

**S1.** The following figure is a supplement material to Figure 6. The protein band was immunostained by AQP4 antibody and stained by Red ponceau, respectively.

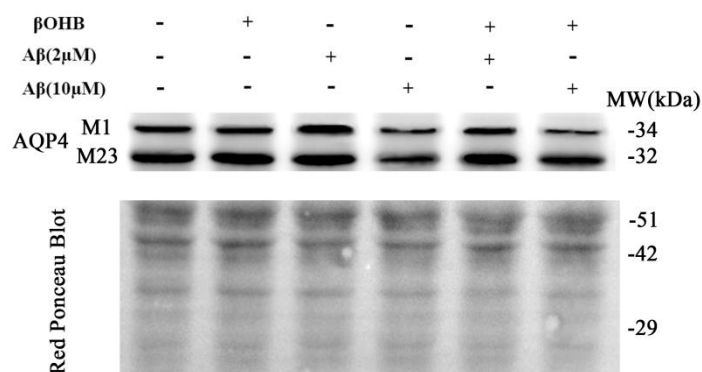


Figure S1.  $\beta$ OHB ameliorated the increase of AQP4-M1/M23 ratio in A $\beta$ -treated U251 cells. (n=6)

**S2.** The following figure is a supplement material to Figure 8. The protein band was immunostained by AQP4 antibody and stained by Red ponceau, respectively.

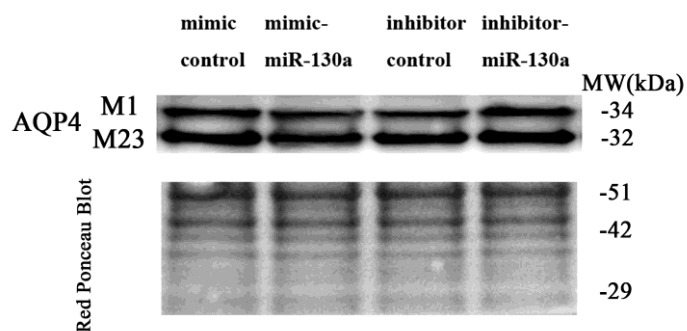


Figure S2. Effect of miR-130a on transcriptional activity of AQP4 and the AQP4-M1/M23 ratio. (n=6)

**S3.** The following figure is a supplement material to Figure 9. The protein band was immunostained by AQP4 antibody and stained by Red ponceau, respectively.

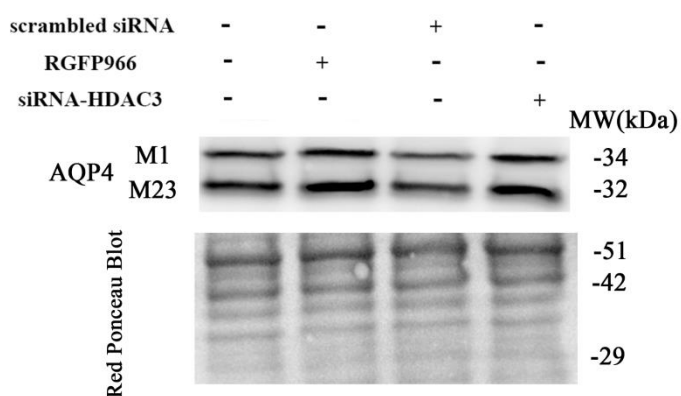


Figure S3. Silencing HDAC3 caused the reduction of AQP4-M1/M23 ratio in U251 cells. (n=6)