

Amplicon sequence of the refSNP ID: **rs41352448** ( details in dbSNP (BUILD 127);  
NCBI Assay ID: ss65713825)

**Forward**→

5'**ttgtccagagaaacagccaat**aaagatgtgtggatgtgtggatggatggatggatggatggatggat**ggat**ggaca  
gacagctatagaaatacagatagataaaccaatgagtagattatagatagacgagaggagggggagagagaaaaagagaga  
gagagaggataatggatatatagagagagaataatggatagatagatagatagagatagataaagatacacaatggatgga  
tagatatagataagataaatgataagttacatgatggatggatagatagataagacagatgatggatagatagataatagata  
gatgaaaagtagaagcagttcatggatggatgaatagatggatagatcttcatggatgatggatgaaaagtagatagagatatct  
ggtgggctgtttgaaaagacagatgaccatatagttagataatagatagatagatagacaggtgatagataagttgatcgataaat  
agatgatagatggatagaatagatggtagataggtagata**gatgacaggtatgtaggtagatggat** 3'  
3' **ctactgtccatacatccatctaccta** 5'

←**Reverse**

Forward primer: 5'ttgtccagagaaacagccaat 3'

Reverse primer: 5'atccatctacctacatacctgtcatc 3'

Q5 subgroup is defined by the insertion of the **ggat** repeat(4bp) at 72,314 position of the human arylsulfatase D pseudogene (ARSDP gene) in individuals with the derived state at the binary markers: M45, 92R7, P36/MEH2/ M242 and ancestral state at the M120, M3, M25/M143 and M346 markers. The hierarchical details of the bi-allelic markers are provided in Figure 1.