The endogenous opioid system may be involved in the development and maintenance of alcohol use disorder (AUD) and is a target for existing AUD pharmacotherapies. A functional polymorphism of the mu-opioid receptor gene (OPRM1 A118G, rs1799971) may alter the risk of developing AUD. Human laboratory studies have demonstrated that minor allele carriers self-administer more alcohol, show greater sensitivity to alcohol's effects, and exhibit increased alcohol-induced dopamine release. On the other hand, large genome-wide association studies and meta-analyses of candidate gene studies have not found an association between this genotype and alcohol dependence diagnosis. Given this discrepancy, the present study sought to verify whether OPRM1 A118G was associated with alcohol self-administration, subjective response to alcohol, and craving in a sample of 106 social drinkers of European ancestry who completed an intravenous alcohol self-administration session. We found no relationship between OPRM1 rs1799971 genotype and subjective response to alcohol or craving. OPRM1 genotype was not associated with total alcohol exposure or likelihood of attaining a binge-level exposure (80mg%) during the intravenous alcohol self-administration session. Analysis of 90-day Timeline Followback interview data in a larger sample of 965 participants of European ancestry found no relationship between OPRM1 genotype and alcohol consumption in either alcohol dependent or non-dependent participants. These findings suggest that there may not be an association between OPRM1 rs1799971 genotype and alcohol consumption or sensitivity in individuals of European ancestry.