSPG2 6.59138000 7.57179000 up  
## 1969 HTATIP2 5.13647800 4.95218200 unchanging  
## 1970 HTATSF1 6.55062700 6.43176940 unchanging  
## 1971 HTR2A-AS1 -3.68086100 -3.59213900 unchanging  
## 1972 HTR2C -3.68086100 -3.59213900 unchanging  
## 1973 HTT 6.84509470 6.47872730 unchanging  
## 1974 HUNK 3.89740680 3.81725200 unchanging  
## 1975 ICAM2 -0.20692979 -2.44013570 unchanging  
## 1976 ICMT 7.57442950 7.49060200 unchanging  
## 1977 ID2 3.81099200 3.38004300 unchanging  
## 1978 IDI2 1.11499820 1.08342620 unchanging  
## 1979 IDO1 -0.94389530 -0.11820772 unchanging  
## 1980 IER2 4.26555820 3.99449250 unchanging  
## 1981 IER3 -1.20692980 3.00280790 up  
## 1982 IER5 3.04099750 3.58223220 unchanging  
## 1983 IFI44 0.47114208 0.01929582 unchanging  
## 1984 IFIT5 -1.20692980 0.01929582 unchanging  
## 1985 IFITM10 -1.52885800 -1.44013570 unchanging  
## 1986 IFITM2 3.56917430 3.80779200 unchanging  
## 1987 IFITM5 -3.68086100 -3.59213900 unchanging  
## 1988 IFNA6 -3.68086100 -3.59213900 unchanging  
## 1989 IFRD2 4.41950940 4.68914700 unchanging  
## 1990 IFT20 3.40187930 3.57109140 unchanging  
## 1991 IFT46 4.59526350 4.60425800 unchanging  
## 1992 IFT52 5.36595960 5.20372000 unchanging  
## 1993 IGDCC4 -0.06942624 -0.85517323 unchanging  
## 1994 IGF2BP2 4.15062200 4.81252960 unchanging  
## 1995 IGFBP3 9.76188100 8.26894800 down  
## 1996 IGFBP5 6.12756730 7.44708500 up  
## 1997 IGFBP7 4.84183000 5.98403020 up  
## 1998 IGFBPL1 1.22602960 0.36721915 unchanging  
## 1999 IGSF5 -2.52885800 -3.59213900 unchanging  
## 2000 IGSF6 -3.68086100 -3.59213900 unchanging  
## 2001 IKBKB 3.65105100 3.96074370 unchanging  
## 2002 IKZF1 1.99470410 0.80779165 unchanging  
## 2003 IL10 -3.68086100 -3.59213900 unchanging  
## 2004 IL13RA1 6.38403200 6.74845300 unchanging  
## 2005 IL15RA -3.68086100 -3.44013550 unchanging  
## 2006 IL16 -1.94389530 -0.27021074 unchanging  
## 2007 IL17F -3.68086100 -3.59213900 unchanging  
## 2008 IL18R1 0.64106710 0.55986420 unchanging  
## 2009 IL18RAP -3.68086100 -3.59213900 unchanging  
## 2010 IL1F10 -3.68086100 -3.59213900 unchanging  
## 2011 IL1R1 5.13292030 4.51986600 unchanging  
## 2012 IL1R2 2.55860500 2.11445300 unchanging  
## 2013 IL1RAPL1 -3.68086100 -3.59213900 unchanging  
## 2014 IL20RB 0.47114208 0.14482673 unchanging  
## 2015 IL21R -3.68086100 -1.85517320 unchanging  
## 2016 IL22RA1 -3.68086100 -3.44013550 unchanging  
## 2017 IL27 -3.52885800 -3.59213900 unchanging  
## 2018 IL27RA 2.05610470 1.95218160 unchanging  
## 2019 IL5 -3.68086100 -3.59213900 unchanging  
## 2020 IL7 1.64106700 1.20372030 unchanging  
## 2021 IL8 -3.68086100 -3.59213900 unchanging  
## 2022 INCENP 5.64856150 5.39275460 unchanging  
## 2023 INE1 -1.52885800 -0.11820772 unchanging  
## 2024 INF2 4.69514370 5.12210660 unchanging  
## 2025 ING2 3.88899450 3.63668000 unchanging  
## 2026 ING5 3.97098780 4.04368000 unchanging  
## 2027 INHBB -1.94389530 0.36721915 unchanging  
## 2028 INO80 5.23601400 5.20372000 unchanging  
## 2029 INO80B 4.93874800 4.58777050 unchanging  
## 2030 INO80C 2.68059560 1.80779170 unchanging  
## 2031 INO80E 3.68059560 3.99449250 unchanging  
## 2032 INPP4A 4.45982700 4.76443530 unchanging  
## 2033 INPP5B 4.83308600 4.80303800 unchanging  
## 2034 INPP5F 3.90577030 4.09902330 unchanging  
## 2035 INS -3.68086100 -3.59213900 unchanging  
## 2036 INSL5 -3.68086100 -3.59213900 unchanging  
## 2037 INSM2 -3.68086100 -2.44013570 unchanging  
## 2038 INTS5 4.44268560 4.08342650 unchanging  
## 2039 IPO11 4.82869400 4.94356800 unchanging  
## 2040 IPO9 7.28572460 6.96606900 unchanging  
## 2041 IPP 5.25904460 5.06369000 unchanging  
## 2042 IQCA1P1 -3.68086100 -3.59213900 unchanging  
## 2043 IQCH 2.19906260 1.55986430 unchanging  
## 2044 IQUB 2.14356730 1.80779170 unchanging  
## 2045 IRAK1 5.64357000 5.88179200 unchanging  
## 2046 IRF2BP2 6.33067660 6.39906800 unchanging  
## 2047 IRS2 2.44842200 2.62595340 unchanging  
## 2048 ISL1 1.51553620 1.68914720 unchanging  
## 2049 ISLR -3.52885800 -1.85517320 unchanging  
## 2050 ISYNA1 4.84618140 4.63132670 unchanging  
## 2051 ITGA7 1.96299520 2.64732700 unchanging  
## 2052 ITGAV 8.28010700 8.53068900 unchanging  
## 2053 ITGB1BP2 -2.52885800 -1.44013570 unchanging  
## 2054 ITGB4 5.30719230 6.06765840 unchanging  
## 2055 ITIH4 -0.94389530 0.26030394 unchanging  
## 2056 ITIH5 1.17158190 -0.63278085 unchanging  
## 2057 ITPK1 4.97496800 4.63132670 unchanging  
## 2058 IVD 6.01223900 6.13729300 unchanging  
## 2059 JAK2 3.22602960 3.50237900 unchanging  
## 2060 JAK3 1.99470410 2.51406050 unchanging  
## 2061 JAKMIP3 -3.68086100 -3.59213900 unchanging  
## 2062 JARID2 3.85484620 3.97771640 unchanging  
## 2063 JHDM1D 3.84618140 3.54854900 unchanging  
## 2064 JMJD6 3.48236940 3.52564840 unchanging  
## 2065 JPX 4.37200900 4.25335100 unchanging  
## 2066 JSRP1 1.17158190 0.72978930 unchanging  
## 2067 KAAG1 -0.94389530 -1.11820770 unchanging  
## 2068 KAL1 3.44842200 2.53714420 unchanging  
## 2069 KAT6B 5.14709900 5.06369000 unchanging  
## 2070 KATNA1 4.66096700 4.58777050 unchanging  
## 2071 KB-1047C11.2 -2.52885800 -3.59213900 unchanging  
## 2072 KB-1183D5.11 -0.35893290 1.14482670 unchanging  
## 2073 KB-1183D5.14 -3.52885800 -1.44013570 unchanging  
## 2074 KB-1254G8.1 -3.68086100 -3.59213900 unchanging  
## 2075 KB-1299A7.2 -3.68086100 -3.59213900 unchanging  
## 2076 KB-1896H10.1 5.56389900 5.27754070 unchanging  
## 2077 KB-1930G5.3 -3.68086100 -3.59213900 unchanging  
## 2078 KB-431C1.4 2.81099200 2.96925500 unchanging  
## 2079 KBTBD11 3.80205900 3.85448480 unchanging  
## 2080 KBTBD4 5.08952760 5.14857900 unchanging  
## 2081 KBTBD6 5.65353630 5.45164780 unchanging  
## 2082 KBTBD7 5.59008300 5.41473300 unchanging  
## 2083 KCNA6 -3.52885800 -3.44013550 unchanging  
## 2084 KCNA7 -3.68086100 -1.85517320 unchanging  
## 2085 KCND3-IT1 -3.68086100 -3.59213900 unchanging  
## 2086 KCNE4 -3.68086100 1.36721920 up  
## 2087 KCNH2 0.99470407 1.46675490 unchanging  
## 2088 KCNH7 -3.52885800 -3.44013550 unchanging  
## 2089 KCNH8 1.96299520 1.84526660 unchanging  
## 2090 KCNJ6-IT1 -3.68086100 -3.59213900 unchanging  
## 2091 KCNK1 3.95495770 3.88179230 unchanging  
## 2092 KCNK7 -3.68086100 -3.59213900 unchanging  
## 2093 KCNMB2-IT1 -3.68086100 -3.59213900 unchanging  
## 2094 KCNMB3 2.94687560 3.12971970 unchanging  
## 2095 KCNQ2 -3.68086100 -3.59213900 unchanging  
## 2096 KCNQ5-IT1 -3.52885800 -3.59213900 unchanging  
## 2097 KCNT1 -2.52885800 -2.44013570 unchanging  
## 2098 KCTD19 -3.68086100 -3.44013550 unchanging  
## 2099 KCTD21 2.57966640 2.28778460 unchanging  
## 2100 KCTD7 5.36292550 5.37043570 unchanging  
## 2101 KDELR3 5.07847200 5.50237900 unchanging  
## 2102 KDM1B 4.79757170 5.23582120 unchanging  
## 2103 KHDRBS1 8.11725000 7.84353160 unchanging  
## 2104 KHDRBS2 0.47114208 0.80779165 unchanging  
## 2105 KIAA0141 5.23932650 5.02338840 unchanging  
## 2106 KIAA0146 5.78402470 5.53140800 unchanging  
## 2107 KIAA0355 4.55860470 4.71973560 unchanging  
## 2108 KIAA0368 6.53453730 6.60698800 unchanging  
## 2109 KIAA0586 5.14002700 5.06369000 unchanging  
## 2110 KIAA1274 2.11499830 2.41784500 unchanging  
## 2111 KIAA1324 -3.52885800 4.12971970 up  
## 2112 KIAA1432 4.85915950 5.07556400 unchanging  
## 2113 KIAA1486 -3.68086100 -3.59213900 unchanging  
## 2114 KIAA1797 5.19224100 5.02338840 unchanging  
## 2115 KIF15 5.95092250 5.84988300 unchanging  
## 2116 KIF18A 5.32601070 5.30133100 unchanging  
## 2117 KIF21B -0.94389530 0.14482673 unchanging  
## 2118 KIF2A 6.12039800 6.05571900 unchanging  
## 2119 KIF2B -3.68086100 -3.59213900 unchanging  
## 2120 KIF3C 3.40187930 3.57109140 unchanging  
## 2121 KIF5C 2.27849700 3.39275430 unchanging  
## 2122 KIFAP3 5.07476850 4.46073100 unchanging  
## 2123 KIR3DL3 -3.68086100 -3.59213900 unchanging  
## 2124 KIRREL 6.17850160 7.17825000 up  
## 2125 KIRREL3 -3.68086100 -3.44013550 unchanging  
## 2126 KLF10 5.58748600 5.15977700 unchanging  
## 2127 KLF3 5.47957100 5.30469800 unchanging  
## 2128 KLF5 5.46266400 5.05571940 unchanging  
## 2129 KLF7-IT1 -2.52885800 -3.59213900 unchanging  
## 2130 KLHDC4 2.69996070 2.68914720 unchanging  
## 2131 KLHDC8A -3.68086100 -3.59213900 unchanging  
## 2132 KLHDC8B 2.75654440 2.88179230 unchanging  
## 2133 KLHDC9 0.47114208 -0.85517323 unchanging  
## 2134 KLHL10 -3.68086100 -1.11820770 unchanging  
## 2135 KLHL14 7.51758400 7.62393330 unchanging  
## 2136 KLHL2 4.90159460 4.78868300 unchanging  
## 2137 KLHL26 2.40187930 1.84526660 unchanging  
## 2138 KLHL30 -3.52885800 -1.44013570 unchanging  
## 2139 KLHL31 0.71906954 0.80779165 unchanging  
## 2140 KLHL36 5.29450940 5.49060150 unchanging  
## 2141 KLK1 -3.52885800 -2.44013570 unchanging  
## 2142 KLK10 -3.68086100 -3.44013550 unchanging  
## 2143 KLK12 -3.68086100 -3.59213900 unchanging  
## 2144 KLK9 -3.68086100 -3.59213900 unchanging  
## 2145 KLRC1 -3.68086100 -3.59213900 unchanging  
## 2146 KPNA1 6.44555660 6.28096340 unchanging  
## 2147 KPNA3 6.56125450 6.56267930 unchanging  
## 2148 KREMEN2 -1.94389530 0.36721915 unchanging  
## 2149 KRT2 -3.52885800 -3.59213900 unchanging  
## 2150 KRT26 -3.68086100 -3.59213900 unchanging  
## 2151 KRT27 -3.68086100 -3.59213900 unchanging  
## 2152 KRT38 -3.68086100 -3.59213900 unchanging  
## 2153 KRT4 -3.68086100 -1.85517320 unchanging  
## 2154 KRT5 -0.06942624 2.64732700 up  
## 2155 KRT7 2.42533850 2.11445300 unchanging  
## 2156 KRT71 -3.68086100 -3.59213900 unchanging  
## 2157 KRTAP10-5 -3.68086100 -3.59213900 unchanging  
## 2158 KRTAP12-3 -3.68086100 -3.59213900 unchanging  
## 2159 KRTAP13-3 -3.68086100 -3.59213900 unchanging  
## 2160 KRTAP19-3 -3.68086100 -3.59213900 unchanging  
## 2161 KRTAP19-6 -3.68086100 -3.59213900 unchanging  
## 2162 KRTAP27-1 -3.68086100 -3.59213900 unchanging  
## 2163 KRTAP4-11 -3.68086100 -3.59213900 unchanging  
## 2164 KRTAP5-1 -3.68086100 -3.44013550 unchanging  
## 2165 KRTAP5-9 -3.52885800 -3.59213900 unchanging  
## 2166 KRTAP6-2 -3.68086100 -3.59213900 unchanging  
## 2167 KRTAP8-1 -3.68086100 -3.59213900 unchanging  
## 2168 KRTAP9-8 -3.68086100 -3.59213900 unchanging  
## 2169 KRTAP9-9 -3.68086100 -3.59213900 unchanging  
## 2170 KY -3.68086100 -3.59213900 unchanging  
## 2171 KYNU -3.68086100 3.26030400 up  
## 2172 L1CAM 0.47114208 3.24636480 up  
## 2173 LA16c-23H5.4 -3.68086100 -3.59213900 unchanging  
## 2174 LA16c-3G11.5 -3.68086100 -3.59213900 unchanging  
## 2175 LA16c-4G1.3 -3.68086100 -3.59213900 unchanging  
## 2176 LAGE3 2.68059560 2.68914720 unchanging  
## 2177 LAMA4 3.49351000 -1.11820770 down  
## 2178 LANCL1 6.47536300 6.23758360 unchanging  
## 2179 LAP3 5.28492300 5.21807580 unchanging  
## 2180 LAS1L 5.59267570 4.84063500 unchanging  
## 2181 LBH 3.98684200 3.32804870 unchanging  
## 2182 LBR 7.27527330 7.19376750 unchanging  
## 2183 LBX2 0.47114208 -0.27021074 unchanging  
## 2184 LCAT -0.35893290 0.95218160 unchanging  
## 2185 LCE2A -3.68086100 -3.59213900 unchanging  
## 2186 LCE3B -3.68086100 -3.59213900 unchanging  
## 2187 LCE3D -3.68086100 -3.59213900 unchanging  
## 2188 LCN10 -0.72150310 -1.11820770 unchanging  
## 2189 LCN2 -0.52885790 -1.44013570 unchanging  
## 2190 LDB2 -3.68086100 -3.59213900 unchanging  
## 2191 LECT1 -3.68086100 -3.59213900 unchanging  
## 2192 LEMD3 6.31819960 6.54712800 unchanging  
## 2193 LENG9 0.55860496 1.14482670 unchanging  
## 2194 LEP -3.68086100 -3.59213900 unchanging  
## 2195 LEPRE1 5.19906300 5.03559800 unchanging  
## 2196 LEPREL4 5.01417400 5.12591800 unchanging  
## 2197 LGALS14 -3.68086100 -3.59213900 unchanging  
## 2198 LGR6 -3.68086100 -2.44013570 unchanging  
## 2199 LHFPL1 -3.68086100 -3.59213900 unchanging  
## 2200 LHFPL3 -3.68086100 -2.44013570 unchanging  
## 2201 LHFPL4 -3.68086100 -3.59213900 unchanging  
## 2202 LHFPL5 2.62088920 2.60425830 unchanging  
## 2203 LHPP 2.14356730 2.20372030 unchanging  
## 2204 LHX3 -3.68086100 -3.59213900 unchanging  
## 2205 LHX5 -3.68086100 -3.59213900 unchanging  
## 2206 LHX8 -3.68086100 -3.59213900 unchanging  
## 2207 LIF -1.20692980 1.14482670 unchanging  
## 2208 LILRA1 -3.68086100 -3.59213900 unchanging  
## 2209 LILRB1 -3.68086100 -3.59213900 unchanging  
## 2210 LILRB5 -3.68086100 -3.59213900 unchanging  
## 2211 LIMA1 7.29371260 7.18831000 unchanging  
## 2212 LIMD1 5.61069350 5.72728250 unchanging  
## 2213 LINC00028 -3.68086100 -3.59213900 unchanging  
## 2214 LINC00029 -3.68086100 -3.59213900 unchanging  
## 2215 LINC00094 3.91408560 4.23229000 unchanging  
## 2216 LINC00159 -3.68086100 -3.59213900 unchanging  
## 2217 LINC00173 -2.52885800 -2.44013570 unchanging  
## 2218 LINC00184 -3.68086100 -3.59213900 unchanging  
## 2219 LINC00207 -3.68086100 -3.59213900 unchanging  
## 2220 LINC00221 3.84618140 4.23229000 unchanging  
## 2221 LINC00230A -3.68086100 -3.59213900 unchanging  
## 2222 LINC00230B -3.68086100 -3.59213900 unchanging  
## 2223 LINC00278 -3.68086100 -3.59213900 unchanging  
## 2224 LINC00282 -3.52885800 -3.44013550 unchanging  
## 2225 LINC00284 -3.52885800 -3.59213900 unchanging  
## 2226 LINC00293 -3.68086100 -3.59213900 unchanging  
## 2227 LINC00301 -3.68086100 -3.59213900 unchanging  
## 2228 LINC00307 -3.68086100 -3.59213900 unchanging  
## 2229 LINC00312 -3.68086100 -3.59213900 unchanging  
## 2230 LINC00320 -3.68086100 -3.59213900 unchanging  
## 2231 LINC00326 -3.68086100 -3.59213900 unchanging  
## 2232 LINC00331 -3.68086100 -3.59213900 unchanging  
## 2233 LINC00332 -3.68086100 -3.59213900 unchanging  
## 2234 LINC00333 -3.68086100 -3.59213900 unchanging  
## 2235 LINC00337 -1.20692980 -1.85517320 unchanging  
## 2236 LINC00338 1.27849700 1.60425830 unchanging  
## 2237 LINC00339 3.02573100 2.46675500 unchanging  
## 2238 LINC00340 -3.68086100 -3.59213900 unchanging  
## 2239 LINC00346 -3.68086100 -3.44013550 unchanging  
## 2240 LINC00366 -3.68086100 -3.59213900 unchanging  
## 2241 LINC00444 -3.52885800 -3.59213900 unchanging  
## 2242 LINC00447 -3.68086100 -3.59213900 unchanging  
## 2243 LINC00449 -3.52885800 -0.85517323 unchanging  
## 2244 LINC00462 -3.68086100 -3.59213900 unchanging  
## 2245 LINC00466 -1.94389530 -2.44013570 unchanging  
## 2246 LINC00469 -3.68086100 -3.59213900 unchanging  
## 2247 LINC00476 1.05610470 1.55986430 unchanging  
## 2248 LINC00479 -3.68086100 -3.59213900 unchanging  
## 2249 LINC00484 -3.68086100 -3.59213900 unchanging  
## 2250 LINGO2 1.99470410 1.31475160 unchanging  
## 2251 LIPG 2.35378530 4.23934460 up  
## 2252 LIPJ -3.68086100 -3.59213900 unchanging  
## 2253 LIX1 1.51553620 3.74968890 up  
## 2254 LIX1L 4.97496800 4.74473950 unchanging  
## 2255 LL0XNC01-157D4.1 2.08585200 2.76931760 unchanging  
## 2256 LL0XNC01-250H12.3 -1.94389530 -3.44013550 unchanging  
## 2257 LL22NC01-81G9.3 -3.68086100 -3.59213900 unchanging  
## 2258 LL22NC03-104C7.1 -3.68086100 -2.44013570 unchanging  
## 2259 LL22NC03-23C6.13 -3.68086100 -3.59213900 unchanging  
## 2260 LLGL2 4.29769040 4.51986600 unchanging  
## 2261 LMBR1 6.79757170 6.88853930 unchanging  
## 2262 LMNA 5.95697100 6.16534330 unchanging  
## 2263 LMO1 -3.68086100 -3.59213900 unchanging  
## 2264 LMO7-AS1 -3.68086100 -3.44013550 unchanging  
## 2265 LNX1-AS2 -3.68086100 -3.44013550 unchanging  
## 2266 LONP1 5.88265280 5.66315200 unchanging  
## 2267 LONRF3 2.17158170 2.11445300 unchanging  
## 2268 LOR -3.68086100 -3.59213900 unchanging  
## 2269 LPAR6 -2.52885800 -1.44013570 unchanging  
## 2270 LPCAT2 4.64106700 4.58223200 unchanging  
## 2271 LPIN1 4.56917430 4.99031700 unchanging  
## 2272 LPIN3 2.08585200 