

Supplementary Data

Electronic Supplementary Information

Fig. 1 Illustration of the experimental design. A. Mouse skull depicting the locations of KCl application (*i.e.*, occipital cortex) and DC-potential recordings (*i.e.*, frontal cortex). B. Induction of 7 CSDs by application of 1M KCl with a 5-min interval. At the end of the CSD induction, *ca.* 40 μ L of blood was collected from the mouse trunk. C. Specimen example traces recordings following application of 1M KCl (upper part) and 1M NaCl (lower part) in FHM1 R192Q and WT mice.

Fig. 2 PCA score plot of the whole data set, including mice samples (labelled S, blue diamonds) and quality controls (labelled QC, red diamonds). The first two principal components cover 50% of the total variation.