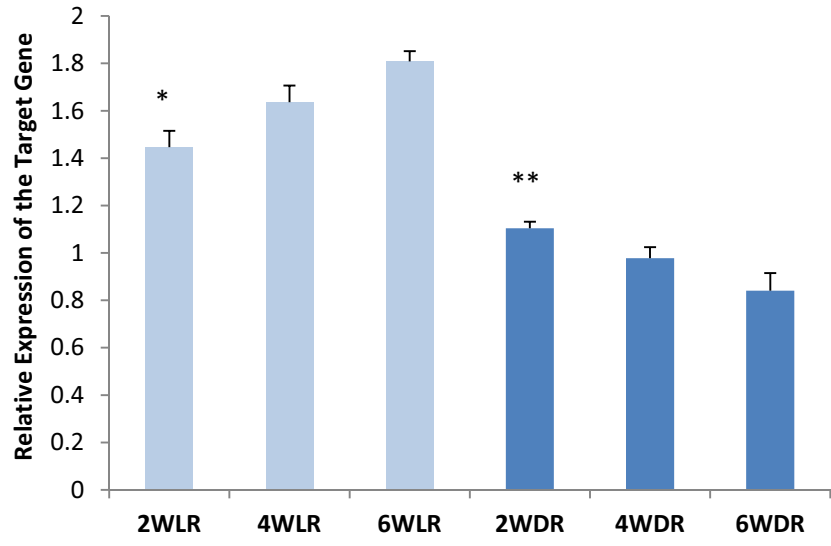


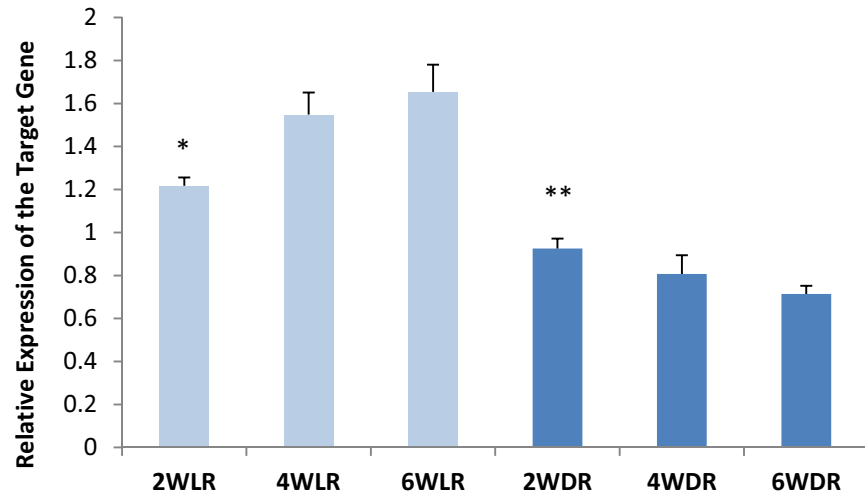
**Table 1)** Specifications of Primers Related to Melatonin Receptor Gene

Gene size (Kbase)	Gene Melting Temperature (°C)	Primer Sequencing
<b>HPRT Gene</b> (NCBI Reference Sequence Data Base: NM_012583.2)		
172	60	For: 5'-GGTCCATTCTATGACTGTAGATTTT-3' Rev: 5'-CAATCAAGACGTTCTTTCCAGTT-3'
<b>MT1 Gene</b> (NCBI Reference Sequence Data Base: NM_053676.2)		
262	59.5	For: 5'-CTGAGTGTCTTGGCTCGGT-3' Rev: 5'-AATGGAAAACCAACAGGCA-3'
<b>MT2 Gene</b> (NCBI Reference Sequence Data Base: NM_001100641.1)		
146	58.5	For: 5'-CAGACAGCCAGCACCAATA-3' Rev: 5'-AGGCGTAGCTTCTCTCAGC-3'