2.49060150 unchanging  
## 2273 LPL 2.08585200 -2.44013570 down  
## 2274 LPXN 2.02573100 1.36721920 unchanging  
## 2275 LRCH1 3.34150700 3.41784520 unchanging  
## 2276 LRFN3 2.97893670 2.86364480 unchanging  
## 2277 LRIG2 4.81543800 4.47872730 unchanging  
## 2278 LRIT3 -1.94389530 -3.59213900 unchanging  
## 2279 LRP3 3.80205900 3.92618630 unchanging  
## 2280 LRP4 3.23932620 3.30133100 unchanging  
## 2281 LRP5 5.51280100 5.41473300 unchanging  
## 2282 LRP6 7.17244800 7.20642330 unchanging  
## 2283 LRPAP1 5.96699700 5.89078140 unchanging  
## 2284 LRRC15 -3.68086100 -3.59213900 unchanging  
## 2285 LRRC16A 4.35378500 4.12210660 unchanging  
## 2286 LRRC3 2.14356730 1.68914720 unchanging  
## 2287 LRRC36 -3.52885800 -3.59213900 unchanging  
## 2288 LRRC41 5.00641730 5.09513950 unchanging  
## 2289 LRRC4C -2.52885800 -3.59213900 unchanging  
## 2290 LRRC55 -3.68086100 -3.59213900 unchanging  
## 2291 LRRC69 -0.72150310 -0.11820772 unchanging  
## 2292 LRRC70 -1.52885800 -3.44013550 unchanging  
## 2293 LRRN4CL -1.20692980 -3.44013550 unchanging  
## 2294 LRSAM1 3.12935380 3.05171730 unchanging  
## 2295 LSG1 5.75654460 5.94356800 unchanging  
## 2296 LSM14B 6.04099800 5.77661040 unchanging  
## 2297 LSM2 5.32289100 5.09902330 unchanging  
## 2298 LSMD1 2.91408560 3.00280790 unchanging  
## 2299 LST1 -3.68086100 -3.59213900 unchanging  
## 2300 LTC4S -3.68086100 -3.59213900 unchanging  
## 2301 LTN1 5.01417400 4.83132740 unchanging  
## 2302 LTV1 4.67081450 4.74473950 unchanging  
## 2303 LUZP1 5.78402470 5.64997670 unchanging  
## 2304 LY6G6E 4.24592900 4.18922100 unchanging  
## 2305 LY6H -3.68086100 -3.59213900 unchanging  
## 2306 LY6K -1.94389530 -1.11820770 unchanging  
## 2307 LY75 1.47114200 0.55986420 unchanging  
## 2308 LY9 -3.68086100 -3.59213900 unchanging  
## 2309 LYL1 -3.68086100 -3.59213900 unchanging  
## 2310 LYN 4.01030060 3.98612880 unchanging  
## 2311 LYPD2 -3.68086100 -3.59213900 unchanging  
## 2312 LYPD3 0.05610465 2.05171730 unchanging  
## 2313 LYPLA2 3.62088940 3.80779200 unchanging  
## 2314 LYRM2 6.41218950 6.19285900 unchanging  
## 2315 LYZL1 -3.68086100 -3.59213900 unchanging  
## 2316 MAB21L3 -3.52885800 -1.85517320 unchanging  
## 2317 MACC1 4.60042520 4.39275460 unchanging  
## 2318 MAGEA2 5.31349230 5.42095100 unchanging  
## 2319 MAGEA3 6.65229460 6.57945500 unchanging  
## 2320 MAGEA4 -1.52885800 -0.27021074 unchanging  
## 2321 MAGEA9B -0.52885790 -1.85517320 unchanging  
## 2322 MAGEB1 -3.68086100 -3.59213900 unchanging  
## 2323 MAGEC1 -3.68086100 -3.59213900 unchanging  
## 2324 MAGEC3 -3.68086100 -3.59213900 unchanging  
## 2325 MAGED2 7.00933100 6.92618660 unchanging  
## 2326 MAGED4 5.33532800 4.99449250 unchanging  
## 2327 MAGIX -1.20692980 -0.27021074 unchanging  
## 2328 MAGT1 7.61898300 7.64732700 unchanging  
## 2329 MAK16 5.26555820 5.21091600 unchanging  
## 2330 MAL 6.80093800 4.50823160 down  
## 2331 MALAT1 6.03147500 7.43176940 up  
## 2332 MALT1 7.36520200 8.36963200 up  
## 2333 MAN2A1 6.09136200 6.12971970 unchanging  
## 2334 MANSC4 -3.68086100 -2.44013570 unchanging  
## 2335 MAP2K7 3.92235330 4.03559800 unchanging  
## 2336 MAP3K1 5.99077840 6.21270940 unchanging  
## 2337 MAP3K14 2.96299530 2.74968890 unchanging  
## 2338 MAP3K5 3.45982700 3.26030400 unchanging  
## 2339 MAP3K6 2.30403200 2.41784500 unchanging  
## 2340 MAP7 5.33532800 5.39906800 unchanging  
## 2341 MAP7D3 3.22602960 3.31475160 unchanging  
## 2342 MAPK13 3.37803270 3.24636480 unchanging  
## 2343 MAPKAPK2 5.69272950 5.82430650 unchanging  
## 2344 MAPRE3 0.86345950 0.80779165 unchanging  
## 2345 MARK2 5.19224100 5.15977700 unchanging  
## 2346 MAS1 -3.68086100 -3.59213900 unchanging  
## 2347 MAS1L -3.68086100 -3.59213900 unchanging  
## 2348 MAST1 2.25250170 2.44250750 unchanging  
## 2349 MAST2 4.53723100 4.99031700 unchanging  
## 2350 MAST4-IT1 -3.68086100 -3.59213900 unchanging  
## 2351 MATN1 -3.68086100 -1.85517320 unchanging  
## 2352 MB21D1 0.27849698 0.14482673 unchanging  
## 2353 MBD6 4.93874800 4.72477100 unchanging  
## 2354 MBP 5.80876450 5.78386600 unchanging  
## 2355 MCAM 2.11499830 3.97771640 unchanging  
## 2356 MCCC1-AS1 1.11499820 0.88179230 unchanging  
## 2357 MCM6 7.32132900 7.06765840 unchanging  
## 2358 MCM8 5.17504550 5.21807580 unchanging  
## 2359 MCRS1 5.55329130 5.31475160 unchanging  
## 2360 MDFIC 5.44555660 5.30133100 unchanging  
## 2361 MDGA2 3.43692640 2.96925500 unchanging  
## 2362 MDM1 5.02956300 4.96500600 unchanging  
## 2363 MDP1 2.60042520 2.46675500 unchanging  
## 2364 MEA1 5.23932650 5.23934460 unchanging  
## 2365 MEAF6 5.53723100 5.43330800 unchanging  
## 2366 MECOM 8.54092700 8.04468700 unchanging  
## 2367 MECR 3.17158200 2.93490360 unchanging  
## 2368 MED10 4.24592900 4.42405030 unchanging  
## 2369 MED11 2.55860500 2.31475160 unchanging  
## 2370 MED12 5.70715600 5.18922100 unchanging  
## 2371 MED22 4.38403130 4.29457400 unchanging  
## 2372 MED23 4.70476200 5.01519160 unchanging  
## 2373 MED29 5.56653930 5.37684770 unchanging  
## 2374 MED6 4.24592900 4.39275460 unchanging  
## 2375 MEF2B 1.55860500 1.51406050 unchanging  
## 2376 MEF2BNB 1.99470410 2.46675500 unchanging  
## 2377 MEF2BNB-MEF2B 1.47114200 1.36721920 unchanging  
## 2378 MEG3 -3.68086100 -3.44013550 unchanging  
## 2379 MEIG1 -2.52885800 -1.85517320 unchanging  
## 2380 MEIS1 7.32132900 7.13161700 unchanging  
## 2381 MEOX1 7.87148760 6.91190770 down  
## 2382 MERTK 2.47114200 2.80779170 unchanging  
## 2383 MET 4.03338500 4.53714400 unchanging  
## 2384 METRNL 4.44268560 3.89971420 unchanging  
## 2385 METTL20 2.64106700 2.39275430 unchanging  
## 2386 METTL7A 7.43186860 6.74349980 unchanging  
## 2387 METTL7B 2.27849700 2.05171730 unchanging  
## 2388 METTL9 6.68424600 6.58500400 unchanging  
## 2389 MEX3B 2.02573100 1.60425830 unchanging  
## 2390 MFAP3 6.50868900 6.51696600 unchanging  
## 2391 MFSD2A 1.93057370 3.67880500 up  
## 2392 MFSD7 -3.68086100 -2.44013570 unchanging  
## 2393 MGAM -2.52885800 -2.44013570 unchanging  
## 2394 MGAT3 2.14356730 3.40535430 unchanging  
## 2395 MGAT4A 5.05610470 4.79826900 unchanging  
## 2396 MGST2 4.26555820 4.05171730 unchanging  
## 2397 MIA 1.86345960 1.80779170 unchanging  
## 2398 MIA3 6.65725660 6.64467300 unchanging  
## 2399 MICAL2 4.23269300 4.42405030 unchanging  
## 2400 MICB 1.79307010 1.98612890 unchanging  
## 2401 MID2 1.32912310 2.49060150 unchanging  
## 2402 MIIP 2.53723120 2.41784500 unchanging  
## 2403 MINK1 4.76116100 4.74473950 unchanging  
## 2404 MIR10B -3.68086100 -3.59213900 unchanging  
## 2405 MIR196A2 -3.68086100 -3.59213900 unchanging  
## 2406 MIR3179-3 -0.72150310 0.36721915 unchanging  
## 2407 MIR3180-3 -3.68086100 -3.59213900 unchanging  
## 2408 MIS18A 4.45982700 4.32804870 unchanging  
## 2409 MKKS 5.49904780 5.36399560 unchanging  
## 2410 MKL2 6.41804840 6.12782050 unchanging  
## 2411 MKLN1 6.00057200 6.28778460 unchanging  
## 2412 MKS1 3.88053300 3.44250730 unchanging  
## 2413 MKX 2.66096660 2.58223200 unchanging  
## 2414 MLK7-AS1 0.93057376 0.88179230 unchanging  
## 2415 MLLT1 5.12935350 5.29795650 unchanging  
## 2416 MMADHC 6.50042960 6.42868660 unchanging  
## 2417 MMP12 -3.68086100 -3.59213900 unchanging  
## 2418 MMP24 2.11499830 1.41784510 unchanging  
## 2419 MMRN2 -1.94389530 -2.44013570 unchanging  
## 2420 MMS19 4.89740700 4.91741660 unchanging  
## 2421 MND1 3.05610440 2.96925500 unchanging  
## 2422 MNT 3.42533850 3.08342650 unchanging  
## 2423 MOAP1 5.22602940 4.89971400 unchanging  
## 2424 MOCOS 2.27849700 2.96925500 unchanging  
## 2425 MON2 6.49073270 6.52276040 unchanging  
## 2426 MORC2-AS1 1.27849700 1.84526660 unchanging  
## 2427 MORC3 4.53723100 4.34122370 unchanging  
## 2428 MORN5 -2.52885800 -2.44013570 unchanging  
## 2429 MOSPD3 3.05610440 3.09902300 unchanging  
## 2430 MPDZ 5.03338500 5.23934460 unchanging  
## 2431 MPEG1 -3.68086100 -3.59213900 unchanging  
## 2432 MPG 2.94687560 2.95218160 unchanging  
## 2433 MPHOSPH8 5.55860470 5.55704400 unchanging  
## 2434 MPHOSPH9 6.01417400 5.90193900 unchanging  
## 2435 MPV17 3.69031050 3.73977350 unchanging  
## 2436 MPZ -2.52885800 -3.44013550 unchanging  
## 2437 MRGPRX3 -3.68086100 -3.59213900 unchanging  
## 2438 MRPL37 5.71431640 5.60425800 unchanging  
## 2439 MRPL39 4.30403200 4.02746960 unchanging  
## 2440 MRPL41 2.64106700 2.62595340 unchanging  
## 2441 MRPL43 4.48236940 4.57109170 unchanging  
## 2442 MRPL54 2.44842200 2.28778460 unchanging  
## 2443 MRPL55 2.84618140 2.76931760 unchanging  
## 2444 MRPS28 3.60042520 3.40535430 unchanging  
## 2445 MRPS6 5.52371030 5.32473600 unchanging  
## 2446 MRS2 5.10776660 5.03153940 unchanging  
## 2447 MRTO4 4.45413600 4.65789600 unchanging  
## 2448 MS4A1 -3.68086100 -3.59213900 unchanging  
## 2449 MS4A10 -3.68086100 -3.44013550 unchanging  
## 2450 MS4A13 -3.68086100 -3.59213900 unchanging  
## 2451 MS4A15 -3.68086100 -3.59213900 unchanging  
## 2452 MS4A8B -3.68086100 -3.59213900 unchanging  
## 2453 MSGN1 -3.68086100 -3.59213900 unchanging  
## 2454 MSH5 3.04099750 3.21807580 unchanging  
## 2455 MSH5-C6orf26 2.64106700 2.96925500 unchanging  
## 2456 MSI1 4.25250200 3.94356850 unchanging  
## 2457 MSRB3 5.01417400 6.12782050 up  
## 2458 MST1P9 1.32912310 1.41784510 unchanging  
## 2459 MT1P3 4.61069350 4.54285760 unchanging  
## 2460 MT1X 2.30403200 2.34122400 unchanging  
## 2461 MT2A 2.79307000 2.91741630 unchanging  
## 2462 MT-ATP6 -3.68086100 -3.59213900 unchanging  
## 2463 MTCP1NB 2.30403200 2.31475160 unchanging  
## 2464 MTERF 3.62088940 3.55986450 unchanging  
## 2465 MTMR4 5.96299500 6.03762250 unchanging  
## 2466 MTMR6 5.53183800 5.40848700 unchanging  
## 2467 MTMR9 5.15764300 5.13729300 unchanging  
## 2468 MT-ND1 -3.68086100 -3.59213900 unchanging  
## 2469 MTPN 8.15983000 8.25813500 unchanging  
## 2470 MTRNR2L3 -2.52885800 -1.11820770 unchanging  
## 2471 MTRNR2L8 4.28492300 6.19104100 up  
## 2472 MTRNR2L9 3.52642440 5.57945500 up  
## 2473 MTTP -1.20692980 -1.85517320 unchanging  
## 2474 MTUS2 -0.06942624 -2.44013570 unchanging  
## 2475 MUC1 3.10049870 4.25335100 up  
## 2476 MUC16 3.60042520 0.88179230 down  
## 2477 MUC2 -1.52885800 -2.44013570 unchanging  
## 2478 MUC20 4.68546100 3.84526660 unchanging  
## 2479 MUC5AC 0.17158182 2.53714420 unchanging  
## 2480 MUC5B -1.94389530 3.57109140 up  
## 2481 MUT 5.98881150 5.55986450 unchanging  
## 2482 MVD 4.31663230 4.09124570 unchanging  
## 2483 MXRA5 4.56917430 3.68914720 unchanging  
## 2484 MYB 3.32912330 2.44250750 unchanging  
## 2485 MYC 3.15764280 4.38641260 up  
## 2486 MYCBP2-AS2 -3.68086100 -3.59213900 unchanging  
## 2487 MYCL1 2.71906970 2.49060150 unchanging  
## 2488 MYCNOS -1.94389530 -1.44013570 unchanging  
## 2489 MYEOV -0.20692979 -0.44013572 unchanging  
## 2490 MYH1 -3.68086100 -3.59213900 unchanging  
## 2491 MYH8 -3.68086100 -3.59213900 unchanging  
## 2492 MYL9 5.56917430 6.70579620 up  
## 2493 MYLK3 -2.52885800 -3.44013550 unchanging  
## 2494 MYLK4 -3.68086100 -3.44013550 unchanging  
## 2495 MYLK-AS2 -3.52885800 -3.59213900 unchanging  
## 2496 MYO15A -0.72150310 -1.85517320 unchanging  
## 2497 MYO1A -3.68086100 -3.59213900 unchanging  
## 2498 MYO3A -3.68086100 -3.59213900 unchanging  
## 2499 MYOC -3.68086100 -3.59213900 unchanging  
## 2500 MYOT -0.06942624 -0.44013572 unchanging  
## 2501 N4BP2L2 5.62848900 5.90193900 unchanging  
## 2502 NAALADL2 3.66096690 2.62595340 unchanging  
## 2503 NAALADL2-AS3 -3.68086100 -3.59213900 unchanging  
## 2504 NAB2 4.69514370 4.05971050 unchanging  
## 2505 NACC1 5.87841000 6.03762250 unchanging  
## 2506 NAE1 6.11138700 5.84988300 unchanging  
## 2507 NAIF1 3.78402500 3.65789630 unchanging  
## 2508 NAIP 4.17850100 5.00280760 unchanging  
## 2509 NAMPTL 5.08585170 5.17825000 unchanging  
## 2510 NANOS1 4.77948100 4.89078100 unchanging  
## 2511 NAP1L3 4.92235330 4.85907200 unchanging  
## 2512 NASP 7.55860500 7.44556100 unchanging  
## 2513 NAV2 6.24428130 4.93924300 down  
## 2514 NAV3 2.30403200 1.20372030 unchanging  
## 2515 NBL1 3.04099750 3.40535430 unchanging  
## 2516 NBN 5.92852260 6.08342600 unchanging  
## 2517 NBPF11 6.20585160 6.46675500 unchanging  
## 2518 NBPF15 6.40925100 6.63266700 unchanging  
## 2519 NCALD 6.26880360 3.70961140 down  
## 2520 NCBP2L -3.68086100 -3.59213900 unchanging  
## 2521 NCOA4 7.38851450 7.58707950 unchanging  
## 2522 NCS1 5.85700460 5.70706940 unchanging  
## 2523 NDC80 5.89950230 5.79826930 unchanging  
## 2524 NDFIP1 7.09410900 7.02746960 unchanging  
## 2525 NDOR1 3.95495770 3.81725200 unchanging  
## 2526 NDUFA13 5.21597580 4.93055150 unchanging  
## 2527 NDUFA4 5.88053300 5.95432700 unchanging  
## 2528 NDUFA5 6.09502360 5.89525400 unchanging  
## 2529 NDUFAF3 3.39000540 3.24636480 unchanging  
## 2530 NDUFB4 5.14002700 4.86364500 unchanging  
## 2531 NDUFB6 4.85484650 5.00694750 unchanging  
## 2532 NDUFB7 3.05610440 2.98612880 unchanging  
## 2533 NDUFB9 5.35072500 5.38641260 unchanging  
## 2534 NDUFS7 2.84618140 2.34122400 unchanging  
## 2535 NDUFV2 4.63604900 4.69941570 unchanging  
## 2536 NDUFV3 4.15062200 4.36076400 unchanging  
## 2537 NEAT1 1.79307010 4.21807580 up  
## 2538 NECAB2 -3.52885800 -1.85517320 unchanging  
## 2539 NECAB3 3.74726680 2.91741630 unchanging  
## 2540 NEDD4 4.03338500 4.15232130 unchanging  
## 2541 NEGR1 0.05610465 0.95218160 unchanging  
## 2542 NEIL1 -0.52885790 0.72978930 unchanging  
## 2543 NEK1 5.23932650 5.05571940 unchanging  
## 2544 NEK11 3.44842200 3.44250730 unchanging  
## 2545 NEK3 2.89740680 1.98612890 unchanging  
## 2546 NEK5 0.99470407 0.46675485 unchanging  
## 2547 NEK6 5.84400700 4.59878300 down  
## 2548 NEU1 6.18366900 5.69172100 unchanging  
## 2549 NEURL4 4.26555820 3.95218160 unchanging  
## 2550 NEXN-AS1 -2.52885800 -2.44013570 unchanging  
## 2551 NFAT5 6.10413740 6.68269200 unchanging  
## 2552 NFE2L3 3.30403180 3.69941570 unchanging  
## 2553 NFXL1 4.93874800 5.12210660 unchanging  
## 2554 NHLH1 -3.52885800 -3.59213900 unchanging  
## 2555 NHLH2 -3.68086100 -3.44013550 unchanging  
## 2556 NHP2 4.31034560 4.58223200 unchanging  
## 2557 NHP2L1 5.94890070 5.81016300 unchanging  
## 2558 NICN1-AS1 0.71906954 0.55986420 unchanging  
## 2559 NID1 5.83089160 4.48467700 down  
## 2560 NINJ1 3.49351000 3.23228980 unchanging  
## 2561 NIPAL4 -3.52885800 -3.59213900 unchanging  
## 2562 NKIRAS2 5.05985700 4.77903270 unchanging  
## 2563 NKX2-4 -3.68086100 -3.59213900 unchanging  
## 2564 NKX2-5 1.22602960 1.51406050 unchanging  
## 2565 NKX3-1 -0.06942624 -0.11820772 unchanging  
## 2566 NKX6-3 -3.68086100 -3.59213900 unchanging  
## 2567 NLGN2 5.23269300 5.42095100 unchanging  
## 2568 NLRP8 -3.68086100 -3.59213900 unchanging  
## 2569 NME1 6.05422500 6.14482640 unchanging  
## 2570 NME4 4.59008300 4.45468200 unchanging  
## 2571 NOL10 5.10776660 5.12210660 unchanging  
## 2572 NOL3 2.22602960 2.44250750 unchanging  
## 2573 NOS3 -3.68086100 -1.44013570 unchanging  
## 2574 NOSIP 3.54795770 3.65789630 unchanging  
## 2575 NOTCH2 7.25741200 7.39512540 unchanging  
## 2576 NOTCH2NL 4.90577030 5.06369000 unchanging  
## 2577 NOV 3.04099750 3.11445300 unchanging  
## 2578 NOX1 0.17158182 -0.11820772 unchanging  
## 2579 NOXO1 -1.94389530 -2.44013570 unchanging  
## 2580 NOXRED1 -0.20692979 1.36721920 unchanging  
## 2581 NPAS3 3.68059560 1.01929580 down  
## 2582 NPBWR2 -3.68086100 -3.59213900 unchanging  
## 2583 NPC1L1 -3.68086100 -3.44013550 unchanging  
## 2584 NPDC1 2.44842200 3.00280790 unchanging  
## 2585 NPFFR2 -3.52885800 -3.59213900 unchanging  
## 2586 NPHP1 