OPRK1 (opioid receptor, kappa 1), also known as KOR, belongs to the rhodopsin subfamily of G-protein-coupled receptor (GPCR) family. OPRK1 is consist of 380 amino acids and is widely expressed in the nervous system. OPRK1 is activated by endogenous opioid peptide agonists derived from prodynorphin. Stimulation of OPRK1 in vivo produces many effects, including analgesia, water diuresis, dysphoria, antipruritic effects, and attenuation of cocaine craving in addicts. In addition, some studies reported that OPRK1 is associated with alcohol intake and the risk for alcohol dependence and activation of OPRK1 in human microglia suppresses HIV-1 expression.