

#flo #ref #ret #disorganized #incomplete

0.1 | **General**

0.1.1 | **SNiPs**

- rs4680
 - pain tolerance, worrier/warrior
 - <https://www.snpedia.com/index.php/Rs4680>
- CYP1A2 gene
 - specifically, rs2069514
 - encodes for the 1C variant,
 - which encodes for slow caffeine metabolism
- rs6902875
 - episodic memory
 - <https://pubmed.ncbi.nlm.nih.gov/25317765/>

0.2 | **Write-up**

0.2.1 | **A :: rs4680**

Also known as Val158Me, rs4680 is an extensively studied SNP located in the COMT gene. The COMT enzyme, encoded by the COMT gene, is responsible for breaking down dopamine in the brain's prefrontal cortex (cite). rs4680 causes the enzyme to function roughly 25% as efficiently as the wild type. The result of wild-type versus rs4680 is commonly referred to as the warrior versus worrier hypothesis (cite). A worrier, one with the rs4680 SNP, has higher dopamine levels. Thus, supposedly, they should have lower pain tolerance, be more prone to stress as well as more exploratory, and more efficient at information processing. Conversely, the wild-type warriors should have higher pain tolerance, be less prone to stress, less exploratory, and less efficient at cognition in most conditions (cite).

0.2.2 | **B :: rs2069514**

rs2069514 is a 1C type allele of the CYP1A2 gene (cite). CYP1A2 is a cytochrome P450 mixed function oxidase enzyme, all