2.73792860 2.84526660 unchanging  
## 2587 NPHP3-AS1 -3.68086100 -2.44013570 unchanging  
## 2588 NPIPL2 1.93057370 2.28778460 unchanging  
## 2589 NPIPP1 4.77948100 5.31140850 unchanging  
## 2590 NPM1 8.34842700 8.35631000 unchanging  
## 2591 NPM3 3.21260900 3.38004300 unchanging  
## 2592 NPR2 0.05610465 1.08342620 unchanging  
## 2593 NPRL2 3.41365650 3.67880500 unchanging  
## 2594 NPRL3 4.50456520 4.36721900 unchanging  
## 2595 NPVF -3.68086100 -3.59213900 unchanging  
## 2596 NPY5R -3.52885800 -3.59213900 unchanging  
## 2597 NR0B2 -3.68086100 -3.59213900 unchanging  
## 2598 NR1H2 3.66096690 3.27410980 unchanging  
## 2599 NR1I2 -3.68086100 -3.59213900 unchanging  
## 2600 NR2F2 1.82869410 3.05171730 unchanging  
## 2601 NR3C1 5.52099040 5.56267930 unchanging  
## 2602 NR5A2 -0.94389530 -0.63278085 unchanging  
## 2603 NRAP -3.68086100 -3.59213900 unchanging  
## 2604 NRARP 4.85484650 5.28437800 unchanging  
## 2605 NRP1 -2.52885800 1.76931760 up  
## 2606 NRTN 0.47114208 1.72978930 unchanging  
## 2607 NSMCE1 4.12219400 4.03559800 unchanging  
## 2608 NSMCE4A 4.14356760 4.34776700 unchanging  
## 2609 NSUN5 4.53723100 4.53714400 unchanging  
## 2610 NSUN6 3.27849700 3.26030400 unchanging  
## 2611 NT5C1A -2.52885800 -3.44013550 unchanging  
## 2612 NT5C1B-RDH14 1.42533850 1.41784510 unchanging  
## 2613 NT5C3L 5.10413740 5.13729300 unchanging  
## 2614 NTF3 -3.52885800 -3.44013550 unchanging  
## 2615 NTM-IT1 -3.68086100 -3.59213900 unchanging  
## 2616 NTPCR 4.43114380 4.72477100 unchanging  
## 2617 NTRK1 -3.68086100 -3.59213900 unchanging  
## 2618 NTS 1.86345960 5.81725200 up  
## 2619 NUBP2 3.67081450 3.73977350 unchanging  
## 2620 NUBPL 2.55860500 2.84526660 unchanging  
## 2621 NUDT19 4.95898200 4.89971400 unchanging  
## 2622 NUDT4 6.73792900 6.52709050 unchanging  
## 2623 NUMB 5.64606760 5.66577300 unchanging  
## 2624 NUMBL 2.47114200 2.70961120 unchanging  
## 2625 NUP133 5.71193360 5.53140800 unchanging  
## 2626 NUP210 7.91408600 7.71847400 unchanging  
## 2627 NUP98 7.22603000 7.14106500 unchanging  
## 2628 NUS1 6.96999100 7.05171730 unchanging  
## 2629 NVL 4.62596000 4.67880540 unchanging  
## 2630 NXF3 -3.68086100 -3.59213900 unchanging  
## 2631 NXPH1 -3.68086100 -3.59213900 unchanging  
## 2632 NYX -3.52885800 -3.59213900 unchanging  
## 2633 OAS1 -3.68086100 -2.44013570 unchanging  
## 2634 OAS2 -3.68086100 -3.44013550 unchanging  
## 2635 OAS3 -3.68086100 1.41784510 up  
## 2636 OCRL 5.72144030 5.64467240 unchanging  
## 2637 OGFOD1 5.50456520 5.66052680 unchanging  
## 2638 OLAH -3.52885800 -2.44013570 unchanging  
## 2639 OLFM3 -3.68086100 -3.59213900 unchanging  
## 2640 OPCML-IT1 -3.68086100 -3.59213900 unchanging  
## 2641 OPN1LW -3.68086100 -3.59213900 unchanging  
## 2642 OPN4 -3.68086100 -3.59213900 unchanging  
## 2643 OPN5 -3.68086100 -3.59213900 unchanging  
## 2644 OPRM1 -3.68086100 -3.59213900 unchanging  
## 2645 OPTN 4.88899470 4.90416000 unchanging  
## 2646 OR10A6 -3.68086100 -3.59213900 unchanging  
## 2647 OR10AB1P -3.68086100 -3.59213900 unchanging  
## 2648 OR10AD1 -3.68086100 -3.59213900 unchanging  
## 2649 OR10G2 -3.68086100 -3.59213900 unchanging  
## 2650 OR10G7 -3.68086100 -3.59213900 unchanging  
## 2651 OR10H3 -3.68086100 -3.59213900 unchanging  
## 2652 OR10J3 -3.68086100 -3.59213900 unchanging  
## 2653 OR10V1 -3.68086100 -3.59213900 unchanging  
## 2654 OR12D3 -3.68086100 -3.59213900 unchanging  
## 2655 OR13A1 -3.52885800 -3.59213900 unchanging  
## 2656 OR13C8 -3.68086100 -3.59213900 unchanging  
## 2657 OR13H1 -3.68086100 -3.59213900 unchanging  
## 2658 OR14I1 -3.68086100 -3.59213900 unchanging  
## 2659 OR1A2 -3.68086100 -3.59213900 unchanging  
## 2660 OR1F1 -3.52885800 -3.59213900 unchanging  
## 2661 OR1I1 -3.68086100 -3.59213900 unchanging  
## 2662 OR1N1 -3.68086100 -3.59213900 unchanging  
## 2663 OR1S1 -3.68086100 -3.59213900 unchanging  
## 2664 OR2AE1 -3.68086100 -3.59213900 unchanging  
## 2665 OR2B11 -3.68086100 -3.59213900 unchanging  
## 2666 OR2G2 -3.68086100 -3.59213900 unchanging  
## 2667 OR2K2 -3.68086100 -3.59213900 unchanging  
## 2668 OR2L3 -3.68086100 -3.59213900 unchanging  
## 2669 OR2M4 -3.68086100 -3.59213900 unchanging  
## 2670 OR2M7 -3.68086100 -3.59213900 unchanging  
## 2671 OR2T2 -3.68086100 -3.59213900 unchanging  
## 2672 OR2T3 -3.68086100 -3.59213900 unchanging  
## 2673 OR3A1 -3.68086100 -3.59213900 unchanging  
## 2674 OR3A3 -3.68086100 -3.59213900 unchanging  
## 2675 OR4C46 -3.68086100 -3.59213900 unchanging  
## 2676 OR4C6 -3.68086100 -3.59213900 unchanging  
## 2677 OR4D2 -3.68086100 -3.59213900 unchanging  
## 2678 OR4F16 -3.68086100 -3.44013550 unchanging  
## 2679 OR51A4 -3.68086100 -3.59213900 unchanging  
## 2680 OR51B2 -3.68086100 -3.59213900 unchanging  
## 2681 OR51C1P -3.68086100 -3.59213900 unchanging  
## 2682 OR51E2 -3.68086100 -3.59213900 unchanging  
## 2683 OR51I2 -3.68086100 -3.59213900 unchanging  
## 2684 OR52E8 -3.68086100 2.93490360 up  
## 2685 OR52L1 -3.68086100 -3.59213900 unchanging  
## 2686 OR52N2 -3.68086100 -3.59213900 unchanging  
## 2687 OR56B1 -3.68086100 -3.44013550 unchanging  
## 2688 OR5D14 -3.68086100 -3.59213900 unchanging  
## 2689 OR5D16 -3.68086100 -3.59213900 unchanging  
## 2690 OR5F1 -3.68086100 -3.59213900 unchanging  
## 2691 OR5H14 -3.68086100 -3.59213900 unchanging  
## 2692 OR5M10 -3.68086100 -3.59213900 unchanging  
## 2693 OR5P3 -3.68086100 -3.59213900 unchanging  
## 2694 OR5T2 -3.68086100 -3.59213900 unchanging  
## 2695 OR5T3 -3.68086100 -3.59213900 unchanging  
## 2696 OR5V1 -3.68086100 -3.59213900 unchanging  
## 2697 OR5W2 -3.68086100 -3.59213900 unchanging  
## 2698 OR6C1 -3.68086100 -3.59213900 unchanging  
## 2699 OR6C68 -3.68086100 -3.59213900 unchanging  
## 2700 OR6C76 -3.68086100 -3.59213900 unchanging  
## 2701 OR6J1 -3.68086100 -3.59213900 unchanging  
## 2702 OR6N1 -3.68086100 -3.59213900 unchanging  
## 2703 OR6T1 -3.68086100 -3.59213900 unchanging  
## 2704 OR7C1 -3.68086100 -3.59213900 unchanging  
## 2705 OR8D4 -3.68086100 -3.59213900 unchanging  
## 2706 OR8H2 -3.68086100 -3.59213900 unchanging  
## 2707 OR8J3 -3.68086100 -3.59213900 unchanging  
## 2708 OR9K2 -3.68086100 -3.59213900 unchanging  
## 2709 ORC6 4.74726700 4.77903270 unchanging  
## 2710 OSBP 7.01514050 6.78988460 unchanging  
## 2711 OSGEPL1 3.64106700 3.49060150 unchanging  
## 2712 OSM -3.68086100 -3.59213900 unchanging  
## 2713 OSR1 -1.94389530 -1.85517320 unchanging  
## 2714 OSTN -3.68086100 -3.59213900 unchanging  
## 2715 OSTN-AS1 -3.68086100 -3.59213900 unchanging  
## 2716 OTP -2.52885800 -3.59213900 unchanging  
## 2717 OTUD6B 4.96299500 4.93490360 unchanging  
## 2718 OTUD7B 4.83308600 4.91741660 unchanging  
## 2719 OVOL1 0.79307020 0.95218160 unchanging  
## 2720 OXTR 1.22602960 1.91741620 unchanging  
## 2721 P2RX1 -3.68086100 -3.59213900 unchanging  
## 2722 P2RX5 -1.94389530 -0.85517323 unchanging  
## 2723 P2RX6 -3.68086100 -3.44013550 unchanging  
## 2724 P2RX7 -1.52885800 -0.63278085 unchanging  
## 2725 P2RY13 -3.68086100 -3.59213900 unchanging  
## 2726 P4HA1 5.94687500 5.97137500 unchanging  
## 2727 P4HA3 2.02573100 1.91741620 unchanging  
## 2728 PACRG -0.52885790 -1.11820770 unchanging  
## 2729 PACSIN2 5.69514370 5.50237900 unchanging  
## 2730 PAF1 5.46832130 5.23582120 unchanging  
## 2731 PAIP1 6.04668140 5.85678050 unchanging  
## 2732 PAIP2 6.20754400 6.35428000 unchanging  
## 2733 PAIP2B 4.43114380 4.28778460 unchanging  
## 2734 PAK2 7.53453730 7.69300600 unchanging  
## 2735 PALM2-AKAP2 2.49351000 2.46675500 unchanging  
## 2736 PALM3 2.17158170 1.98612890 unchanging  
## 2737 PANX2 2.53723120 2.17457410 unchanging  
## 2738 PAPD5 4.92235330 4.81252960 unchanging  
## 2739 PAPD7 4.91822530 4.54854900 unchanging  
## 2740 PAPLN 1.42533850 1.14482670 unchanging  
## 2741 PAPPA -3.52885800 -1.44013570 unchanging  
## 2742 PAQR4 4.42533870 4.09902330 unchanging  
## 2743 PAQR8 3.34150700 3.26030400 unchanging  
## 2744 PARD3B 3.89740680 4.18191600 unchanging  
## 2745 PARD6G 4.27849700 4.28778460 unchanging  
## 2746 PARK2 -3.52885800 -3.59213900 unchanging  
## 2747 PARP14 -1.20692980 0.64732707 unchanging  
## 2748 PARP3 2.64106700 2.70961120 unchanging  
## 2749 PASD1 -2.52885800 -3.59213900 unchanging  
## 2750 PATZ1 6.02764800 5.93490400 unchanging  
## 2751 PAX1 -3.68086100 -3.59213900 unchanging  
## 2752 PAX3 -3.68086100 -3.59213900 unchanging  
## 2753 PC 4.21933500 4.32141540 unchanging  
## 2754 PCBP1 7.82484050 7.83249400 unchanging  
## 2755 PCCA 4.97496800 3.87274720 down  
## 2756 PCDH1 3.26555800 3.60425830 unchanging  
## 2757 PCDH11X 2.14356730 2.44250750 unchanging  
## 2758 PCDH15 1.37803270 1.08342620 unchanging  
## 2759 PCDH18 3.39000540 2.58223200 unchanging  
## 2760 PCDH9 6.51143170 6.74473900 unchanging  
## 2761 PCDHA1 3.84618140 3.23228980 unchanging  
## 2762 PCDHA3 3.88053300 3.28778480 unchanging  
## 2763 PCDHA9 3.82869390 3.30133100 unchanging  
## 2764 PCDHB11 4.43692640 4.40535400 unchanging  
## 2765 PCDHB12 2.32912300 2.39275430 unchanging  
## 2766 PCDHB5 3.79307000 2.51406050 unchanging  
## 2767 PCDHGA8 5.99861960 6.17641300 unchanging  
## 2768 PCK1 -3.68086100 -3.59213900 unchanging  
## 2769 PCNA 7.56257720 7.45543960 unchanging  
## 2770 PCP4L1 -0.94389530 -1.44013570 unchanging  
## 2771 PCSK1 -3.68086100 -3.59213900 unchanging  
## 2772 PCSK5 1.42533850 1.88179220 unchanging  
## 2773 PCSK9 4.56389900 3.43022900 down  
## 2774 PDCL 5.56917430 5.43638130 unchanging  
## 2775 PDCL2 -3.68086100 -3.44013550 unchanging  
## 2776 PDE3A 4.85484650 3.59328720 down  
## 2777 PDE3B 2.19906260 3.11445300 unchanging  
## 2778 PDE4C -3.52885800 -2.44013570 unchanging  
## 2779 PDE6B 1.96299520 2.95218160 unchanging  
## 2780 PDE6C -3.68086100 -3.59213900 unchanging  
## 2781 PDE6H -3.68086100 -3.59213900 unchanging  
## 2782 PDGFB 2.25250170 3.05171730 unchanging  
## 2783 PDGFC 5.53723100 6.26549670 up  
## 2784 PDGFRA 0.27849698 -1.44013570 unchanging  
## 2785 PDIA2 -2.52885800 -3.44013550 unchanging  
## 2786 PDIA4 8.03909800 8.14435700 unchanging  
## 2787 PDIA6 8.23849900 8.33423900 unchanging  
## 2788 PDK1 3.23932620 3.12971970 unchanging  
## 2789 PDLIM1 4.59008300 4.67360640 unchanging  
## 2790 PDLIM2 0.37803268 1.41784510 unchanging  
## 2791 PDLIM3 -0.06942624 -0.63278085 unchanging  
## 2792 PDSS1 2.08585200 2.49060150 unchanging  
## 2793 PDXP 4.53183800 4.17457400 unchanging  
## 2794 PDZD9 -3.52885800 -3.44013550 unchanging  
## 2795 PEA15 6.81210470 6.75092360 unchanging  
## 2796 PEAK1 5.01803640 5.87953660 up  
## 2797 PEBP1 7.51485300 7.46223930 unchanging  
## 2798 PERP 7.05516530 7.08734100 unchanging  
## 2799 PEX11A 3.25250170 3.12971970 unchanging  
## 2800 PEX11B 4.20585160 4.01107550 unchanging  
## 2801 PEX13 5.11860100 4.82195900 unchanging  
## 2802 PF4V1 -3.68086100 -3.59213900 unchanging  
## 2803 PFDN5 6.53992030 6.63534300 unchanging  
## 2804 PGA5 -3.68086100 -3.59213900 unchanging  
## 2805 PGAM1 7.73147400 7.70706900 unchanging  
## 2806 PGAM5 6.27365830 6.05171730 unchanging  
## 2807 PGAP1 5.17504550 5.67620850 unchanging  
## 2808 PGP 4.70954660 4.30133100 unchanging  
## 2809 PGR 1.60042510 4.62595300 up  
## 2810 PGRMC2 6.91512160 7.05171730 unchanging  
## 2811 PHACTR2 7.65911250 6.65657950 down  
## 2812 PHACTR3 -3.68086100 -3.59213900 unchanging  
## 2813 PHB 5.77263830 5.76687860 unchanging  
## 2814 PHKA1 4.10776660 4.37364530 unchanging  
## 2815 PHKG2 3.42533850 3.55986450 unchanging  
## 2816 PHLDA2 1.32912310 1.08342620 unchanging  
## 2817 PHPT1 4.16462900 4.09124570 unchanging  
## 2818 PHYH 5.10049870 3.99449250 down  
## 2819 PIAS2 4.77035000 4.46073100 unchanging  
## 2820 PIEZO1 4.69031050 5.99865600 up  
## 2821 PIGH 4.08585200 3.91741630 unchanging  
## 2822 PIGN 5.64357000 5.48467700 unchanging  
## 2823 PIGS 6.08585170 6.12210600 unchanging  
## 2824 PIGV 3.32912330 3.20372030 unchanging  
## 2825 PIK3AP1 3.69031050 3.78868300 unchanging  
## 2826 PIK3C2B 4.04857100 4.31475160 unchanging  
## 2827 PIK3R3 8.29211900 7.90914600 unchanging  
## 2828 PILRA 0.79307020 1.20372030 unchanging  
## 2829 PIM2 2.49351000 2.26030400 unchanging  
## 2830 PION 3.88053300 3.75953650 unchanging  
## 2831 PIWIL4 0.37803268 -2.44013570 unchanging  
## 2832 PJA2 7.77492300 7.65328170 unchanging  
## 2833 PKD1 4.78855470 5.15232130 unchanging  
## 2834 PKIG 2.88053320 2.93490360 unchanging  
## 2835 PKNOX2 -3.68086100 -3.59213900 unchanging  
## 2836 PKP3 4.31034560 4.28778460 unchanging  
## 2837 PLA2G2F -3.68086100 -3.59213900 unchanging  
## 2838 PLA2G4B 2.19906260 2.46675500 unchanging  
## 2839 PLA2G4C -3.68086100 -3.44013550 unchanging  
## 2840 PLA2G4E -3.68086100 -3.59213900 unchanging  
## 2841 PLAC8 -0.94389530 -0.11820772 unchanging  
## 2842 PLAGL2 5.17504550 4.84063500 unchanging  
## 2843 PLCB2 -2.52885800 -3.59213900 unchanging  
## 2844 PLCH1-AS2 -3.68086100 -3.59213900 unchanging  
## 2845 PLCL2-AS1 -3.68086100 -3.44013550 unchanging  
## 2846 PLCXD1 3.12935380 3.24636480 unchanging  
## 2847 PLCXD2-AS1 -3.68086100 -3.59213900 unchanging  
## 2848 PLD1 3.59008310 3.34122400 unchanging  
## 2849 PLD4 -3.68086100 -3.59213900 unchanging  
## 2850 PLD5 -3.68086100 -3.59213900 unchanging  
## 2851 PLEC 5.64106700 6.20732300 unchanging  
## 2852 PLEK -3.68086100 -3.59213900 unchanging  
## 2853 PLEKHG2 4.50456520 4.55986450 unchanging  
## 2854 PLEKHG5 2.44842200 2.20372030 unchanging  
## 2855 PLEKHH2 3.34150700 3.34122400 unchanging  
## 2856 PLEKHN1 -3.68086100 -2.44013570 unchanging  
## 2857 PLIN3 5.25904460 4.91301060 unchanging  
## 2858 PLIN4 0.86345950 0.80779165 unchanging  
## 2859 PLK2 7.04384230 8.16719400 up  
## 2860 PLK3 -0.94389530 0.14482673 unchanging  
## 2861 PLK4 5.28492300 5.45164780 unchanging  
## 2862 PLP1 -3.68086100 -3.59213900 unchanging  
## 2863 PLRG1 6.41512200 6.40221450 unchanging  
## 2864 PLXNA4 -0.94389530 0.64732707 unchanging  
## 2865 PLXNB2 7.40704400 7.26117100 unchanging  
## 2866 PMF1 4.23932650 3.83598880 unchanging  
## 2867 PMP2 -3.52885800 -3.44013550 unchanging  
## 2868 PMP22 3.83746430 4.99449250 up  
## 2869 PMS1 4.86345960 4.77903270 unchanging  
## 2870 PNLIP -3.68086100 -3.59213900 unchanging  
## 2871 PNMA6A 1.42533850 1.60425830 unchanging  
## 2872 PNPLA3 3.72853000 3.41784520 unchanging  
## 2873 PNPT1 4.94687560 4.89078100 unchanging  
## 2874 PNRC2 7.09044500 6.84295230 unchanging  
## 2875 POGK 6.77834270 6.72225570 unchanging  
## 2876 POLA2 5.01803640 4.83132740 unchanging  
## 2877 POLE3 7.13202900 7.06269600 unchanging  
## 2878 POLG 5.30403200 5.13351150 unchanging  
## 2879 POLR1C 3.42533850 3.41784520 unchanging  
## 2880 POLR2B 7.39817900 7.36076400 unchanging  
## 2881 POLR2J 4.72853000 4.82195900 unchanging  
## 2882 POLR3G 2.30403200 2.55986430 unchanging  
## 2883 POLRMT 3.10049870 3.12971970 unchanging  
## 2884 POR 5.83964820 5.51406050 unchanging  
## 2885 POU4F1 3.86345960 3.79826880 unchanging  
## 2886 PPAN 3.02573100 3.21807580 unchanging  
## 2887 PPAP2C 5.41950940 5.20732260 unchanging  
## 2888 PPARGC1A 4.39595460 2.86364480 down  
## 2889 PPARGC1B 2.97893670 3.44250730 unchanging  
## 2890 PPCDC 2.93057370 2.86364480 unchanging  
## 2891 PPCS 5.22268630 5.02338840 unchanging  
## 2892 PPEF1 -3.52885800 -3.59213900 unchanging  
## 2893 PPFIA3 2.88053320 2.70961120 unchanging  
## 2894 PPIB 7.66651440 8.01878400 unchanging  
## 2895 PPM1E 2.84618140 3.08342650 unchanging  
## 2896 PPM1G 6.83198930 6.60835080 unchanging  
## 2897 PPM1M 2.55860500 2.72978930 unchanging  