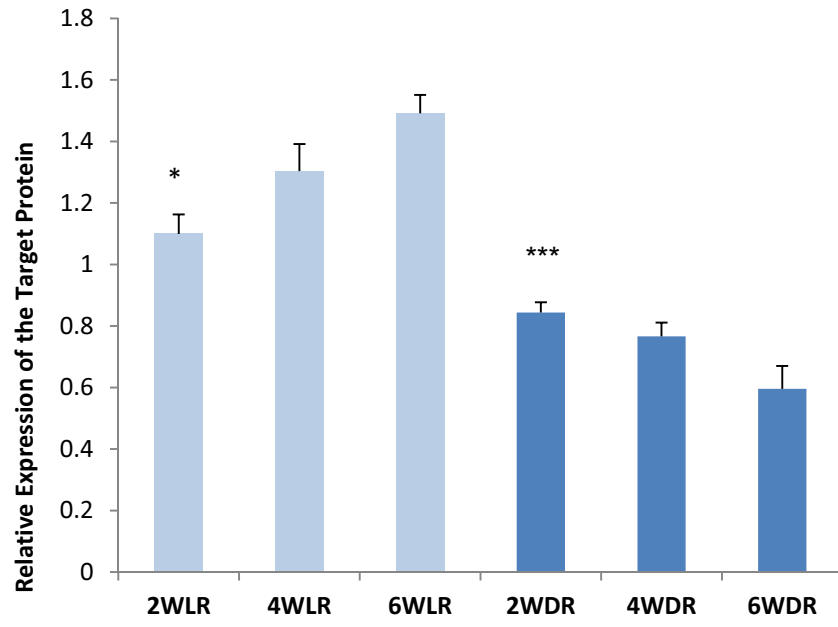
**A**

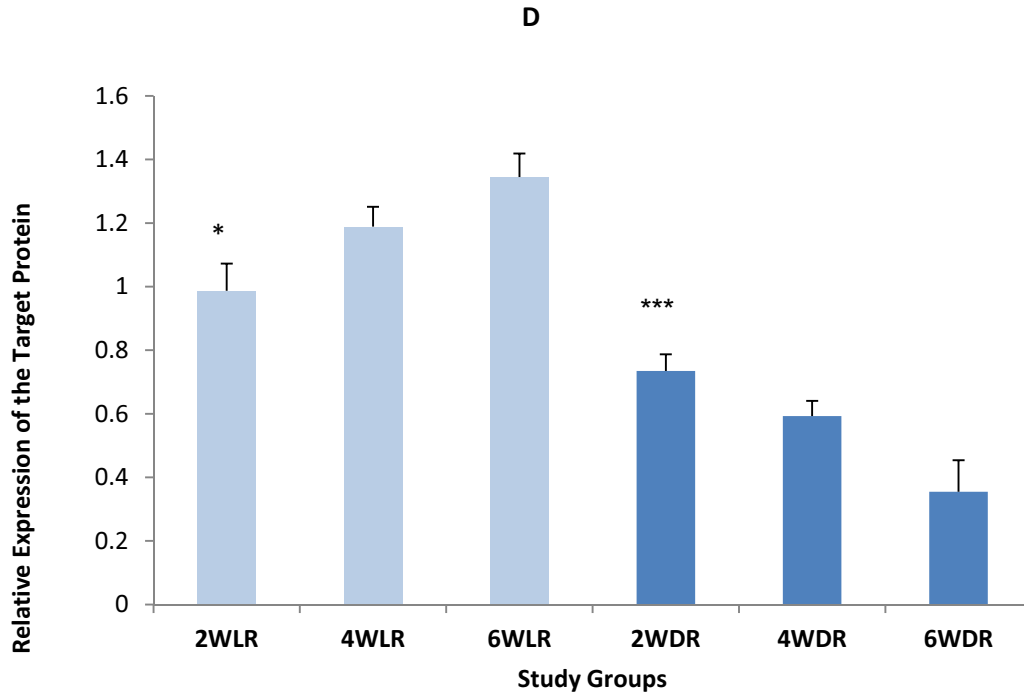


**B**



C





**Diagram 1)** Relative Expressions of MT1 Receptor Gene (A), MT2 Receptor Gene (B), MT1 Receptor Protein (C), and MT2 Receptor Protein (D) in Hippocampus of the Animals in Different Groups (\*Significant difference between groups 2WLR and 6WLR ( $p < 0.001$ ); \*\*significant difference between groups 2WDR and 6WDR ( $p < 0.01$ ); \*\*\*significant difference between groups 2WDR and 6WDR ( $p < 0.001$ ); Inter-group comparison, also, showing significant difference between matched groups in darkness and lightness with ( $p < 0.001$ ))