

Abstract

Multidrug resistance associated proteins (mrps) belong to the C subfamily of ABC transporters. There are 9 mrps in *C.elegans*. Most of them are anion transporters. In this project we studied the role of MRPs in neuronal signaling; more precisely in dopaminergic signaling. We utilized SWIP (Swimming induced paralysis) assay to characterize mrps for their role in dopaminergic signaling. Next rescue was performed with exogenous dopamine (DA). In this study we identified mrp-3 as a probable mrp candidate that could play a role in dopaminergic signaling. Further studies will be done by utilizing various dopaminergic pathway mutants to identify the role of mrp-3 in the pathway.