## 2898 PPP1R12C 3.04099750 3.53714420 unchanging  
## 2899 PPP1R18 3.80205900 3.78868300 unchanging  
## 2900 PPP1R1C -3.52885800 -1.44013570 unchanging  
## 2901 PPP1R3D 2.99470400 3.34122400 unchanging  
## 2902 PPP1R9B 4.90993400 5.04368000 unchanging  
## 2903 PPP2R5B 2.25250170 2.62595340 unchanging  
## 2904 PPP3CA 5.98486950 6.15977700 unchanging  
## 2905 PPP4R2 6.85052000 6.80660500 unchanging  
## 2906 PPP6R3 7.08216700 7.08342600 unchanging  
## 2907 PPWD1 4.64606760 4.60971260 unchanging  
## 2908 PRAC -3.68086100 -3.59213900 unchanging  
## 2909 PRAF2 3.56917430 3.21807580 unchanging  
## 2910 PRAMEF11 -3.68086100 -3.59213900 unchanging  
## 2911 PRAMEF14 -3.68086100 -3.59213900 unchanging  
## 2912 PRAMEF15 -3.68086100 -3.59213900 unchanging  
## 2913 PRAMEF17 -3.68086100 -3.59213900 unchanging  
## 2914 PRAMEF22 -3.68086100 -3.59213900 unchanging  
## 2915 PRAMEF3 -3.68086100 -3.59213900 unchanging  
## 2916 PRAMEF5 -3.68086100 -3.59213900 unchanging  
## 2917 PRCD -2.52885800 -2.44013570 unchanging  
## 2918 PRDM10 4.05610470 3.94356850 unchanging  
## 2919 PRDX2 7.01417400 6.60425800 unchanging  
## 2920 PRDX3 8.04809900 7.85218570 unchanging  
## 2921 PRDX4 6.21429300 6.24986170 unchanging  
## 2922 PRELID2 2.05610470 1.80779170 unchanging  
## 2923 PRG3 -3.68086100 -3.59213900 unchanging  
## 2924 PRICKLE1 3.04099750 4.32804870 up  
## 2925 PRIMA1 6.01610660 4.63132670 down  
## 2926 PRKACB 5.93262150 5.99240600 unchanging  
## 2927 PRKACG 0.17158182 -0.44013572 unchanging  
## 2928 PRKAR1B 3.37803270 2.95218160 unchanging  
## 2929 PRKAR2A 6.82318540 6.83715150 unchanging  
## 2930 PRKCD 4.04099750 3.67880500 unchanging  
## 2931 PRKCI 6.60941360 6.61107300 unchanging  
## 2932 PRKCSH 6.72262430 6.60562370 unchanging  
## 2933 PRKRIP1 3.67081450 3.59328720 unchanging  
## 2934 PRLH -3.68086100 -3.59213900 unchanging  
## 2935 PRM3 -3.68086100 -3.59213900 unchanging  
## 2936 PRND -3.68086100 -3.44013550 unchanging  
## 2937 PRNT -3.68086100 -3.59213900 unchanging  
## 2938 PRODH 4.24592900 3.18922100 unchanging  
## 2939 PROS1 3.54795770 3.40535430 unchanging  
## 2940 PROX1 -1.52885800 -3.44013550 unchanging  
## 2941 PRPF40A 7.47325370 7.36882830 unchanging  
## 2942 PRPSAP1 5.26880360 5.00694750 unchanging  
## 2943 PRPSAP2 4.94687560 4.80303800 unchanging  
## 2944 PRR14L 6.37200900 6.24986170 unchanging  
## 2945 PRR15 2.53723120 2.41784500 unchanging  
## 2946 PRR16 -3.52885800 -1.85517320 unchanging  
## 2947 PRR22 -0.94389530 0.46675485 unchanging  
## 2948 PRR23C -3.68086100 -3.59213900 unchanging  
## 2949 PRR5L 0.55860496 0.88179230 unchanging  
## 2950 PRRC2A 7.76231300 7.77903270 unchanging  
## 2951 PRRG3 4.45982700 4.03559800 unchanging  
## 2952 PRSS1 1.68059550 1.01929580 unchanging  
## 2953 PRSS22 1.47114200 1.60425830 unchanging  
## 2954 PRSS37 -2.52885800 -3.59213900 unchanging  
## 2955 PRSS44 -3.68086100 -3.59213900 unchanging  
## 2956 PRSS45 -3.68086100 -3.59213900 unchanging  
## 2957 PRSS54 1.60042510 0.95218160 unchanging  
## 2958 PRYP3 -3.68086100 -3.59213900 unchanging  
## 2959 PSD3 4.15062200 4.41784520 unchanging  
## 2960 PSENEN 4.23932650 4.09902330 unchanging  
## 2961 PSG5 -3.68086100 -3.59213900 unchanging  
## 2962 PSG6 -3.68086100 -3.59213900 unchanging  
## 2963 PSMA1 7.04004760 6.98717700 unchanging  
## 2964 PSMA6 5.89110200 5.83132700 unchanging  
## 2965 PSMB11 -3.68086100 -3.59213900 unchanging  
## 2966 PSMC3 6.03909800 5.93490400 unchanging  
## 2967 PSMC3IP 4.36595960 3.99449250 unchanging  
## 2968 PSMD12 6.51553600 6.48021700 unchanging  
## 2969 PSMD14 6.62088900 6.52564860 unchanging  
## 2970 PSMD5 6.18710400 6.27411000 unchanging  
## 2971 PSMD7 6.17677400 6.00901270 unchanging  
## 2972 PSMG1 5.23932650 5.15605400 unchanging  
## 2973 PSMG2 5.15764300 4.88629400 unchanging  
## 2974 PSTPIP2 3.73792860 3.39275430 unchanging  
## 2975 PTCH2 0.47114208 1.01929580 unchanging  
## 2976 PTCHD1 4.37200900 4.31475160 unchanging  
## 2977 PTCRA -3.68086100 -3.59213900 unchanging  
## 2978 PTF1A -3.68086100 -3.59213900 unchanging  
## 2979 PTGES3 8.79419700 8.85764000 unchanging  
## 2980 PTGR2 3.56917430 3.36721900 unchanging  
## 2981 PTK2B 1.96299520 2.44250750 unchanging  
## 2982 PTPLA -0.06942624 1.84526660 unchanging  
## 2983 PTPLAD1 7.91356700 7.75154000 unchanging  
## 2984 PTPN11 8.02429200 7.96127700 unchanging  
## 2985 PTPN20B 3.04099750 2.93490360 unchanging  
## 2986 PTPN7 -3.68086100 -2.44013570 unchanging  
## 2987 PTPN9 5.70954660 5.59328700 unchanging  
## 2988 PTPRK 6.34304760 6.20912080 unchanging  
## 2989 PTPRQ 0.27849698 -0.11820772 unchanging  
## 2990 PTPRU 2.99470400 4.04368000 unchanging  
## 2991 PTRF 4.43692640 5.04368000 unchanging  
## 2992 PTRH2 3.64106700 3.67880500 unchanging  
## 2993 PTTG1 5.24921940 5.16719500 unchanging  
## 2994 PTX4 -3.68086100 -3.59213900 unchanging  
## 2995 PUM2 7.61707450 7.43791530 unchanging  
## 2996 PUS3 3.65105100 3.43022900 unchanging  
## 2997 PUS7L 5.46549560 5.63667960 unchanging  
## 2998 PXDN 3.53723120 1.95218160 down  
## 2999 PYGB 5.58488460 5.58223200 unchanging  
## 3000 PYHIN1 -3.68086100 -3.59213900 unchanging  
## 3001 PYY2 -3.68086100 -3.59213900 unchanging  
## 3002 QDPR 4.01030060 4.05971050 unchanging  
## 3003 QPRT 4.61580040 4.75462100 unchanging  
## 3004 QRFP -3.68086100 -3.44013550 unchanging  
## 3005 QRICH1 5.86560440 5.71214870 unchanging  
## 3006 QSOX1 6.54260440 6.82665100 unchanging  
## 3007 R3HDM2 5.53992030 5.54570630 unchanging  
## 3008 RAB11FIP2 4.87628360 4.99031700 unchanging  
## 3009 RAB13 5.16462900 4.94788100 unchanging  
## 3010 RAB1A 7.16637040 7.25683200 unchanging  
## 3011 RAB21 6.98684200 7.14200600 unchanging  
## 3012 RAB24 2.91408560 3.26030400 unchanging  
## 3013 RAB26 0.05610465 0.55986420 unchanging  
## 3014 RAB32 4.59008300 4.58777050 unchanging  
## 3015 RAB34 5.73088550 5.85448460 unchanging  
## 3016 RAB35 5.26555820 5.06369000 unchanging  
## 3017 RAB39 0.93057376 0.64732707 unchanging  
## 3018 RAB3C -1.20692980 -2.44013570 unchanging  
## 3019 RAB3GAP1 6.48934200 6.41161300 unchanging  
## 3020 RAB3IL1 -0.94389530 -0.63278085 unchanging  
## 3021 RAB40A -1.20692980 -0.85517323 unchanging  
## 3022 RAB40B 3.73792860 3.78868300 unchanging  
## 3023 RAB8A 5.76576300 5.48764230 unchanging  
## 3024 RABEP2 2.62088920 2.34122400 unchanging  
## 3025 RABIF 4.50456520 4.24636460 unchanging  
## 3026 RABL3 5.45413600 5.03559800 unchanging  
## 3027 RAD51AP1 6.28171400 6.09708260 unchanging  
## 3028 RAD51B 2.91408560 2.26030400 unchanging  
## 3029 RAF1 6.56521940 6.54428240 unchanging  
## 3030 RALBP1 7.40777970 7.34204340 unchanging  
## 3031 RAP2A 6.46266370 6.76565800 unchanging  
## 3032 RAPGEF2 4.75191300 5.11828470 unchanging  
## 3033 RAPGEF4 1.05610470 0.36721915 unchanging  
## 3034 RAPGEF5 6.31506350 5.05571940 down  
## 3035 RARB 2.11499830 1.46675490 unchanging  
## 3036 RASA3 4.85915950 4.39275460 unchanging  
## 3037 RASAL1 2.60042520 3.84526660 unchanging  
## 3038 RASGRF2 -0.72150310 0.14482673 unchanging  
## 3039 RASGRP1 1.89740680 3.89971420 up  
## 3040 RASL10B -0.06942624 1.14482670 unchanging  
## 3041 RASL11B 0.55860496 1.76931760 unchanging  
## 3042 RASSF5 0.79307020 0.88179230 unchanging  
## 3043 RASSF6 4.66096700 1.88179220 down  
## 3044 RB1 3.85484620 3.90859220 unchanging  
## 3045 RBBP8 7.23435450 7.54570630 unchanging  
## 3046 RBBP9 5.92852260 5.84988300 unchanging  
## 3047 RBFOX2 6.59655570 6.88291900 unchanging  
## 3048 RBM12 7.61133300 7.38402750 unchanging  
## 3049 RBM15 3.45982700 3.40535430 unchanging  
## 3050 RBM24 -3.52885800 -2.44013570 unchanging  
## 3051 RBM25 6.93262150 6.73603770 unchanging  
## 3052 RBM39 6.75654400 6.76443530 unchanging  
## 3053 RBM5 5.97098800 6.18191600 unchanging  
## 3054 RBMS1 5.58227800 5.95218200 unchanging  
## 3055 RBMS2 4.39000560 4.49650240 unchanging  
## 3056 RBMS3-AS2 -3.68086100 -3.59213900 unchanging  
## 3057 RBMX 8.09227850 7.93761730 unchanging  
## 3058 RBMY1A1 -3.68086100 -3.59213900 unchanging  
## 3059 RBMY1B -3.68086100 -3.59213900 unchanging  
## 3060 RBP4 2.11499830 -0.85517323 unchanging  
## 3061 RBP5 -3.52885800 -1.44013570 unchanging  
## 3062 RBP7 3.18538760 3.28778480 unchanging  
## 3063 RCC1 5.74493800 5.89971400 unchanging  
## 3064 RDH8 -3.68086100 -3.59213900 unchanging  
## 3065 RECQL 6.95797730 6.82899100 unchanging  
## 3066 RELL1 2.49351000 3.06765900 unchanging  
## 3067 RELT 1.47114200 1.31475160 unchanging  
## 3068 REPIN1 5.54260440 5.62056000 unchanging  
## 3069 RERG -3.68086100 2.08342620 up  
## 3070 REV1 4.93057350 5.01107550 unchanging  
## 3071 REXO1 2.22602960 2.20372030 unchanging  
## 3072 RFC1 6.79757170 6.65262130 unchanging  
## 3073 RFWD3 6.42242670 6.32804870 unchanging  
## 3074 RFX2 -0.94389530 -2.44013570 unchanging  
## 3075 RGAG1 -3.68086100 -3.59213900 unchanging  
## 3076 RGL2 5.57966660 5.23229000 unchanging  
## 3077 RGL4 1.05610470 2.05171730 unchanging  
## 3078 RGN -3.68086100 -3.59213900 unchanging  
## 3079 RGPD5 6.46690940 6.57527900 unchanging  
## 3080 RGR -3.68086100 -3.59213900 unchanging  
## 3081 RGS14 1.79307010 2.34122400 unchanging  
## 3082 RGS17 0.37803268 0.64732707 unchanging  
## 3083 RGS20 -0.20692979 -0.27021074 unchanging  
## 3084 RGS22 -3.68086100 1.01929580 unchanging  
## 3085 RGS5 1.55860500 2.01929570 unchanging  
## 3086 RGS9 -3.68086100 -1.44013570 unchanging  
## 3087 RHBDD2 5.82208100 5.72728250 unchanging  
## 3088 RHBDF1 2.08585200 2.01929570 unchanging  
## 3089 RHBDL2 0.37803268 0.64732707 unchanging  
## 3090 RHBDL3 0.79307020 -0.44013572 unchanging  
## 3091 RHBG -3.68086100 -3.59213900 unchanging  
## 3092 RHD -2.52885800 -0.85517323 unchanging  
## 3093 RHO -3.68086100 -3.59213900 unchanging  
## 3094 RHOA-IT1 -3.52885800 -3.59213900 unchanging  
## 3095 RHOJ -3.68086100 -3.44013550 unchanging  
## 3096 RHOQ 6.30877000 6.12210600 unchanging  
## 3097 RHPN1 2.86345960 3.17457410 unchanging  
## 3098 RHPN2 4.78855470 4.68398570 unchanging  
## 3099 RICTOR 4.95092250 5.07556400 unchanging  
## 3100 RIF1 6.94586200 7.04267200 unchanging  
## 3101 RIMBP3B -0.06942624 0.46675485 unchanging  
## 3102 RIMS1 0.17158182 -0.85517323 unchanging  
## 3103 RIMS2 4.19224100 4.05971050 unchanging  
## 3104 RIMS3 3.48236940 3.77903300 unchanging  
## 3105 RINL 1.55860500 1.08342620 unchanging  
## 3106 RIPK1 4.97893670 4.87727700 unchanging  
## 3107 RIPK4 4.88899470 2.88179230 down  
## 3108 RLN2 1.47114200 0.88179230 unchanging  
## 3109 RN7SL1 6.91822500 7.90914600 up  
## 3110 RNASE11 -3.68086100 -3.59213900 unchanging  
## 3111 RNASE3 -3.68086100 -3.59213900 unchanging  
## 3112 RNASEH2A 4.85052000 4.53714400 unchanging  
## 3113 RNASEK 6.08032100 5.72225570 unchanging  
## 3114 RND2 3.75654440 3.93490360 unchanging  
## 3115 RND3 3.83746430 5.03559800 up  
## 3116 RNF113A 2.68059560 2.31475160 unchanging  
## 3117 RNF115 5.29450940 5.21091600 unchanging  
## 3118 RNF122 2.27849700 1.95218160 unchanging  
## 3119 RNF123 4.37200900 4.26030400 unchanging  
## 3120 RNF138 5.76576300 5.77175240 unchanging  
## 3121 RNF14 5.50456520 5.12971970 unchanging  
## 3122 RNF144A 5.12577800 4.66838840 unchanging  
## 3123 RNF144B 6.24921940 7.38561800 up  
## 3124 RNF148 -3.68086100 -3.44013550 unchanging  
## 3125 RNF187 6.20246100 6.14482640 unchanging  
## 3126 RNF2 5.27849700 5.02746960 unchanging  
## 3127 RNF25 3.55860470 3.58223220 unchanging  
## 3128 RNF34 5.40187930 5.20010900 unchanging  
## 3129 RNF44 4.10776660 4.12210660 unchanging  
## 3130 RNF7 4.67081450 4.82665060 unchanging  
## 3131 RNFT2 4.77492300 4.98612900 unchanging  
## 3132 RNH1 5.15413670 4.91741660 unchanging  
## 3133 RNMT 6.18538760 5.91961400 unchanging  
## 3134 RNPS1 6.17677400 6.11253300 unchanging  
## 3135 ROCK1 6.41804840 6.83365960 unchanging  
## 3136 ROCK2 6.51143170 6.84757660 unchanging  
## 3137 ROPN1B -0.94389530 -3.59213900 unchanging  
## 3138 RORA 2.86345960 2.51406050 unchanging  
## 3139 RORB 1.60042510 0.55986420 unchanging  
## 3140 RORC 2.14356730 2.44250750 unchanging  
## 3141 RP1-102E24.8 -0.52885790 -0.44013572 unchanging  
## 3142 RP11-100E13.1 -3.68086100 -3.44013550 unchanging  
## 3143 RP11-100F15.2 -3.68086100 -3.59213900 unchanging  
## 3144 RP11-100L22.3 -3.68086100 -3.59213900 unchanging  
## 3145 RP11-100N20.1 -3.68086100 -3.59213900 unchanging  
## 3146 RP11-1018N14.4 -3.68086100 -3.59213900 unchanging  
## 3147 RP11-101E14.2 -3.68086100 -3.59213900 unchanging  
## 3148 RP11-1020M18.10 -3.68086100 -3.59213900 unchanging  
## 3149 RP11-1026M7.2 1.86345960 1.01929580 unchanging  
## 3150 RP11-102C16.3 -3.68086100 -3.59213900 unchanging  
## 3151 RP11-102J14.1 -3.68086100 -3.59213900 unchanging  
## 3152 RP11-102N11.1 -3.68086100 -3.59213900 unchanging  
## 3153 RP11-1036E20.9 -3.68086100 -3.59213900 unchanging  
## 3154 RP11-1057B8.2 -3.68086100 -3.59213900 unchanging  
## 3155 RP11-1069G10.2 -3.68086100 -2.44013570 unchanging  
## 3156 RP11-1070N10.6 3.74726680 0.72978930 down  
## 3157 RP11-1082L8.4 -3.68086100 -3.59213900 unchanging  
## 3158 RP11-1084A12.2 0.17158182 0.46675485 unchanging  
## 3159 RP11-1084I9.1 -3.68086100 -3.59213900 unchanging  
## 3160 RP11-1085N6.4 -3.68086100 -3.59213900 unchanging  
## 3161 RP11-108E14.1 -3.68086100 -3.59213900 unchanging  
## 3162 RP11-108K14.4 -1.94389530 -1.44013570 unchanging  
## 3163 RP11-108K3.3 -3.68086100 -3.59213900 unchanging  
## 3164 RP11-108M12.3 -2.52885800 -2.44013570 unchanging  
## 3165 RP11-109D20.1 -3.68086100 -3.59213900 unchanging  
## 3166 RP11-10A14.7 -3.68086100 -3.59213900 unchanging  
## 3167 RP11-10C8.2 -3.68086100 -3.59213900 unchanging  
## 3168 RP11-10K16.1 -0.20692979 1.14482670 unchanging  
## 3169 RP11-10O22.1 -3.68086100 -3.59213900 unchanging  
## 3170 RP11-110G21.1 -1.20692980 -1.11820770 unchanging  
## 3171 RP11-110G21.2 -3.68086100 -3.59213900 unchanging  
## 3172 RP11-111F5.3 -3.52885800 -3.44013550 unchanging  
## 3173 RP11-113E21.1 -3.68086100 -3.59213900 unchanging  
## 3174 RP11-113K21.4 -0.52885790 -0.63278085 unchanging  
## 3175 RP11-1141N12.1 -3.68086100 -3.59213900 unchanging  
## 3176 RP11-1143G9.4 -3.52885800 -2.44013570 unchanging  
## 3177 RP11-1144P22.1 -3.68086100 -3.59213900 unchanging  
## 3178 RP11-114B7.6 -3.68086100 -3.59213900 unchanging  
## 3179 RP11-114F10.3 -3.68086100 -3.44013550 unchanging  
## 3180 RP11-114G22.1 -3.68086100 -3.59213900 unchanging  
## 3181 RP11-114M1.1 -3.68086100 -3.44013550 unchanging  
## 3182 RP11-114O8.1 -3.68086100 -3.59213900 unchanging  
## 3183 RP11-115E19.1 -3.68086100 -3.59213900 unchanging  
## 3184 RP11-115F18.1 -3.68086100 -3.59213900 unchanging  
## 3185 RP11-115J16.1 -3.68086100 -3.59213900 unchanging  
## 3186 RP11-115K3.1 -3.68086100 -3.59213900 unchanging  
## 3187 RP11-117D22.1 -3.68086100 -3.59213900 unchanging  
## 3188 RP11-117D22.2 -3.68086100 -3.59213900 unchanging  
## 3189 RP11-118A3.1 -3.68086100 -3.59213900 unchanging  
## 3190 RP1-111D6.3 -3.68086100 -3.59213900 unchanging  
## 3191 RP11-1212A22.4 5.37803270 5.55421730 unchanging  
## 3192 RP11-1217F2.15 -3.68086100 -3.59213900 unchanging  
## 3193 RP11-121A14.2 -3.68086100 -3.59213900 unchanging  
## 3194 RP11-122A3.2 3.56917430 3.68914720 unchanging  
## 3195 RP11-122K13.7 -3.68086100 -3.59213900 unchanging  
## 3196 RP11-123B3.2 -3.68086100 -3.59213900 unchanging  
## 3197 RP11-123H22.1 -3.68086100 -3.59213900 unchanging  
## 3198 RP11-123O22.1 -3.68086100 -3.59213900 unchanging  
## 3199 RP11-124G5.3 -3.68086100 -3.59213900 unchanging  
## 3200 RP11-124I4.2 -3.68086100 -3.59213900 unchanging  
## 3201 RP11-125H8.2 2.22602960 2.70961120 unchanging  
## 3202 RP11-125O5.2 -3.68086100 -3.59213900 unchanging  
## 3203 RP11-126H7.3 -0.94389530 -3.44013550 unchanging  
## 3204 RP11-127B16.1 -3.68086100 -3.59213900 unchanging  
## 3205 RP11-127L21.1 -3.68086100 -3.59213900 unchanging  
## 3206 RP11-1286E23.7 -3.68086100 -3.59213900 unchanging  
## 3207 RP11-1286E23.8 -3.68086100 -3.59213900 unchanging  
## 3208 RP11-129J12.1 -3.68086100 -3.59213900 unchanging  
## 3209 RP11-129K20.2 -3.68086100 -3.59213900 unchanging  
## 3210 RP11-129M6.1 -3.68086100 -3.59213900 unchanging  
## 3211 RP11-12A1.1 0.05610465 1.20372030 unchanging  
## 3212 RP11-12A16.3 -3.68086100 -3.59213900 unchanging  
## 3213 RP11-12M5.3 -3.68086100 -3.59213900 unchanging  
## 3214 RP11-130F10.1 -3.68086100 -3.59213900 unchanging  
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## 3216 RP11-132A1.4 1.79307010 2.01929570 unchanging  
