



Supplemental Fig. S2. Regulation of MOR-1B3 and MOR-1B4 cDNA expressions by miR-378a-3p through a conserved miR-378a-3p binding site in MOR-1Bs 3'-UTRs

A). Constructs in pcDNA3 vector. hMOR-1B3 and mMOR-1B3 cDNAs with its partial 3'-UTRs containing wild-type (wt) or mutated (mut) miR-378a-3p sequences were synthesized by Genscript (Piscataway, NJ) and subcloned into pcDNA3 vector as described in Materials and Methods. The wt and mut miR-378a-3p sequences are indicated by red and green lines, respectively.

B). Constructs in pcDNA3 vector. hMOR-1B4 and mMOR-1B4 cDNAs with its partial 3'-UTRs containing wild-type (wt) or mutated (mut) miR-378a-3p sequences were synthesized by Genscript and subcloned into pcDNA3 vector as described in Materials and Methods. The wt and mut miR-378a-3p sequences are indicated by red and green lines, respectively.

C). Expression of MOR-1B3 mRNAs. Total RNAs from HEK293 cells transfected with indicated constructs (n = 4) were used in RT-qPCRs, as described in Materials and Methods. Percentage change of MOR-1B3 mRNA was calculated by normalizing the values of the phB3-mut or pmB3-mut with those of the phB3-wt or pmB3-wt. Two ANOVA with Bonferroni's post hoc analysis was used. \*:  $p < 0.05$ .

D). Expression of MOR-1B4 mRNAs. Total RNAs from HEK293 cells transfected with indicated constructs (n = 4) were used in RT-qPCRs, as described in Materials and Methods. Percentage change of MOR-1B4 mRNA was calculated by normalizing the values of the phB4-mut or pmB4-mut with those of the phB4-wt or pmB4-wt. Two ANOVA with Bonferroni's post hoc analysis was used. \*:  $p < 0.05$ .