

Scopolamine

(0.5 mg/ml; i.p)

C57BL/6JN = 27

Pilocarpine (300

mg/kg; i.p) injected

0.1 ml at the time

Midazolam 40 uL

to attenuate the

seizures

Supplementary Data 1: **Pilocarpine induced Seizure model**. **A.** Mechanisms of seizure induction in mouse both male and female (12-18 months). Figure Created with Biorender. **B.** Proportion of survival. Percentage of animal that survived or died the hour after pilocarpine injection.

 $PAR1^{R41Q/R41Q} N = 19$

 $PAR1^{R46Q/R46Q} N = 33$

 $EPCR^{R84A/R84A} N = 19$