## 3217 RP11-132M7.3 -3.68086100 -3.59213900 unchanging  
## 3218 RP11-132N15.1 -3.68086100 -3.59213900 unchanging  
## 3219 RP11-133L14.5 -3.68086100 -3.59213900 unchanging  
## 3220 RP11-133N21.10 -3.52885800 -3.59213900 unchanging  
## 3221 RP11-134F2.2 -3.68086100 -3.59213900 unchanging  
## 3222 RP11-134G8.7 -3.68086100 -3.59213900 unchanging  
## 3223 RP11-135A1.2 -3.68086100 -3.59213900 unchanging  
## 3224 RP11-136B18.2 -3.68086100 -3.59213900 unchanging  
## 3225 RP11-136I14.5 -3.68086100 -3.59213900 unchanging  
## 3226 RP11-136K14.1 -3.68086100 -3.44013550 unchanging  
## 3227 RP11-138E16.1 -3.68086100 -3.59213900 unchanging  
## 3228 RP11-138H8.2 -3.68086100 -3.59213900 unchanging  
## 3229 RP11-138I17.1 -3.68086100 -3.59213900 unchanging  
## 3230 RP11-1396O13.11 -3.68086100 -3.59213900 unchanging  
## 3231 RP11-1398P2.1 -3.68086100 -3.59213900 unchanging  
## 3232 RP11-139I14.2 -3.68086100 -3.59213900 unchanging  
## 3233 RP11-139J15.2 -0.52885790 -0.11820772 unchanging  
## 3234 RP11-13A1.1 -3.68086100 -2.44013570 unchanging  
## 3235 RP11-1407O15.2 5.30403200 5.36399560 unchanging  
## 3236 RP11-140L24.4 6.62722500 6.50237850 unchanging  
## 3237 RP11-141A19.1 -3.68086100 -3.59213900 unchanging  
## 3238 RP11-141M1.4 0.47114208 -1.11820770 unchanging  
## 3239 RP11-142J21.2 -3.68086100 -3.59213900 unchanging  
## 3240 RP11-144A16.5 -3.68086100 -3.59213900 unchanging  
## 3241 RP11-144G7.2 2.32912300 2.55986430 unchanging  
## 3242 RP11-145A3.2 -3.68086100 -3.59213900 unchanging  
## 3243 RP11-145G20.1 -3.68086100 -3.59213900 unchanging  
## 3244 RP11-147G7.3 -3.68086100 -3.59213900 unchanging  
## 3245 RP11-148B18.3 -3.68086100 -3.59213900 unchanging  
## 3246 RP11-148O21.4 -3.68086100 -3.59213900 unchanging  
## 3247 RP11-14I17.3 -3.68086100 -3.44013550 unchanging  
## 3248 RP11-14I4.3 -3.68086100 -3.59213900 unchanging  
## 3249 RP11-14O19.2 -3.68086100 -3.59213900 unchanging  
## 3250 RP11-150O12.2 -3.68086100 -3.59213900 unchanging  
## 3251 RP11-153F1.2 -3.68086100 -3.59213900 unchanging  
## 3252 RP11-153K16.1 -3.68086100 -3.59213900 unchanging  
## 3253 RP11-153M7.5 -3.68086100 -3.59213900 unchanging  
## 3254 RP11-154F14.2 -3.68086100 -3.59213900 unchanging  
## 3255 RP11-154J22.1 0.27849698 -0.11820772 unchanging  
## 3256 RP11-158D2.2 -3.68086100 -3.59213900 unchanging  
## 3257 RP11-158I13.2 4.33532800 4.09124570 unchanging  
## 3258 RP11-158I23.1 -3.68086100 -3.59213900 unchanging  
## 3259 RP11-159D8.1 -3.68086100 -3.59213900 unchanging  
## 3260 RP11-159H22.2 -3.68086100 -3.59213900 unchanging  
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## 3262 RP11-159K7.2 -3.68086100 -3.59213900 unchanging  
## 3263 RP11-15I11.2 -3.68086100 -3.59213900 unchanging  
## 3264 RP11-15I11.3 -3.68086100 -3.59213900 unchanging  
## 3265 RP11-15M15.1 -3.68086100 -3.59213900 unchanging  
## 3266 RP11-160A10.3 -3.68086100 -3.59213900 unchanging  
## 3267 RP11-160N1.9 -3.68086100 -3.59213900 unchanging  
## 3268 RP11-161H23.11 -3.68086100 -3.59213900 unchanging  
## 3269 RP11-162D16.2 -3.68086100 -3.59213900 unchanging  
## 3270 RP11-162D9.3 -3.68086100 -3.59213900 unchanging  
## 3271 RP11-162J8.3 -3.68086100 -3.59213900 unchanging  
## 3272 RP11-162N7.1 -3.68086100 -3.59213900 unchanging  
## 3273 RP11-163M18.1 -3.68086100 -3.59213900 unchanging  
## 3274 RP11-164D18.2 -3.68086100 -3.59213900 unchanging  
## 3275 RP11-164N3.2 -3.68086100 -3.59213900 unchanging  
## 3276 RP11-164N3.3 -3.68086100 -3.59213900 unchanging  
## 3277 RP11-164O23.7 -3.68086100 -3.59213900 unchanging  
## 3278 RP11-165I9.4 -3.68086100 -3.59213900 unchanging  
## 3279 RP11-165P7.1 1.11499820 1.20372030 unchanging  
## 3280 RP11-166D19.1 0.27849698 0.88179230 unchanging  
## 3281 RP11-167H9.3 -3.68086100 -3.59213900 unchanging  
## 3282 RP11-167H9.5 -3.68086100 -3.59213900 unchanging  
## 3283 RP11-167P20.1 -3.68086100 -3.59213900 unchanging  
## 3284 RP11-168A11.1 -3.68086100 -3.59213900 unchanging  
## 3285 RP11-168K9.1 -3.68086100 -3.59213900 unchanging  
## 3286 RP11-168L22.2 -3.68086100 -3.59213900 unchanging  
## 3287 RP11-168L7.1 -3.68086100 -3.59213900 unchanging  
## 3288 RP11-168O16.2 -3.68086100 -3.59213900 unchanging  
## 3289 RP11-168O22.1 -3.68086100 -3.59213900 unchanging  
## 3290 RP11-168P8.4 -3.68086100 -3.59213900 unchanging  
## 3291 RP11-168P8.5 -3.68086100 -3.59213900 unchanging  
## 3292 RP11-16B9.1 -3.68086100 -3.59213900 unchanging  
## 3293 RP11-16E12.1 -3.52885800 -3.59213900 unchanging  
## 3294 RP11-174G17 -3.68086100 -3.59213900 unchanging  
## 3295 RP11-174O3.3 -3.68086100 -3.59213900 unchanging  
## 3296 RP11-175B12.2 -3.68086100 -3.59213900 unchanging  
## 3297 RP11-175D17.3 -3.68086100 -2.44013570 unchanging  
## 3298 RP11-177F11.1 -3.68086100 -3.59213900 unchanging  
## 3299 RP11-178D16.1 -3.68086100 -3.59213900 unchanging  
## 3300 RP11-178G16.2 -3.52885800 -3.59213900 unchanging  
## 3301 RP11-179A16.1 -3.52885800 -3.44013550 unchanging  
## 3302 RP11-17A4.2 -3.68086100 -3.59213900 unchanging  
## 3303 RP11-17A4.4 -3.68086100 -3.59213900 unchanging  
## 3304 RP11-17E13.3 -0.06942624 0.80779165 unchanging  
## 3305 RP1-117O3.2 -1.20692980 -3.59213900 unchanging  
## 3306 RP11-180I22.2 -3.68086100 -3.59213900 unchanging  
## 3307 RP11-181C3.2 5.06733200 4.68914700 unchanging  
## 3308 RP11-181K12.2 -3.68086100 -3.59213900 unchanging  
## 3309 RP11-182J1.16 -3.52885800 -0.63278085 unchanging  
## 3310 RP11-182L21.2 2.53723120 2.62595340 unchanging  
## 3311 RP11-185P18.1 4.88477000 3.23228980 down  
## 3312 RP11-187C18.5 -3.68086100 -3.59213900 unchanging  
## 3313 RP11-187E13.2 -3.68086100 -3.59213900 unchanging  
## 3314 RP11-18D7.2 -1.52885800 -0.85517323 unchanging  
## 3315 RP11-18I14.7 0.64106710 0.64732707 unchanging  
## 3316 RP1-118J21.5 -3.52885800 -1.44013570 unchanging  
## 3317 RP11-190P13.2 -3.68086100 -3.59213900 unchanging  
## 3318 RP11-191G24.1 -3.68086100 -3.59213900 unchanging  
## 3319 RP11-192H23.4 3.83746430 3.77903300 unchanging  
## 3320 RP11-192H6.2 -3.68086100 -3.59213900 unchanging  
## 3321 RP11-193F5.1 0.64106710 0.72978930 unchanging  
## 3322 RP11-195C7.1 -3.68086100 -3.59213900 unchanging  
## 3323 RP11-195E2.4 1.55860500 1.68914720 unchanging  
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## 3325 RP11-196G18.21 -1.52885800 -3.44013550 unchanging  
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## 3905 RP11-630D6.5 -3.68086100 -3.59213900 unchanging  
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## 3908 RP11-63C8.1 -3.68086100 -3.59213900 unchanging  
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## 3922 RP11-656E20.5 -3.52885800 -3.59213900 unchanging  
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## 3930 RP11-665G4.1 -2.52885800 -2.44013570 unchanging  
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## 3936 RP11-675F6.4 -3.68086100 -3.44013550 unchanging  
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## 3949 RP11-697M17.1 0.71906954 1.41784510 unchanging  
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## 3954 RP11-69H14.6 -0.72150310 -3.44013550 unchanging  
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## 3986 RP11-733O18.1 -3.68086100 -3.59213900 unchanging  
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## 4018 RP11-77B22.2 -3.68086100 -3.59213900 unchanging  
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## 4023 RP11-789C1.2 -3.68086100 -3.59213900 unchanging  
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## 4065 RP11-84C10.4 1.37803270 2.08342620 unchanging  
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## 4075 RP11-867G23.4 4.66096700 4.37364530 unchanging  
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## 4190 RP3-416J7.3 -3.68086100 -3.59213900 unchanging  
## 4191 RP3-425P12.5 -3.68086100 -3.59213900 unchanging  
## 4192 RP3-445N2.1 -2.52885800 -2.44013570 unchanging  
## 4193 RP3-455J7.4 -3.68086100 -3.59213900 unchanging  
## 4194 RP3-461P17.9 -3.68086100 -3.59213900 unchanging  
## 4195 RP3-462C17.1 -3.68086100 -3.59213900 unchanging  
## 4196 RP3-468B3.3 -3.68086100 -1.85517320 unchanging  
## 4197 RP3-471M13.2 -3.68086100 -3.59213900 unchanging  
## 4198 RP3-475N16.1 -0.20692979 -0.85517323 unchanging  
## 4199 RP3-486B10.1 -0.20692979 -3.44013550 unchanging  
## 4200 RP3-486I3.5 1.60042510 1.46675490 unchanging  
## 4201 RP3-495K2.3 -3.68086100 -3.59213900 unchanging  
## 4202 RP3-503A6.2 -3.68086100 -3.59213900 unchanging  
## 4203 RP3-508I15.19 2.25250170 2.14482670 unchanging  
## 4204 RP3-510D11.1 -3.52885800 -3.44013550 unchanging  
## 4205 RP4-537K17.2 -1.20692980 -1.44013570 unchanging  
## 4206 RP4-568F9.3 -1.94389530 -3.44013550 unchanging  
## 4207 RP4-583K8.1 -3.68086100 -3.59213900 unchanging  
## 4208 RP4-607I7.1 -3.68086100 -3.59213900 unchanging  
## 4209 RP4-610C12.1 -3.68086100 -3.59213900 unchanging  
## 4210 RP4-610C12.4 -3.68086100 -3.59213900 unchanging  
## 4211 RP4-613A2.1 -3.52885800 -3.59213900 unchanging  
## 4212 RP4-614N24.1 -3.68086100 -3.59213900 unchanging  
## 4213 RP4-630A11.3 -3.68086100 -3.59213900 unchanging  
## 4214 RP4-630C24.3 -3.68086100 -3.59213900 unchanging  
## 4215 RP4-647C14.3 -0.94389530 -2.44013570 unchanging  
## 4216 RP4-650F12.2 -3.68086100 -3.59213900 unchanging  
## 4217 RP4-651E10.4 -3.68086100 -3.59213900 unchanging  
## 4218 RP4-655L22.2 -1.94389530 -1.44013570 unchanging  
## 4219 RP4-660H19.1 -3.68086100 -3.59213900 unchanging  
## 4220 RP4-665J23.2 -3.68086100 -3.59213900 unchanging  
## 4221 RP4-668G5.1 -3.68086100 -3.59213900 unchanging  
## 4222 RP4-697K14.3 -3.68086100 -3.59213900 unchanging  
## 4223 RP4-697K14.7 1.27849700 1.98612890 unchanging  
## 4224 RP4-705O1.1 -3.68086100 -3.59213900 unchanging  
## 4225 RP4-714D9.2 0.64106710 1.31475160 unchanging  
## 4226 RP4-718N17.2 -3.68086100 -3.59213900 unchanging  
## 4227 RP4-735C1.6 -3.68086100 -3.59213900 unchanging  
## 4228 RP4-736H5.3 -3.68086100 -3.59213900 unchanging  
## 4229 RP4-743D20.1 -3.68086100 -3.59213900 unchanging  
## 4230 RP4-749H3.2 -3.68086100 -3.59213900 unchanging  
## 4231 RP4-753D4.2 -3.68086100 -3.59213900 unchanging  
## 4232 RP4-758J18.8 -3.68086100 -3.59213900 unchanging  
## 4233 RP4-760C5.3 -3.68086100 -1.85517320 unchanging  
## 4234 RP4-760C5.5 -3.68086100 -3.59213900 unchanging  
## 4235 RP4-773N10.5 4.54795800 4.54854900 unchanging  
## 4236 RP4-781K5.4 -3.68086100 -3.59213900 unchanging  
## 4237 RP4-796I8.1 -3.68086100 -3.59213900 unchanging  
## 4238 RP4-798A10.2 -0.72150310 0.14482673 unchanging  
## 4239 RP4-799D16.1 -3.68086100 -3.59213900 unchanging  
## 4240 RP4-799P18.4 -3.68086100 -3.59213900 unchanging  
## 4241 RP4-803J11.2 1.22602960 1.01929580 unchanging  
## 4242 RP4-811H24.3 -3.68086100 -3.44013550 unchanging  
## 4243 RP4-811H24.9 -3.68086100 -3.44013550 unchanging  
## 4244 RP4-813D12.2 -3.68086100 -3.59213900 unchanging  
## 4245 RP4-813D12.3 -3.68086100 -3.59213900 unchanging  
## 4246 RP4-816N1.7 3.70954680 3.53714420 unchanging  
## 4247 RP5-1006K12.1 -3.68086100 -3.59213900 unchanging  
## 4248 RP5-1021I20.4 5.88899470 5.67620850 unchanging  
## 4249 RP5-1024N4.2 -3.68086100 -3.59213900 unchanging  
## 4250 RP5-1027O15.1 -3.68086100 -3.59213900 unchanging  
## 4251 RP5-1029K10.2 -3.68086100 -3.59213900 unchanging  
## 4252 RP5-1044H5.1 -3.68086100 -3.59213900 unchanging  
## 4253 RP5-1050E16.2 -3.68086100 -3.59213900 unchanging  
## 4254 RP5-1057I20.2 -3.68086100 -3.59213900 unchanging  
## 4255 RP5-1069P2.4 -2.52885800 -3.44013550 unchanging  
## 4256 RP5-1077H22.1 -3.68086100 -3.59213900 unchanging  
## 4257 RP5-1077I2.3 -3.68086100 -3.44013550 unchanging  
## 4258 RP5-1086K13.1 -3.52885800 -2.44013570 unchanging  
## 4259 RP5-1092A11.5 -3.68086100 -3.59213900 unchanging  
## 4260 RP5-1096J16.1 -3.68086100 -3.59213900 unchanging  
## 4261 RP5-1113E3.3 2.08585200 2.14482670 unchanging  
## 4262 RP5-1154L15.2 -3.68086100 -3.59213900 unchanging  
## 4263 RP5-1158E12.3 -3.52885800 -2.44013570 unchanging  
## 4264 RP5-1160K1.6 0.17158182 0.88179230 unchanging  
## 4265 RP5-1166F10.1 -3.68086100 -3.59213900 unchanging  
## 4266 RP5-1180C18.1 -3.68086100 -3.59213900 unchanging  
## 4267 RP5-1185H19.2 -3.68086100 -3.59213900 unchanging  
## 4268 RP5-1185K9.1 -3.68086100 -3.59213900 unchanging  
## 4269 RP5-827O9.1 -3.68086100 -3.59213900 unchanging  
## 4270 RP5-837M10.4 -0.52885790 -0.11820772 unchanging  
## 4271 RP5-842K16.1 -3.68086100 -3.59213900 unchanging  
## 4272 RP5-843L14.1 -3.68086100 -3.59213900 unchanging  
## 4273 RP5-857K21.2 -3.52885800 -2.44013570 unchanging  
## 4274 RP5-860P4.2 -3.68086100 -3.59213900 unchanging  
## 4275 RP5-866L20.1 -3.68086100 -3.59213900 unchanging  
## 4276 RP5-869M20.2 -3.68086100 -3.59213900 unchanging  
## 4277 RP5-872K7.7 -3.52885800 -2.44013570 unchanging  
## 4278 RP5-881L22.6 -3.68086100 -3.59213900 unchanging  
## 4279 RP5-886K2.3 3.23932620 3.11445300 unchanging  
## 4280 RP5-888M10.2 -3.68086100 -3.59213900 unchanging  
## 4281 RP5-893G23.1 -3.68086100 -3.59213900 unchanging  
## 4282 RP5-896L10.1 -3.68086100 -3.59213900 unchanging  
## 4283 RP5-897D18.1 -3.68086100 -3.59213900 unchanging  
## 4284 RP5-905H7.3 -3.68086100 -3.59213900 unchanging  
## 4285 RP5-905H7.8 -3.68086100 -3.59213900 unchanging  
## 4286 RP5-919F19.5 -3.68086100 -2.44013570 unchanging  
## 4287 RP5-940F7.2 -3.68086100 -3.59213900 unchanging  
## 4288 RP5-945F2.3 -3.68086100 -3.59213900 unchanging  
## 4289 RP5-945I17.2 -3.68086100 -3.59213900 unchanging  
## 4290 RP5-947P14.1 -0.94389530 -1.85517320 unchanging  
## 4291 RP5-956O18.3 3.35378530 3.86364480 unchanging  
## 4292 RP5-977B1.11 4.60042520 5.74968900 up  
## 4293 RP5-988G17.1 -3.68086100 -3.59213900 unchanging  
## 4294 RP5-991B18.1 -3.68086100 -3.59213900 unchanging  
## 4295 RP5-991O23.1 -3.68086100 -3.59213900 unchanging  
## 4296 RP5-994D16.7 -3.68086100 -3.59213900 unchanging  
## 4297 RP5-994D16.9 -0.06942624 -1.11820770 unchanging  
## 4298 RP6-109B7.3 0.79307020 1.01929580 unchanging  
## 4299 RP6-27P15.2 -3.68086100 -3.59213900 unchanging  
## 4300 RP6-65G23.3 0.05610465 0.36721915 unchanging  
## 4301 RPA2 5.71193360 5.45770930 unchanging  
## 4302 RPF2 3.40187930 3.73977350 unchanging  
## 4303 RPGRIP1L 4.54260440 4.49650240 unchanging  
## 4304 RPH3A -3.68086100 -2.44013570 unchanging  
## 4305 RPH3AL 2.08585200 1.14482670 unchanging  
## 4306 RPL11 7.85915950 7.81607300 unchanging  
## 4307 RPL13A 8.55628300 8.48319150 unchanging  
## 4308 RPL14 7.22853200 7.14857860 unchanging  
## 4309 RPL31 7.30403230 7.46975760 unchanging  
## 4310 RPL36A 5.95092250 6.03762250 unchanging  
## 4311 RPL39L 3.61069350 3.51406050 unchanging  
## 4312 RPLP1 7.50868900 7.51260500 unchanging  
## 4313 RPP21 2.30403200 2.31475160 unchanging  
## 4314 RPP25 1.79307010 2.05171730 unchanging  
## 4315 RPRM -1.52885800 -0.11820772 unchanging  
## 4316 RPS13 6.46549560 6.52853100 unchanging  
## 4317 RPS15 6.39298300 6.34613370 unchanging  
## 4318 RPS2 9.16593550 9.26528100 unchanging  
## 4319 RPS20 7.79476000 7.78567360 unchanging  
## 4320 RPS23 8.62437700 8.59397500 unchanging  
## 4321 RPS25 7.08401060 7.15138670 unchanging  
## 4322 RPS28 5.49351000 5.21450040 unchanging  
## 4323 RPS4Y2 -3.68086100 -3.59213900 unchanging  
## 4324 RPS6KA2 4.52099040 4.65789600 unchanging  
## 4325 RPS6KB1 5.59784650 6.39906800 up  
## 4326 RPS7 7.36216640 7.25247960 unchanging  
## 4327 RPSAP58 9.36387400 9.43215500 unchanging  
## 4328 RPUSD2 2.35378530 2.23228960 unchanging  
## 4329 RQCD1 6.58097270 6.56408450 unchanging  
## 4330 RRAGD 6.18538760 5.29118300 down  
## 4331 RRM2B 7.10686000 6.87614600 unchanging  
## 4332 RRP7B 3.82869390 3.75953650 unchanging  
## 4333 RSPH10B2 4.05610470 3.67880500 unchanging  
## 4334 RSPH3 3.74726680 3.21807580 unchanging  
## 4335 RSPO3 -1.20692980 -0.85517323 unchanging  
## 4336 RTCD1 4.55860470 4.31475160 unchanging  
## 4337 RTN1 1.96299520 0.80779165 unchanging  
## 4338 RTN3 7.85754350 7.71341660 unchanging  
## 4339 S100A14 -0.94389530 3.67880500 up  
## 4340 S100A16 3.66096690 4.77418330 up  
## 4341 S100A4 3.88899450 3.49060150 unchanging  
## 4342 S100A5 -3.68086100 -3.44013550 unchanging  
## 4343 S100A6 6.12756730 6.11637000 unchanging  
## 4344 S100P -3.68086100 1.91741620 up  
## 4345 S1PR2 1.86345960 2.31475160 unchanging  
## 4346 SAA2-SAA4 -3.68086100 -3.59213900 unchanging  
## 4347 SAA4 -3.68086100 -3.59213900 unchanging  
## 4348 SAMD10 1.37803270 0.55986420 unchanging  
## 4349 SAMD13 1.05610470 0.14482673 unchanging  
## 4350 SAMD3 -3.68086100 -3.59213900 unchanging  
## 4351 SAP18 6.47676700 6.20010950 unchanging  
## 4352 SARDH -3.52885800 -2.44013570 unchanging  
## 4353 SARM1 5.35683870 5.46374600 unchanging  
## 4354 SASH1 5.86988540 5.31140850 unchanging  
## 4355 SAT1 6.41804840 4.81725200 down  
## 4356 SBNO2 3.61069350 3.45468190 unchanging  
## 4357 SCAF1 4.78402470 4.65262130 unchanging  
## 4358 SCAMP4 5.13292030 4.95646900 unchanging  
## 4359 SCAP 5.80429740 5.72728250 unchanging  
## 4360 SCG3 -2.52885800 -3.44013550 unchanging  
## 4361 SCGB1A1 -3.68086100 -3.59213900 unchanging  
## 4362 SCGB1D1 -3.52885800 -3.59213900 unchanging  
## 4363 SCGB1D2 2.66096660 -0.85517323 down  
## 4364 SCGB2A1 3.21260900 0.95218160 down  
## 4365 SCGB2A2 -3.68086100 -3.59213900 unchanging  
## 4366 SCHIP1 1.86345960 2.53714420 unchanging  
## 4367 SCN1A -3.52885800 -1.85517320 unchanging  
## 4368 SCN2A -0.52885790 0.55986420 unchanging  
## 4369 SCN3B -3.52885800 -3.59213900 unchanging  
## 4370 SCRN3 4.49904780 4.23934460 unchanging  
## 4371 SCXB -2.52885800 -0.85517323 unchanging  
## 4372 SDCBP 7.30955840 6.81134650 unchanging  
## 4373 SDHAF2 4.56389900 4.25335100 unchanging  
## 4374 SDIM1 -3.68086100 -3.59213900 unchanging  
## 4375 SDR42E1 3.47114200 3.78868300 unchanging  
## 4376 SEC14L2 1.32912310 1.51406050 unchanging  
## 4377 SEC14L3 -3.68086100 -3.59213900 unchanging  
## 4378 SEC14L6 -3.68086100 -3.59213900 unchanging  
## 4379 SEC22A 4.14356760 4.20372000 unchanging  
## 4380 SEC23A 6.96499730 7.05471940 unchanging  
## 4381 SEC24B 5.58227800 5.32804870 unchanging  
## 4382 SEC24C 6.71669500 6.70452200 unchanging  
## 4383 SEC24D 5.97695350 6.37524750 unchanging  
## 4384 SEC61B 4.99470400 5.39275460 unchanging  
## 4385 SEC61G 5.52099040 6.05372000 unchanging  
## 4386 SEC62-AS1 -3.68086100 -3.59213900 unchanging  
## 4387 SEL1L2 -3.68086100 -3.59213900 unchanging  
## 4388 SEL1L3 7.38477950 7.28778460 unchanging  
## 4389 SEMA3C 2.94687560 5.35428000 up  
## 4390 SEMA3G 1.68059550 2.05171730 unchanging  
## 4391 SEMA6A 4.49351020 5.32804870 unchanging  
## 4392 SENP7 4.94687560 4.80303800 unchanging  
## 4393 SENP8 1.96299520 1.72978930 unchanging  
## 4394 SEPHS1 6.40335700 6.28437800 unchanging  
## 4395 SEPN1 5.95092250 6.06369000 unchanging  
## 4396 SEPP1 4.64106700 4.07556400 unchanging  
## 4397 SEPSECS 4.34150700 3.57109140 unchanging  
## 4398 SERAC1 4.62596000 4.29457400 unchanging  
## 4399 SERF1A 4.83308600 4.87274740 unchanging  
## 4400 SERF1B 4.85484650 4.88629400 unchanging  
## 4401 SERPINA3 -3.68086100 2.88179230 up  
## 4402 SERPINB12 -3.68086100 -3.59213900 unchanging  
## 4403 SERPINB2 -3.68086100 -3.59213900 unchanging  
## 4404 SERPINB9 1.17158190 -0.11820772 unchanging  
## 4405 SERPINE1 -3.68086100 -1.85517320 unchanging  
## 4406 SERPINF1 1.60042510 0.64732707 unchanging  
## 4407 SERPINI1 2.30403200 1.55986430 unchanging  
## 4408 SERPINI2 -3.52885800 -3.59213900 unchanging  
## 4409 SETD6 4.27204200 4.43638130 unchanging  
## 4410 SETD7 4.67081450 5.53140800 up  
## 4411 SF3B1 8.59590900 8.48356200 unchanging  
## 4412 SF3B4 5.75191300 5.73977330 unchanging  
## 4413 SFPQ 8.43476000 8.34490800 unchanging  
## 4414 SFRP1 3.01030060 2.76931760 unchanging  
## 4415 SFRP5 -3.68086100 -3.44013550 unchanging  
## 4416 SFTA2 -3.68086100 -3.59213900 unchanging  
## 4417 SFXN2 3.65105100 4.26030400 unchanging  
## 4418 SGCA -3.68086100 -3.44013550 unchanging  
## 4419 SGOL2 6.14886200 6.24285900 unchanging  
## 4420 SGSM3 3.26555800 3.49060150 unchanging  
## 4421 SH2B2 -0.35893290 -0.85517323 unchanging  
## 4422 SH2D1A -3.52885800 -3.59213900 unchanging  
## 4423 SH2D3A 1.89740680 2.11445300 unchanging  
## 4424 SH3RF3 -1.94389530 -3.59213900 unchanging  
## 4425 SH3TC2 -2.52885800 -2.44013570 unchanging  
## 4426 SHANK2-AS3 -3.68086100 -3.59213900 unchanging  
## 4427 SHC4 -1.52885800 -0.85517323 unchanging  
## 4428 SHE -3.68086100 -3.59213900 unchanging  
## 4429 SHH -2.52885800 -2.44013570 unchanging  
## 4430 SHISA3 0.71906954 2.96925500 up  
## 4431 SHKBP1 4.64106700 4.62056000 unchanging  
## 4432 SHOC2 6.05234240 6.16719500 unchanging  
## 4433 SHROOM1 2.97893670 2.70961120 unchanging  
## 4434 SIGMAR1 5.71431640 5.92837050 unchanging  
## 4435 SIL1 4.36595960 4.41784520 unchanging  
## 4436 SIX1 3.88899450 3.87274720 unchanging  
## 4437 SKAP1 -3.68086100 -2.44013570 unchanging  
## 4438 SKAP2 6.35836200 6.02134370 unchanging  
## 4439 SKI 5.78402470 5.94356800 unchanging  
## 4440 SKP1 7.68849400 7.65129950 unchanging  
## 4441 SLA2 2.89740680 3.20372030 unchanging  
## 4442 SLAMF7 -3.52885800 -3.59213900 unchanging  
## 4443 SLC10A6 -3.52885800 -3.59213900 unchanging  
## 4444 SLC12A4 4.02573100 4.42405030 unchanging  
## 4445 SLC13A1 -3.68086100 -3.59213900 unchanging  
## 4446 SLC13A4 -0.94389530 -0.85517323 unchanging  
## 4447 SLC15A5 -3.68086100 -3.59213900 unchanging  
## 4448 SLC16A4 -3.68086100 0.36721915 unchanging  
## 4449 SLC16A8 -0.52885790 -0.85517323 unchanging  
## 4450 SLC16A9 3.57966640 3.57109140 unchanging  
## 4451 SLC17A7 1.64106700 2.17457410 unchanging  
## 4452 SLC19A1 5.06359900 5.32804870 unchanging  
## 4453 SLC1A5 6.48516230 7.08146500 unchanging  
## 4454 SLC22A1 -3.52885800 -3.44013550 unchanging  
## 4455 SLC22A16 -1.20692980 -3.44013550 unchanging  
## 4456 SLC22A17 1.11499820 0.80779165 unchanging  
## 4457 SLC22A18 2.40187930 2.51406050 unchanging  
## 4458 SLC22A18AS -3.52885800 -1.11820770 unchanging  
## 4459 SLC22A23 3.63101360 3.67880500 unchanging  
## 4460 SLC22A25 -3.68086100 -3.59213900 unchanging  
## 4461 SLC22A9 -3.68086100 -3.59213900 unchanging  
## 4462 SLC24A3 -3.68086100 -0.85517323 unchanging  
## 4463 SLC25A2 -3.52885800 -3.44013550 unchanging  
## 4464 SLC25A3 8.63542100 8.28395200 unchanging  
## 4465 SLC25A35 3.57966640 3.38004300 unchanging  
## 4466 SLC25A40 5.79307030 5.47275350 unchanging  
## 4467 SLC25A6 6.53588500 6.19467540 unchanging  
## 4468 SLC29A2 4.66096700 4.52564860 unchanging  
## 4469 SLC2A12 5.19906300 3.18922100 down  
## 4470 SLC30A10 -2.52885800 -3.44013550 unchanging  
## 4471 SLC30A4 4.26555820 4.18191600 unchanging  
## 4472 SLC30A5 6.59397030 6.56127200 unchanging  
## 4473 SLC34A1 -3.68086100 -3.59213900 unchanging  
## 4474 SLC35B3 4.33532800 4.57667260 unchanging  
## 4475 SLC35B4 5.43403800 5.64201300 unchanging  
## 4476 SLC35D2 3.35378530 3.17457410 unchanging  
## 4477 SLC35E1 5.95294140 6.10675860 unchanging  
## 4478 SLC35G3 -3.68086100 -3.59213900 unchanging  
## 4479 SLC35G5 -3.68086100 -3.59213900 unchanging  
## 4480 SLC37A1 3.11499830 2.76931760 unchanging  
## 4481 SLC37A3 5.65601730 5.46374600 unchanging  
## 4482 SLC38A10 4.71431640 4.72477100 unchanging  
## 4483 SLC39A6 7.20838930 8.43906400 up  
## 4484 SLC39A7 7.39966000 7.51406050 unchanging  
## 4485 SLC43A1 0.55860496 1.64732710 unchanging  
## 4486 SLC4A2 5.47676660 5.58223200 unchanging  
## 4487 SLC4A7 6.69031100 6.52997000 unchanging  
## 4488 SLC4A8 2.14356730 2.49060150 unchanging  
## 4489 SLC6A13 0.86345950 -0.27021074 unchanging  
## 4490 SLC6A14 -3.68086100 3.96074370 up  
## 4491 SLC6A17 0.71906954 0.64732707 unchanging  
## 4492 SLC6A18 -3.68086100 -3.59213900 unchanging  
## 4493 SLC6A20 5.44555660 2.82665090 down  
## 4494 SLC6A3 -2.52885800 -1.11820770 unchanging  
## 4495 SLC6A5 -3.68086100 -3.59213900 unchanging  
## 4496 SLC6A9 3.07105500 3.41784520 unchanging  
## 4497 SLC7A10 -3.52885800 -2.44013570 unchanging  
## 4498 SLC7A11 8.45556100 8.21046700 unchanging  
## 4499 SLC7A14 -3.68086100 -3.59213900 unchanging  
## 4500 SLC7A2 3.07105500 6.06765840 up  
## 4501 SLC7A4 -3.68086100 -2.44013570 unchanging  
## 4502 SLC7A6OS 5.19565630 5.50823160 unchanging  
## 4503 SLC8A2 -3.52885800 -2.44013570 unchanging  
## 4504 SLC9A3R2 4.71431640 4.32141540 unchanging  
## 4505 SLC9A4 -3.68086100 -1.85517320 unchanging  
## 4506 SLC9A5 0.64106710 0.88179230 unchanging  
## 4507 SLCO1B1 -3.68086100 -3.59213900 unchanging  
## 4508 SLCO2A1 1.51553620 1.01929580 unchanging  
## 4509 SLTM 6.10776660 5.96500600 unchanging  
## 4510 SMAD1 4.23269300 3.86364480 unchanging  
## 4511 SMAD9-AS1 -3.68086100 -3.59213900 unchanging  
## 4512 SMAGP 3.26555800 3.00280790 unchanging  
## 4513 SMARCA5-AS1 2.11499830 1.91741620 unchanging  
## 4514 SMARCAD1 6.38851450 6.24110270 unchanging  
## 4515 SMCP -3.68086100 -3.59213900 unchanging  
## 4516 SMCR2 -3.68086100 -3.59213900 unchanging  
## 4517 SMCR7 2.55860500 2.53714420 unchanging  
## 4518 SMG5 5.77263830 5.89525400 unchanging  
## 4519 SMOC2 5.79307030 4.54285760 down  
## 4520 SMOX 0.47114208 1.31475160 unchanging  
## 4521 SNAP25 1.86345960 1.68914720 unchanging  
## 4522 SNAPC2 2.30403200 2.26030400 unchanging  
## 4523 SNAPC4 2.69996070 3.08342650 unchanging  
## 4524 SNCB -3.68086100 -3.59213900 unchanging  
## 4525 SNCG -3.68086100 -3.59213900 unchanging  
## 4526 SNHG1 5.40187930 5.97982450 unchanging  
## 4527 SNHG11 2.22602960 1.95218160 unchanging  
## 4528 SNHG9 0.05610465 -1.85517320 unchanging  
## 4529 SNORA58 -3.68086100 -3.59213900 unchanging  
## 4530 SNORA71B -3.68086100 -3.59213900 unchanging  
## 4531 SNX15 4.68546100 4.61514660 unchanging  
## 4532 SNX24 4.10776660 4.20372000 unchanging  
## 4533 SNX25 3.50456500 3.34122400 unchanging  
## 4534 SNX6 6.46832200 6.45922140 unchanging  
## 4535 SOAT2 -3.68086100 -3.59213900 unchanging  
## 4536 SOBP 3.57966640 3.77903300 unchanging  
## 4537 SORCS3 -3.68086100 -3.59213900 unchanging  
## 4538 SORT1 7.90159500 8.00694750 unchanging  
## 4539 SOS1-IT1 -3.52885800 -2.44013570 unchanging  
## 4540 SOST -3.68086100 -3.59213900 unchanging  
## 4541 SOSTDC1 4.11499830 4.15977700 unchanging  
## 4542 SOX10 -3.68086100 -3.59213900 unchanging  
## 4543 SOX14 -3.68086100 -3.59213900 unchanging  
## 4544 SOX2 -3.68086100 2.26030400 up  
## 4545 SOX2-OT -2.52885800 -3.59213900 unchanging  
## 4546 SOX6 5.89950230 4.90859200 down  
## 4547 SP7 -3.68086100 -3.59213900 unchanging  
## 4548 SP9 -3.68086100 -3.59213900 unchanging  
## 4549 SPAG17 0.79307020 1.08342620 unchanging  
## 4550 SPANXB2 -3.68086100 -3.59213900 unchanging  
## 4551 SPANXN4 -3.68086100 -3.59213900 unchanging  
## 4552 SPATA18 -2.52885800 0.01929582 unchanging  
## 4553 SPATA2L 1.79307010 2.20372030 unchanging  
## 4554 SPATA3 -3.68086100 -3.59213900 unchanging  
## 4555 SPATA5 3.35378530 3.50237900 unchanging  
## 4556 SPCS3 7.59138000 7.99083950 unchanging  
## 4557 SPDEF -3.68086100 2.14482670 up  
## 4558 SPDYE3 2.57966640 2.76931760 unchanging  
## 4559 SPDYE4 -3.68086100 -3.44013550 unchanging  
## 4560 SPDYE6 2.19906260 3.30133100 unchanging  
## 4561 SPESP1 2.93057370 2.89971420 unchanging  
## 4562 SPG21 6.25577700 6.11828470 unchanging  
## 4563 SPHAR 3.64106700 3.28778480 unchanging  
## 4564 SPIC -3.68086100 -3.59213900 unchanging  
## 4565 SPIN2A 0.93057376 0.88179230 unchanging  
## 4566 SPIN2B 1.51553620 1.31475160 unchanging  
## 4567 SPIRE1 4.93057350 4.84063500 unchanging  
## 4568 SPIRE2 2.40187930 2.72978930 unchanging  
## 4569 SPN -3.68086100 -3.44013550 unchanging  
## 4570 SPPL2A 5.55595060 5.62056000 unchanging  
## 4571 SPRR2B -3.68086100 -3.59213900 unchanging  
## 4572 SPRR2E -3.68086100 -3.59213900 unchanging  
## 4573 SPRR3 -3.68086100 -3.44013550 unchanging  
## 4574 SPRY1 5.41658600 5.18557300 unchanging  
## 4575 SPRYD7 3.79307000 3.88179230 unchanging  
## 4576 SPSB2 1.68059550 2.08342620 unchanging  
## 4577 SPTLC1 6.31663230 6.32141540 unchanging  
## 4578 SPTSSB -0.35893290 6.60015400 up  
## 4579 SRF 4.93466660 5.01929570 unchanging  
## 4580 SRGAP3-AS2 -3.68086100 -3.59213900 unchanging  
## 4581 SRI 5.73792900 5.61785600 unchanging  
## 4582 SRSF10 7.12846100 7.25856920 unchanging  
## 4583 SRSF4 5.64357000 5.56267930 unchanging  
## 4584 SSC5D -3.68086100 -3.44013550 unchanging  
## 4585 SSX9 -3.68086100 -3.59213900 unchanging  
## 4586 ST14 6.60299900 6.51841700 unchanging  
## 4587 ST18 -3.68086100 -3.59213900 unchanging  
## 4588 ST3GAL1 1.60042510 3.18922100 unchanging  
## 4589 ST6GALNAC1 2.86345960 0.26030394 down  
## 4590 ST7-AS2 0.64106710 0.36721915 unchanging  
## 4591 ST8SIA6 -3.68086100 -2.44013570 unchanging  
## 4592 STAB1 0.05610465 -0.63278085 unchanging  
## 4593 STARD10 3.37803270 4.41784520 up  
## 4594 STARD13-AS1 -3.68086100 -3.59213900 unchanging  
## 4595 STARD13-AS2 -3.68086100 -3.59213900 unchanging  
## 4596 STARD4 7.22853200 7.02236650 unchanging  
## 4597 STARD5 1.05610470 1.55986430 unchanging  
## 4598 STARD9 3.12935380 2.78868300 unchanging  
## 4599 STAT3 6.17331460 5.99657540 unchanging  
## 4600 STAT5A 1.99470410 1.95218160 unchanging  
## 4601 STAT5B 3.56917430 3.58223220 unchanging  
## 4602 STAU2 6.17331460 6.00280760 unchanging  
## 4603 STEAP2-AS1 -3.68086100 -3.59213900 unchanging  
## 4604 STEAP3 4.53723100 4.09902330 unchanging  
## 4605 STK11 4.69514370 4.77903270 unchanging  
## 4606 STK17B 5.34150700 5.20010900 unchanging  
## 4607 STK24-AS1 -3.68086100 -3.59213900 unchanging  
## 4608 STK31 2.84618140 0.55986420 down  
## 4609 STK38 5.48516230 5.68398570 unchanging  
## 4610 STK38L 6.29450940 6.10096070 unchanging  
## 4611 STMN3 3.50456500 4.18191600 unchanging  
## 4612 STRA13 4.42533870 4.01929570 unchanging  
## 4613 STRN3 5.94484800 6.01929570 unchanging  
## 4614 STUB1 5.35378500 5.42405030 unchanging  
## 4615 STX10 4.07105500 3.71973560 unchanging  
## 4616 STX12 5.29769040 5.08734130 unchanging  
## 4617 STX2 5.02573100 4.84526630 unchanging  
## 4618 STX5 4.61069350 4.71973560 unchanging  
## 4619 STXBP6 7.35454900 5.69172100 down  
## 4620 STYX 5.59267570 5.83132700 unchanging  
## 4621 STYXL1 3.22602960 3.34122400 unchanging  
## 4622 SUCLA2-AS1 -1.94389530 -1.85517320 unchanging  
## 4623 SUGT1 4.65601730 4.76931760 unchanging  
## 4624 SULF1 -2.52885800 2.39275430 up  
## 4625 SULF2 0.79307020 5.78145100 up  
## 4626 SULT1A2 2.27849700 1.64732710 unchanging  
## 4627 SULT1A4 3.59008310 3.53714420 unchanging  
## 4628 SULT1B1 -3.68086100 -3.59213900 unchanging  
## 4629 SUMO1 6.62088900 6.39275400 unchanging  
## 4630 SUMO2 8.45662900 8.36963200 unchanging  
## 4631 SUN2 5.54260440 5.45164780 unchanging  
## 4632 SUOX 4.69996070 4.63667960 unchanging  
## 4633 SURF6 4.15764300 4.08342650 unchanging  
## 4634 SUSD4 2.86345960 3.01929570 unchanging  
## 4635 SUSD5 3.86345960 3.88179230 unchanging  
## 4636 SV2C 3.29132100 1.98612890 unchanging  
## 4637 SVEP1 0.27849698 -1.85517320 unchanging  
## 4638 SVOP -3.68086100 -3.59213900 unchanging  
## 4639 SYCE2 1.37803270 1.20372030 unchanging  
## 4640 SYCP2L 1.32912310 0.88179230 unchanging  
## 4641 SYNGAP1 3.66096690 3.67880500 unchanging  
## 4642 SYNGR2 5.60042520 5.69429060 unchanging  
## 4643 SYNGR3 1.42533850 1.91741620 unchanging  
## 4644 SYNJ1 4.25250200 4.16719500 unchanging  
## 4645 SYNJ2-IT1 -3.68086100 -3.59213900 unchanging  
## 4646 SYNPR-AS1 -3.68086100 -3.59213900 unchanging  
## 4647 SYNRG 6.28972400 6.22342200 unchanging  
## 4648 SYS1-DBNDD2 4.08585200 4.23229000 unchanging  
## 4649 SYT4 -3.68086100 -3.59213900 unchanging  
## 4650 SYTL2 2.32912300 4.71973560 up  
## 4651 SZT2 4.31663230 4.34122370 unchanging  
## 4652 TAAR8 -3.68086100 -3.59213900 unchanging  
## 4653 TAB3-AS1 -3.68086100 -3.44013550 unchanging  
## 4654 TAC3 -3.52885800 -3.59213900 unchanging  
## 4655 TAC4 -3.68086100 -3.59213900 unchanging  
## 4656 TADA1 3.75654440 4.00280760 unchanging  
## 4657 TAF12 4.33532800 4.09124570 unchanging  
## 4658 TAF15 7.50800230 7.26290230 unchanging  
## 4659 TAF1C 3.69996070 3.59328720 unchanging  
## 4660 TAF1D 5.24592900 5.64997670 unchanging  
## 4661 TAF4 4.47676660 4.25335100 unchanging  
## 4662 TAGAP -3.68086100 -3.59213900 unchanging  
## 4663 TAGLN 3.72853000 6.03559800 up  
## 4664 TAGLN2 6.26230530 6.31308100 unchanging  
## 4665 TAGLN3 -2.52885800 -3.44013550 unchanging  
## 4666 TANC1 7.33222900 7.11253300 unchanging  
## 4667 TAP1 -3.52885800 -0.63278085 unchanging  
## 4668 TAP2 -3.68086100 -1.85517320 unchanging  
## 4669 TARM1 -3.68086100 -3.59213900 unchanging  
## 4670 TAS2R31 -3.52885800 -1.85517320 unchanging  
## 4671 TAS2R40 -3.68086100 -3.59213900 unchanging  
## 4672 TAZ 2.86345960 2.86364480 unchanging  
## 4673 TBC1D17 3.65105100 3.39275430 unchanging  
## 4674 TBC1D20 5.06733200 4.88179200 unchanging  
## 4675 TBC1D22B 4.37803270 3.97771640 unchanging  
## 4676 TBC1D24 2.84618140 3.23228980 unchanging  
## 4677 TBC1D9 4.68546100 5.63934900 up  
## 4678 TBC1D9B 6.33222900 6.33465150 unchanging  
## 4679 TBCB 4.21933500 4.65262130 unchanging  
## 4680 TBCCD1 4.72380730 4.54285760 unchanging  
## 4681 TBCD 6.04668140 5.81489320 unchanging  
## 4682 TBL1XR1-AS1 -3.68086100 -3.59213900 unchanging  
## 4683 TBX1 -3.52885800 -1.44013570 unchanging  
## 4684 TBX2 0.55860496 1.55986430 unchanging  
## 4685 TBX3 -3.68086100 -1.44013570 unchanging  
## 4686 TCAP -0.52885790 -3.59213900 unchanging  
## 4687 TCEAL3 3.65105100 3.64732720 unchanging  
## 4688 TCEANC2 3.87202140 3.51406050 unchanging  
## 4689 TCF12 7.04289440 6.82547950 unchanging  
## 4690 TCF23 -3.68086100 -3.59213900 unchanging  
## 4691 TCL1B 3.80205900 0.55986420 down  
## 4692 TCL6 2.53723120 -0.44013572 down  
## 4693 TCP1 7.52031000 7.46900700 unchanging  
## 4694 TCP10L -2.52885800 -3.59213900 unchanging  
## 4695 TCP10L2 -3.68086100 -3.59213900 unchanging  
## 4696 TDO2 -3.52885800 -3.59213900 unchanging  
## 4697 TDRD1 -1.94389530 -0.85517323 unchanging  
## 4698 TEAD4 3.48236940 4.05171730 unchanging  
## 4699 TEC 2.53723120 2.44250750 unchanging  
## 4700 TECPR2 4.19906300 4.05971050 unchanging  
## 4701 TECTA -0.35893290 -0.63278085 unchanging  
## 4702 TERF1 5.30403200 5.24986200 unchanging  
## 4703 TERT -3.52885800 -3.44013550 unchanging  
## 4704 TESK2 3.22602960 3.17457410 unchanging  
## 4705 TET2 6.04099800 6.23758360 unchanging  
## 4706 TEX13A -3.68086100 -3.59213900 unchanging  
## 4707 TEX14 -1.20692980 -0.44013572 unchanging  
## 4708 TEX15 2.99470400 3.09902300 unchanging  
## 4709 TEX19 -0.94389530 -0.44013572 unchanging  
## 4710 TEX22 1.37803270 0.95218160 unchanging  
## 4711 TEX261 6.56257720 6.65262130 unchanging  
## 4712 TEX28 -3.68086100 -3.59213900 unchanging  
## 4713 TFAP4 2.77492280 2.46675500 unchanging  
## 4714 TFB2M 3.49351000 3.98612880 unchanging  
## 4715 TFCP2 6.12935350 5.87501400 unchanging  
## 4716 TFCP2L1 3.70954680 3.24636480 unchanging  
## 4717 TFDP3 -0.35893290 0.36721915 unchanging  
## 4718 TFEB 0.47114208 1.08342620 unchanging  
## 4719 TFF1 -3.68086100 4.84063500 up  
## 4720 TFF2 -3.68086100 -3.59213900 unchanging  
## 4721 TFPI2 3.91408560 2.89971420 down  
## 4722 TG -3.68086100 -3.59213900 unchanging  
## 4723 TGFA 5.44842200 4.80303800 unchanging  
## 4724 TGFA-IT1 -3.68086100 -3.59213900 unchanging  
## 4725 TGFB3 3.11499830 3.20372030 unchanging  
## 4726 TGFBRAP1 4.91408600 4.97349200 unchanging  
## 4727 TGIF2LY -3.68086100 -3.59213900 unchanging  
## 4728 TGM3 -1.52885800 -1.44013570 unchanging  
## 4729 TH1L 6.01996370 6.15045100 unchanging  
## 4730 THAP11 4.63604900 4.84988300 unchanging  
## 4731 THAP6 3.95495770 3.61514640 unchanging  
## 4732 THBS1 5.78629160 8.52600900 up  
## 4733 THBS3 2.27849700 2.14482670 unchanging  
## 4734 THEM5 -2.52885800 -1.44013570 unchanging  
## 4735 THNSL1 4.03338500 4.05971050 unchanging  
## 4736 THOC6 3.19906260 2.93490360 unchanging  
## 4737 TIAL1 6.34150650 6.35914560 unchanging  
## 4738 TIGD4 -1.94389530 -3.44013550 unchanging  
## 4739 TIGD6 2.94687560 2.88179230 unchanging  
## 4740 TIMM17B 2.99470400 2.68914720 unchanging  
## 4741 TIMMDC1 5.09685100 5.20010900 unchanging  
## 4742 TIMP3 -1.52885800 3.64732720 up  
## 4743 TJP3 4.78855470 4.59878300 unchanging  
## 4744 TKTL1 -3.68086100 -2.44013570 unchanging  
## 4745 TLR3 -3.68086100 -3.44013550 unchanging  
## 4746 TLR9 -3.68086100 -2.44013570 unchanging  
## 4747 TLX3 0.93057376 0.46675485 unchanging  
## 4748 TM2D3 5.02573100 4.99865630 unchanging  
## 4749 TMBIM6 10.32376900 10.01750200 unchanging  
## 4750 TMC4 4.27849700 3.88179230 unchanging  
## 4751 TMCC3 2.82869400 2.23228960 unchanging  
## 4752 TMCO4 4.35988500 4.15977700 unchanging  
## 4753 TMCO6 2.27849700 2.23228960 unchanging  
## 4754 TMED7-TICAM2 5.10049870 5.18922100 unchanging  
## 4755 TMEM106A -0.52885790 1.31475160 unchanging  
## 4756 TMEM111 4.45413600 4.52564860 unchanging  
## 4757 TMEM115 4.17850100 3.80779200 unchanging  
## 4758 TMEM119 -1.94389530 -3.44013550 unchanging  
## 4759 TMEM123 7.97347700 7.99136160 unchanging  
## 4760 TMEM126B 4.84183000 4.86820300 unchanging  
## 4761 TMEM127 5.69272950 5.71468260 unchanging  
## 4762 TMEM132C -3.68086100 -3.59213900 unchanging  
## 4763 TMEM135 4.59008300 4.54854900 unchanging  
## 4764 TMEM143 -0.06942624 0.36721915 unchanging  
## 4765 TMEM165 6.49073270 6.62191060 unchanging  
## 4766 TMEM174 -3.68086100 -3.59213900 unchanging  
## 4767 TMEM185A 3.53723120 3.94356850 unchanging  
## 4768 TMEM185B 4.61580040 4.73977330 unchanging  
## 4769 TMEM190 -3.68086100 -3.59213900 unchanging  
## 4770 TMEM199 4.56917430 4.47275350 unchanging  
## 4771 TMEM200B 2.05610470 2.34122400 unchanging  
## 4772 TMEM215 -3.68086100 -3.59213900 unchanging  
## 4773 TMEM217 0.47114208 0.46675485 unchanging  
## 4774 TMEM236 -3.68086100 -3.44013550 unchanging  
## 4775 TMEM25 3.87202140 4.31475160 unchanging  
## 4776 TMEM30B 6.44412200 5.93490400 unchanging  
## 4777 TMEM38B 5.31034560 5.38323100 unchanging  
## 4778 TMEM39B 2.47114200 2.60425830 unchanging  
## 4779 TMEM5 4.83308600 4.95218200 unchanging  
## 4780 TMEM51 1.93057370 2.26030400 unchanging  
## 4781 TMEM66 6.67449000 6.77418330 unchanging  
## 4782 TMEM78 -3.68086100 -3.44013550 unchanging  
## 4783 TMEM8B 3.63101360 3.67880500 unchanging  
## 4784 TMEM95 -3.68086100 -3.59213900 unchanging  
## 4785 TMEM97 6.82318540 6.72978930 unchanging  
## 4786 TMIGD2 -3.68086100 -3.59213900 unchanging  
## 4787 TMPO 9.53116200 9.47163100 unchanging  
## 4788 TMPRSS2 7.62912100 5.43944740 down  
## 4789 TMPRSS5 -3.52885800 -1.85517320 unchanging  
## 4790 TMPRSS7 -3.68086100 -3.59213900 unchanging  
## 4791 TMSB10 9.31898200 8.84295300 unchanging  
## 4792 TMTC2 4.97496800 4.85907200 unchanging  
## 4793 TNFAIP1 5.32289100 5.24986200 unchanging  
## 4794 TNFRSF10C -1.20692980 0.46675485 unchanging  
## 4795 TNFRSF11B 1.22602960 0.46675485 unchanging  
## 4796 TNFRSF8 -3.68086100 -3.59213900 unchanging  
## 4797 TNFSF12-TNFSF13 3.02573100 3.21807580 unchanging  
## 4798 TNFSF13B -3.68086100 -1.85517320 unchanging  
## 4799 TNIP1 4.53723100 4.52564860 unchanging  
## 4800 TNKS2 7.16984650 6.69685500 unchanging  
## 4801 TNNC1 1.60042510 3.78868300 up  
## 4802 TNNI3 -0.52885790 -0.44013572 unchanging  
## 4803 TNRC6B 6.35378500 6.36238050 unchanging  
## 4804 TOMM5 5.31976500 5.32804870 unchanging  
## 4805 TOP1MT 3.26555800 3.40535430 unchanging  
## 4806 TOP3B 3.26555800 3.14482670 unchanging  
## 4807 TP53I11 4.72380730 4.33465100 unchanging  
## 4808 TP53TG5 0.37803268 0.46675485 unchanging  
## 4809 TPM1 6.18194870 6.91851500 unchanging  
## 4810 TPM4 7.95848000 8.05221800 unchanging  
## 4811 TPO 0.79307020 -1.85517320 unchanging  
## 4812 TPRG1 1.37803270 2.01929570 unchanging  
## 4813 TPRXL -3.68086100 -3.59213900 unchanging  
## 4814 TPSD1 -3.68086100 -3.59213900 unchanging  
## 4815 TPTE2 -0.52885790 0.14482673 unchanging  
## 4816 TRA2B 7.56257720 7.63667960 unchanging  
## 4817 TRAF6 3.88899450 3.89078100 unchanging  
## 4818 TRAIP 3.57966640 3.63668000 unchanging  
## 4819 TRAJ43 -3.68086100 -3.59213900 unchanging  
## 4820 TRAJ47 -3.68086100 -3.59213900 unchanging  
## 4821 TRAJ7 -3.68086100 -3.59213900 unchanging  
## 4822 TRAPPC10 5.90993400 5.77175240 unchanging  
## 4823 TRAPPC9 3.49351000 3.88179230 unchanging  
## 4824 TRAT1 -3.68086100 -3.59213900 unchanging  
## 4825 TRAV10 -3.68086100 -3.59213900 unchanging  
## 4826 TRAV12-3 -3.68086100 -3.59213900 unchanging  
## 4827 TRAV17 -3.68086100 -3.59213900 unchanging  
## 4828 TRAV2 -3.68086100 -3.59213900 unchanging  
## 4829 TRAV39 -3.68086100 -3.59213900 unchanging  
## 4830 TRAV41 -3.68086100 -3.59213900 unchanging  
## 4831 TRAV8-3 -3.68086100 -3.59213900 unchanging  
## 4832 TRBJ2-2 -3.68086100 -3.59213900 unchanging  
## 4833 TRBV30 -3.68086100 -3.59213900 unchanging  
## 4834 TRBV6-5 -3.68086100 -3.59213900 unchanging  
## 4835 TRBV7-1 -3.68086100 -3.59213900 unchanging  
## 4836 TRDJ1 -3.68086100 -3.59213900 unchanging  
## 4837 TREML2 -3.68086100 -3.59213900 unchanging  
## 4838 TRGJP1 -3.68086100 -3.59213900 unchanging  
## 4839 TRGV10 -3.68086100 -3.59213900 unchanging  
## 4840 TRH -3.68086100 -3.59213900 unchanging  
## 4841 TRHR -3.68086100 -0.85517323 unchanging  
## 4842 TRIM16 5.07476850 5.55421730 unchanging  
## 4843 TRIM2 9.42588300 9.56127300 unchanging  
## 4844 TRIM3 2.17158170 2.20372030 unchanging  
## 4845 TRIM37 6.07662150 6.80422800 unchanging  
## 4846 TRIM46 -1.20692980 -0.63278085 unchanging  
## 4847 TRIM49L2 -2.52885800 -2.44013570 unchanging  
## 4848 TRIM50 -3.52885800 -3.44013550 unchanging  
## 4849 TRIM52 2.53723120 2.95218160 unchanging  
## 4850 TRIM59 6.97596070 7.09805300 unchanging  
## 4851 TRIM61 -3.68086100 -3.44013550 unchanging  
## 4852 TRIM62 2.75654440 2.78868300 unchanging  
## 4853 TRIM73 0.17158182 0.64732707 unchanging  
## 4854 TRMT112 4.87202170 5.06369000 unchanging  
## 4855 TRMT1L 4.34150700 4.12971970 unchanging  
## 4856 TRMU 4.74726700 4.63667960 unchanging  
## 4857 TRNAU1AP 4.15764300 4.18191600 unchanging  
## 4858 TRPC1 1.89740680 1.76931760 unchanging  
## 4859 TRPC4AP 6.33842040 6.23228930 unchanging  
## 4860 TRPC6 -0.20692979 -0.63278085 unchanging  
## 4861 TRPC7 -3.68086100 -3.59213900 unchanging  
## 4862 TRPM1 -3.68086100 -3.44013550 unchanging  
## 4863 TRPM7 6.73558470 6.82313300 unchanging  
## 4864 TSC22D4 2.75654440 2.84526660 unchanging  
## 4865 TSEN34 4.77035000 4.67880540 unchanging  
## 4866 TSFM 4.72380730 4.60971260 unchanging  
## 4867 TSG101 5.25904460 5.11828470 unchanging  
## 4868 TSGA10 2.99470400 2.89971420 unchanging  
## 4869 TSGA10IP -3.68086100 -3.59213900 unchanging  
## 4870 TSHR -3.68086100 -3.59213900 unchanging  
## 4871 TSKS -3.68086100 -3.59213900 unchanging  
## 4872 TSLP 0.64106710 -0.44013572 unchanging  
## 4873 TSPAN12 5.23932650 5.69941570 unchanging  
## 4874 TSPAN14 6.15939240 5.95432700 unchanging  
## 4875 TSPAN19 -1.94389530 -0.85517323 unchanging  
## 4876 TSPAN2 3.59008310 4.18191600 unchanging  
## 4877 TSPAN4 2.69996070 3.01929570 unchanging  
## 4878 TSPY8 -3.68086100 -3.59213900 unchanging  
## 4879 TSPYL2 3.01030060 3.18922100 unchanging  
## 4880 TSPYL5 -3.68086100 2.31475160 up  
## 4881 TSR2 4.95495800 4.86364500 unchanging  
## 4882 TSSC1-IT1 -3.52885800 -1.44013570 unchanging  
## 4883 TTC1 5.40778000 5.29457400 unchanging  
## 4884 TTC30A 5.45413600 5.57945500 unchanging  
## 4885 TTC31 2.99470400 3.08342650 unchanging  
## 4886 TTC35 4.66589900 4.50237900 unchanging  
## 4887 TTC9C 3.31663200 3.24636480 unchanging  
## 4888 TTLL1 2.17158170 1.01929580 unchanging  
## 4889 TTLL10 -3.52885800 -2.44013570 unchanging  
## 4890 TTLL5 5.18194870 5.11445330 unchanging  
## 4891 TTLL9 -0.72150310 -3.44013550 unchanging  
## 4892 TTR -3.68086100 -3.59213900 unchanging  
## 4893 TTTY16 -3.68086100 -3.59213900 unchanging  
## 4894 TTTY23 -3.68086100 -3.59213900 unchanging  
## 4895 TTTY3 -3.68086100 -3.59213900 unchanging  
## 4896 TTTY7B -3.68086100 -3.59213900 unchanging  
## 4897 TTTY8 -3.68086100 -3.59213900 unchanging  
## 4898 TUBB 10.33455400 10.11684900 unchanging  
## 4899 TUBE1 3.50456500 2.86364480 unchanging  
## 4900 TULP2 -3.68086100 -3.59213900 unchanging  
## 4901 TXLNG 4.47114200 4.67880540 unchanging  
## 4902 TYROBP -3.68086100 -3.59213900 unchanging  
## 4903 TYW5 3.42533850 3.80779200 unchanging  
## 4904 U2AF1 5.70715600 5.86364500 unchanging  
## 4905 U47924.27 -1.52885800 -0.63278085 unchanging  
## 4906 U73167.7 -1.20692980 -1.44013570 unchanging  
## 4907 UBA1 7.89373250 7.80303800 unchanging  
## 4908 UBAC2 5.69996070 5.57667260 unchanging  
## 4909 UBAC2-IT1 -3.68086100 -3.59213900 unchanging  
## 4910 UBAP1 5.22268630 5.13351150 unchanging  
## 4911 UBE2E1-AS1 -3.68086100 -2.44013570 unchanging  
## 4912 UBE2H 7.31349300 7.08244560 unchanging  
## 4913 UBE2K 7.95445400 7.86535600 unchanging  
## 4914 UBE2R2 6.41218950 6.24986170 unchanging  
## 4915 UBE2W 5.79981700 5.65526100 unchanging  
## 4916 UBE3A 6.95495800 6.86021660 unchanging  
## 4917 UBIAD1 4.17850100 4.50237900 unchanging  
## 4918 UBL7 4.32289100 4.13729300 unchanging  
## 4919 UBR1 4.73323700 4.87727700 unchanging  
## 4920 UBTD2 6.10049800 5.96713200 unchanging  
## 4921 UBXN6 4.91408600 4.72978930 unchanging  
## 4922 UCK1 5.07105500 4.95218200 unchanging  
## 4923 UGGT2 5.30403200 5.16349030 unchanging  
## 4924 UGP2 5.66835900 5.52564860 unchanging  
## 4925 UGT1A9 -3.68086100 -3.44013550 unchanging  
## 4926 UGT2B15 -3.68086100 -1.44013570 unchanging  
## 4927 UGT2B7 -3.68086100 -3.59213900 unchanging  
## 4928 UIMC1 4.32912300 4.15232130 unchanging  
## 4929 ULK2 4.66589900 4.40535400 unchanging  
## 4930 ULK3 3.93874760 3.94356850 unchanging  
## 4931 UMOD -3.68086100 -3.59213900 unchanging  
## 4932 UMODL1 -3.52885800 -3.59213900 unchanging  
## 4933 UNC13A 1.68059550 2.11445300 unchanging  
## 4934 UNC13B 5.88477040 5.88404460 unchanging  
## 4935 UNC5A -3.68086100 -3.59213900 unchanging  
## 4936 UNC79 3.31663200 1.46675490 down  
## 4937 UNC93A 1.27849700 1.14482670 unchanging  
## 4938 UPP2-IT1 -3.68086100 -3.59213900 unchanging  
## 4939 UQCR11 4.65105100 4.44860740 unchanging  
## 4940 USH1G 0.93057376 0.36721915 unchanging  
## 4941 USO1 6.65849400 6.69813600 unchanging  
## 4942 USP21 4.34765900 4.27411000 unchanging  
## 4943 USP28 5.56917430 5.32804870 unchanging  
## 4944 USP29 -3.68086100 -3.59213900 unchanging  
## 4945 USP35 2.35378530 2.46675500 unchanging  
## 4946 USP42 4.58488460 4.11445330 unchanging  
## 4947 USP44 2.71906970 2.05171730 unchanging  
## 4948 USP6 2.42533850 3.08342650 unchanging  
## 4949 UTF1 -3.68086100 -3.59213900 unchanging  
## 4950 UTP6 4.51006100 4.59328700 unchanging  
## 4951 UTS2R -3.68086100 -3.44013550 unchanging  
## 4952 UTY -2.52885800 -3.59213900 unchanging  
## 4953 VAC14 4.40778000 4.57109170 unchanging  
## 4954 VAMP2 4.19906300 4.01107550 unchanging  
## 4955 VAMP3 6.32289100 6.13918000 unchanging  
## 4956 VAPA 6.93057400 6.72477150 unchanging  
## 4957 VAV2 3.78402500 3.91741630 unchanging  
## 4958 VAV3 6.74726700 5.34776700 down  
## 4959 VBP1 6.19394970 6.10675860 unchanging  
## 4960 VCAN 5.86774700 7.39670320 up  
## 4961 VCAN-AS1 1.68059550 3.32804870 up  
## 4962 VDAC1 6.93466660 6.84642200 unchanging  
## 4963 VEGFB 5.29132130 5.12210660 unchanging  
## 4964 VGF -3.68086100 -3.44013550 unchanging  
## 4965 VGLL2 -3.52885800 -3.44013550 unchanging  
## 4966 VHL 6.93670850 6.83365960 unchanging  
## 4967 VIM 4.36595960 3.87274720 unchanging  
## 4968 VLDLR 4.08585200 3.78868300 unchanging  
## 4969 VN1R1 -0.72150310 -0.27021074 unchanging  
## 4970 VPREB1 -3.68086100 -3.59213900 unchanging  
## 4971 VPS11 4.37803270 4.29457400 unchanging  
## 4972 VPS13B 5.89740700 6.06369000 unchanging  
## 4973 VPS13C 6.75423050 6.96287630 unchanging  
## 4974 VPS25 4.73323700 4.66838840 unchanging  
## 4975 VPS29 5.97098800 5.77661040 unchanging  
## 4976 VPS33A 4.92646930 4.97349200 unchanging  
## 4977 VPS37D -0.72150310 -0.27021074 unchanging  
## 4978 VPS8 5.24263200 5.23229000 unchanging  
## 4979 VRK3 4.10049870 3.60425830 unchanging  
## 4980 VSIG10 5.50456520 5.60971260 unchanging  
## 4981 VSIG10L 1.32912310 0.95218160 unchanging  
## 4982 VSTM1 -3.68086100 -3.59213900 unchanging  
## 4983 VSTM2L -3.68086100 -3.59213900 unchanging  
## 4984 VTN -3.68086100 -3.44013550 unchanging  
## 4985 VWA1 3.01030060 3.36721900 unchanging  
## 4986 VWA5B2 0.27849698 0.36721915 unchanging  
## 4987 VWC2L-IT1 -3.68086100 -3.59213900 unchanging  
## 4988 WARS2-IT1 -3.52885800 -3.59213900 unchanging  
## 4989 WASF2 6.87841000 6.60835080 unchanging  
## 4990 WASF3-AS1 -3.68086100 -3.59213900 unchanging  
## 4991 WASIR2 -3.52885800 -1.44013570 unchanging  
## 4992 WBP2 5.87415400 5.68139740 unchanging  
## 4993 WBSCR16 4.93874800 4.86364500 unchanging  
## 4994 WDFY3-AS1 0.86345950 0.72978930 unchanging  
## 4995 WDR11 6.37200900 6.24986170 unchanging  
## 4996 WDR13 3.41365650 3.51406050 unchanging  
## 4997 WDR36 6.21260930 6.21091600 unchanging  
## 4998 WDR37 4.32289100 4.04368000 unchanging  
## 4999 WDR44 4.42533870 4.25335100 unchanging  
## 5000 WDR47 4.17158170 3.96074370 unchanging  
## 5001 WDR65 1.11499820 1.46675490 unchanging  
## 5002 WDR66 2.55860500 2.31475160 unchanging  
## 5003 WDR74 3.34150700 3.67880500 unchanging  
## 5004 WDR78 2.97893670 2.64732700 unchanging  
## 5005 WDR93 -0.52885790 -1.11820770 unchanging  
## 5006 WFDC5 -3.68086100 -3.59213900 unchanging  
## 5007 WHAMMP2 3.74726680 3.97771640 unchanging  
## 5008 WI2-2994D6.2 -3.68086100 -3.59213900 unchanging  
## 5009 WIPF2 6.20585160 5.99657540 unchanging  
## 5010 WIPF3 1.47114200 0.88179230 unchanging  
## 5011 WIPI2 5.39595460 5.17088900 unchanging  
## 5012 WNK2 5.40483300 4.03559800 down  
## 5013 WNK3 3.68059560 3.85448480 unchanging  
## 5014 WNT16 -3.68086100 -3.59213900 unchanging  
## 5015 WNT5A 3.76576280 1.68914720 down  
## 5016 WNT5B -3.52885800 -1.44013570 unchanging  
## 5017 WNT9A 1.96299520 1.95218160 unchanging  
## 5018 WRB 5.69031050 5.45468200 unchanging  
## 5019 WWP2 5.06733200 4.85907200 unchanging  
## 5020 WWTR1 5.00641730 5.31475160 unchanging  
## 5021 WWTR1-AS1 -0.06942624 0.26030394 unchanging  
## 5022 XAGE1B 0.93057376 -2.44013570 unchanging  
## 5023 XAGE3 -3.68086100 -3.59213900 unchanging  
## 5024 XCL2 -3.68086100 -3.59213900 unchanging  
## 5025 XDH -0.20692979 -0.27021074 unchanging  
## 5026 XIAP-AS1 -3.68086100 -3.59213900 unchanging  
## 5027 XIST 1.71906960 3.51406050 up  
## 5028 XKR3 -3.68086100 -3.59213900 unchanging  
## 5029 XKR6 -3.68086100 -3.59213900 unchanging  
## 5030 XPNPEP2 -3.68086100 -3.59213900 unchanging  
## 5031 XPNPEP3 6.07105500 6.18922100 unchanging  
## 5032 XPO5 6.00641780 6.05372000 unchanging  
## 5033 XPR1 6.30244900 6.28267200 unchanging  
## 5034 XRCC4 3.02573100 2.26030400 unchanging  
## 5035 XRCC6BP1 2.79307000 3.05171730 unchanging  
## 5036 XRN1 5.86988540 5.82665100 unchanging  
## 5037 XXbac-B444P24.8 -3.68086100 -3.59213900 unchanging  
## 5038 XXbac-B476C20.14 -3.68086100 -3.59213900 unchanging  
## 5039 XXbac-BPG248L24.13 -3.68086100 -3.59213900 unchanging  
## 5040 XXbac-BPG249D20.9 -3.68086100 -3.44013550 unchanging  
## 5041 XXbac-BPG27H4.8 -3.68086100 -3.59213900 unchanging  
## 5042 XXbac-BPG300A18.12 4.35378500 4.36076400 unchanging  
## 5043 XXbac-BPG300A18.13 2.02573100 2.44250750 unchanging  
## 5044 XXbac-BPG308J9.3 -3.68086100 -3.59213900 unchanging  
## 5045 XXyac-YM21GA2.7 -3.68086100 -3.59213900 unchanging  
## 5046 XXyac-YR14BB7.1 -3.68086100 -3.59213900 unchanging  
## 5047 XXyac-YX60D10.1 -3.68086100 -3.59213900 unchanging  
## 5048 XXyac-YX65C7\_A.3 -3.68086100 -3.59213900 unchanging  
## 5049 YEATS2-AS1 -0.52885790 -0.85517323 unchanging  
## 5050 YEATS4 5.03719600 5.17457400 unchanging  
## 5051 YPEL2 2.84618140 3.17457410 unchanging  
## 5052 YPEL3 1.51553620 1.60425830 unchanging  
## 5053 YTHDC1 6.26067540 6.21091600 unchanging  
## 5054 YWHAB 8.19309600 8.17687200 unchanging  
## 5055 YWHAQ 8.82841900 8.68236800 unchanging  
## 5056 Z69666.2 -3.68086100 -3.59213900 unchanging  
## 5057 Z83851.1 -3.68086100 -2.44013570 unchanging  
## 5058 ZBP1 -3.68086100 -3.59213900 unchanging  
## 5059 ZBTB16 -3.68086100 -3.59213900 unchanging  
## 5060 ZBTB20-AS3 -3.68086100 -3.59213900 unchanging  
## 5061 ZBTB32 -3.68086100 -3.59213900 unchanging  
## 5062 ZBTB40-IT1 -3.68086100 -3.59213900 unchanging  
## 5063 ZBTB48 2.75654440 2.64732700 unchanging  
## 5064 ZBTB5 5.03719600 4.70961140 unchanging  
## 5065 ZBTB7A 3.93057370 3.77903300 unchanging  
## 5066 ZBTB7B 4.22602940 3.72978900 unchanging  
## 5067 ZBTB8B 2.96299530 2.55986430 unchanging  
## 5068 ZC3H14 6.88793950 6.51406050 unchanging  
## 5069 ZC3H3 3.25250170 2.72978930 unchanging  
## 5070 ZC3H4 4.94281700 4.95646900 unchanging  
## 5071 ZC3H7B 6.07847200 6.29795650 unchanging  
## 5072 ZC3H8 3.01030060 3.32804870 unchanging  
## 5073 ZC3HAV1L 3.37803270 3.46675470 unchanging  
## 5074 ZCCHC17 5.59784650 5.32141540 unchanging  
## 5075 ZCCHC4 3.34150700 3.23228980 unchanging  
## 5076 ZDHHC13 4.81987000 4.72477100 unchanging  
## 5077 ZDHHC6 4.85484650 4.91301060 unchanging  
## 5078 ZEB2 -3.68086100 -3.59213900 unchanging  
## 5079 ZEB2-AS1 -3.68086100 -3.59213900 unchanging  
## 5080 ZFAND2B 2.71906970 2.64732700 unchanging  
## 5081 ZFAND5 7.15764300 6.91961400 unchanging  
## 5082 ZFHX3 5.82208100 6.02134370 unchanging  
## 5083 ZFP30 4.45413600 4.62056000 unchanging  
## 5084 ZFP36 2.37803270 2.26030400 unchanging  
## 5085 ZFP64 4.07847200 3.78868300 unchanging  
## 5086 ZFPL1 3.10049870 3.45468190 unchanging  
## 5087 ZFX 5.62088900 5.90416000 unchanging  
## 5088 ZFX-AS1 -3.68086100 -3.59213900 unchanging  
## 5089 ZGLP1 -0.52885790 -1.11820770 unchanging  
## 5090 ZHX3 4.52099040 4.64732740 unchanging  
## 5091 ZIC5 4.29769040 3.81725200 unchanging  
## 5092 ZIK1 -0.20692979 3.12971970 up  
## 5093 ZIM2 -3.68086100 -3.59213900 unchanging  
## 5094 ZKSCAN4 3.04099750 2.39275430 unchanging  
## 5095 ZMIZ1 5.27849700 5.78145100 unchanging  
## 5096 ZMIZ2 5.67081450 5.47574400 unchanging  
## 5097 ZMYM2-IT1 -3.68086100 -2.44013570 unchanging  
## 5098 ZMYND10-AS1 -0.52885790 -1.44013570 unchanging  
## 5099 ZNF107 5.00641730 5.12971970 unchanging  
## 5100 ZNF121 4.12935350 4.26722340 unchanging  
## 5101 ZNF135 0.99470407 1.31475160 unchanging  
## 5102 ZNF146 7.23019800 7.20822200 unchanging  
## 5103 ZNF155 2.96299530 2.95218160 unchanging  
## 5104 ZNF16 3.17158200 3.08342650 unchanging  
## 5105 ZNF175 2.96299530 3.01929570 unchanging  
## 5106 ZNF197-AS1 -3.52885800 -3.59213900 unchanging  
## 5107 ZNF20 4.01803640 3.78868300 unchanging  
## 5108 ZNF211 3.90577030 3.62595320 unchanging  
## 5109 ZNF215 2.37803270 2.41784500 unchanging  
## 5110 ZNF222 0.86345950 1.88179220 unchanging  
## 5111 ZNF223 2.32912300 2.26030400 unchanging  
## 5112 ZNF226 4.62088900 4.65262130 unchanging  
## 5113 ZNF23 2.44842200 2.49060150 unchanging  
## 5114 ZNF232 3.54795770 3.64732720 unchanging  
## 5115 ZNF235 2.27849700 2.44250750 unchanging  
## 5116 ZNF248 4.15062200 3.81725200 unchanging  
## 5117 ZNF250 3.95495770 3.98612880 unchanging  
## 5118 ZNF259 4.11499830 4.25335100 unchanging  
## 5119 ZNF26 4.00252400 3.96925500 unchanging  
## 5120 ZNF319 2.73792860 2.53714420 unchanging  
## 5121 ZNF324 3.56917430 3.27410980 unchanging  
## 5122 ZNF32-AS1 1.11499820 1.31475160 unchanging  
## 5123 ZNF32-AS3 -3.68086100 -3.59213900 unchanging  
## 5124 ZNF331 3.84618140 3.86364480 unchanging  
## 5125 ZNF343 3.49351000 3.32804870 unchanging  
## 5126 ZNF346-IT1 -3.52885800 -2.44013570 unchanging  
## 5127 ZNF37A 5.11860100 5.50530800 unchanging  
## 5128 ZNF383 2.51553630 2.14482670 unchanging  
## 5129 ZNF385C -0.52885790 -0.63278085 unchanging  
## 5130 ZNF385D-AS1 -3.68086100 -3.59213900 unchanging  
## 5131 ZNF398 5.06359900 4.81252960 unchanging  
## 5132 ZNF404 -0.52885790 -0.27021074 unchanging  
## 5133 ZNF430 4.21260930 4.03559800 unchanging  
## 5134 ZNF439 -0.06942624 -0.44013572 unchanging  
## 5135 ZNF449 3.49351000 2.89971420 unchanging  
## 5136 ZNF460 3.08585200 4.35428000 up  
## 5137 ZNF480 4.43692640 4.52564860 unchanging  
## 5138 ZNF486 -3.68086100 -1.85517320 unchanging  
## 5139 ZNF487P 1.75654420 1.72978930 unchanging  
## 5140 ZNF491 1.55860500 1.55986430 unchanging  
## 5141 ZNF503 1.47114200 0.55986420 unchanging  
## 5142 ZNF503-AS1 -3.68086100 -3.59213900 unchanging  
## 5143 ZNF506 3.40187930 3.60425830 unchanging  
## 5144 ZNF507 5.31663230 5.28437800 unchanging  
## 5145 ZNF510 4.77948100 4.89078100 unchanging  
## 5146 ZNF512 5.44842200 5.28096340 unchanging  
## 5147 ZNF512B 5.34150700 5.30805700 unchanging  
## 5148 ZNF521 -3.52885800 -3.59213900 unchanging  
## 5149 ZNF525 5.20246120 5.10675860 unchanging  
## 5150 ZNF526 2.99470400 3.00280790 unchanging  
## 5151 ZNF529 4.40778000 4.28096340 unchanging  
## 5152 ZNF536 -3.68086100 -3.59213900 unchanging  
## 5153 ZNF544 4.94281700 4.85448460 unchanging  
## 5154 ZNF556 -3.52885800 -3.44013550 unchanging  
## 5155 ZNF565 1.22602960 1.51406050 unchanging  
## 5156 ZNF569 3.57966640 3.64732720 unchanging  
## 5157 ZNF571 2.49351000 2.14482670 unchanging  
## 5158 ZNF585B 3.01030060 2.78868300 unchanging  
## 5159 ZNF599 1.27849700 1.01929580 unchanging  
## 5160 ZNF607 4.29769040 3.88179230 unchanging  
## 5161 ZNF613 3.12935380 2.95218160 unchanging  
## 5162 ZNF619 2.47114200 2.84526660 unchanging  
## 5163 ZNF622 3.63101360 3.77903300 unchanging  
## 5164 ZNF626 -1.20692980 0.26030394 unchanging  
## 5165 ZNF641 5.19224100 5.19648900 unchanging  
## 5166 ZNF642 2.51553630 2.74968890 unchanging  
## 5167 ZNF652 6.21597580 6.41161300 unchanging  
## 5168 ZNF671 2.69996070 2.72978930 unchanging  
## 5169 ZNF678 4.34150700 4.32141540 unchanging  
## 5170 ZNF692 2.77492280 2.86364480 unchanging  
## 5171 ZNF700 4.34150700 4.36076400 unchanging  
## 5172 ZNF708 4.10776660 4.16719500 unchanging  
## 5173 ZNF736 3.25250170 3.30133100 unchanging  
## 5174 ZNF749 3.25250170 3.30133100 unchanging  
## 5175 ZNF764 3.15764280 2.58223200 unchanging  
## 5176 ZNF774 2.11499830 2.58223200 unchanging  
## 5177 ZNF776 5.55595060 5.38641260 unchanging  
## 5178 ZNF782 2.86345960 2.91741630 unchanging  
## 5179 ZNF79 2.91408560 2.36721900 unchanging  
## 5180 ZNF8 3.43692640 3.44250730 unchanging  
## 5181 ZNF804B -3.68086100 -2.44013570 unchanging  
## 5182 ZNF827 4.88053270 4.82195900 unchanging  
## 5183 ZNF844 5.18881850 5.00694750 unchanging  
## 5184 ZNF845 4.57443000 4.65789600 unchanging  
## 5185 ZNF860 2.89740680 3.28778480 unchanging  
## 5186 ZNF90 5.65849400 5.61785600 unchanging  
## 5187 ZNHIT6 4.93874800 5.04368000 unchanging  
## 5188 ZNRD1-AS1 2.11499830 2.68914720 unchanging  
## 5189 ZPBP -3.68086100 -3.59213900 unchanging  
## 5190 ZRSR1 1.64106700 1.80779170 unchanging  
## 5191 ZSCAN23 0.17158182 0.14482673 unchanging  
## 5192 ZSCAN30 3.87202140 4.15232130 unchanging  
## 5193 ZW10 5.39892000 5.22519970 unchanging  
## 5194 ZXDA 3.27849700 3.38004300 unchanging  
## 5195 ZYG11B 6.14002700 6.10868600 unchanging  
## 5196 ZYX 4.12219400 4.15977700 unchanging

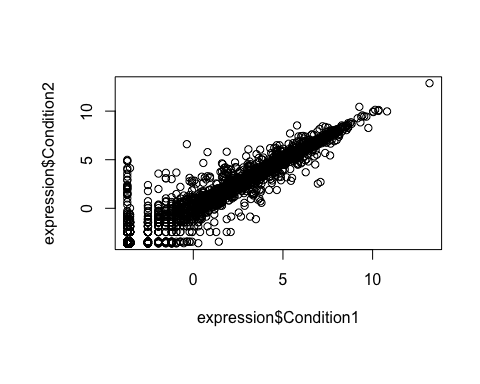
expression <- read.delim("bimm143\_05\_rstats/up\_down\_expression.txt")  
#Find the total genes (How many genes are detailed in this file?)  
nrow(expression)

## [1] 5196

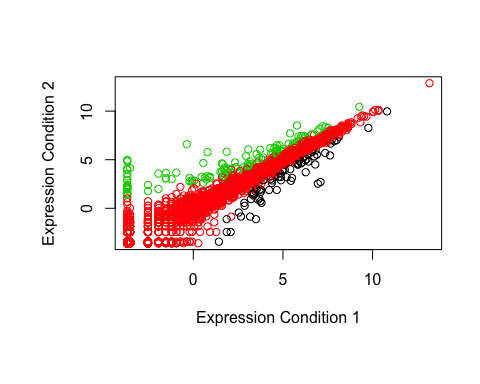
#Determine genes up/down/unchanging in their expression  
table(expression$State)

##   
## down unchanging up   
## 72 4997 127

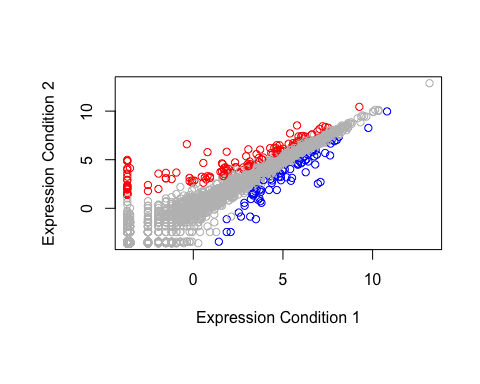
#Plotting the conditions simply black and white  
plot(expression$Condition1, expression$Condition2)



#Plotting the conditions with other inputs  
plot(expression$Condition1, expression$Condition2, col=expression$State, xlab="Expression Condition 1", ylab="Expression Condition 2")



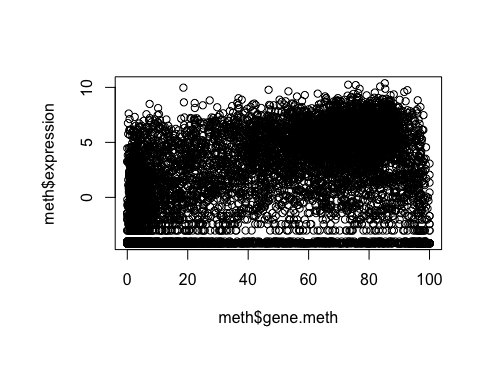
#Run palette()  
palette(c("blue","grey","red"))  
plot(expression$Condition1, expression$Condition2, col=expression$State, xlab="Expression Condition 1", ylab="Expression Condition 2")



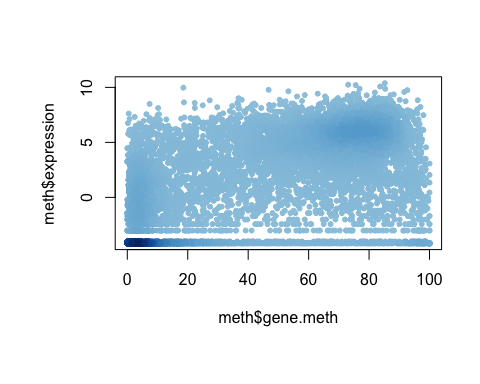
#Section 3C. Dynamic Use of Color  
meth <- read.delim("bimm143\_05\_rstats/expression\_methylation.txt")  
nrow(meth)

## [1] 9241

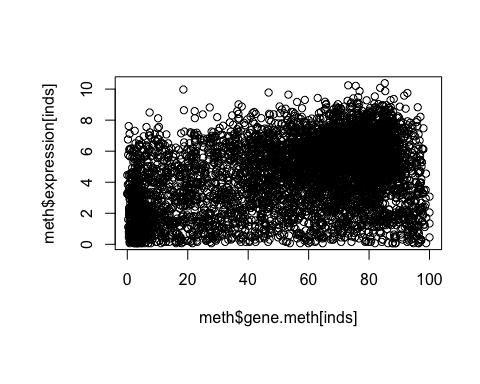
#Draw scatterplot  
plot(meth$gene.meth, meth$expression)



#Improve scatterplot by coloring by point density  
dcols <- densCols(meth$gene.meth, meth$expression)  
#Plot changing the plot character ('pch') to a solid circle  
plot(meth$gene.meth, meth$expression, col = dcols, pch = 20)



#Restrict to genes that have more than zero expression values  
#Find the indices of genes with above 0 expression  
inds <- meth$expression > 0  
#Plot just these genes  
plot(meth$gene.meth [inds], meth$expression[inds])



#Make a density color vector for these genes and plot  
dcols.custom <- densCols(meth$gene.meth[inds], meth$expression[inds],  
 colramp = colorRampPalette(c("blue2",  
 "green2",  
 "red2",  
 "yellow")) )  
  
plot(meth$gene.meth[inds], meth$expression[inds],   
 col = dcols.custom, pch = 20)

