

CORRECTION

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# Correction to: Pathophysiology of and therapeutic options for a *GABRA1* variant linked to epileptic encephalopathy

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**Correction to: Mol Brain (2019) 12:92**

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Following publication of the original article [1], the authors reported errors in Fig. 4. Specifically, a wrong actin blot is presented in Fig. 4a. In this Correction, the corrected version of Fig. 4 is shown.

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## Reference

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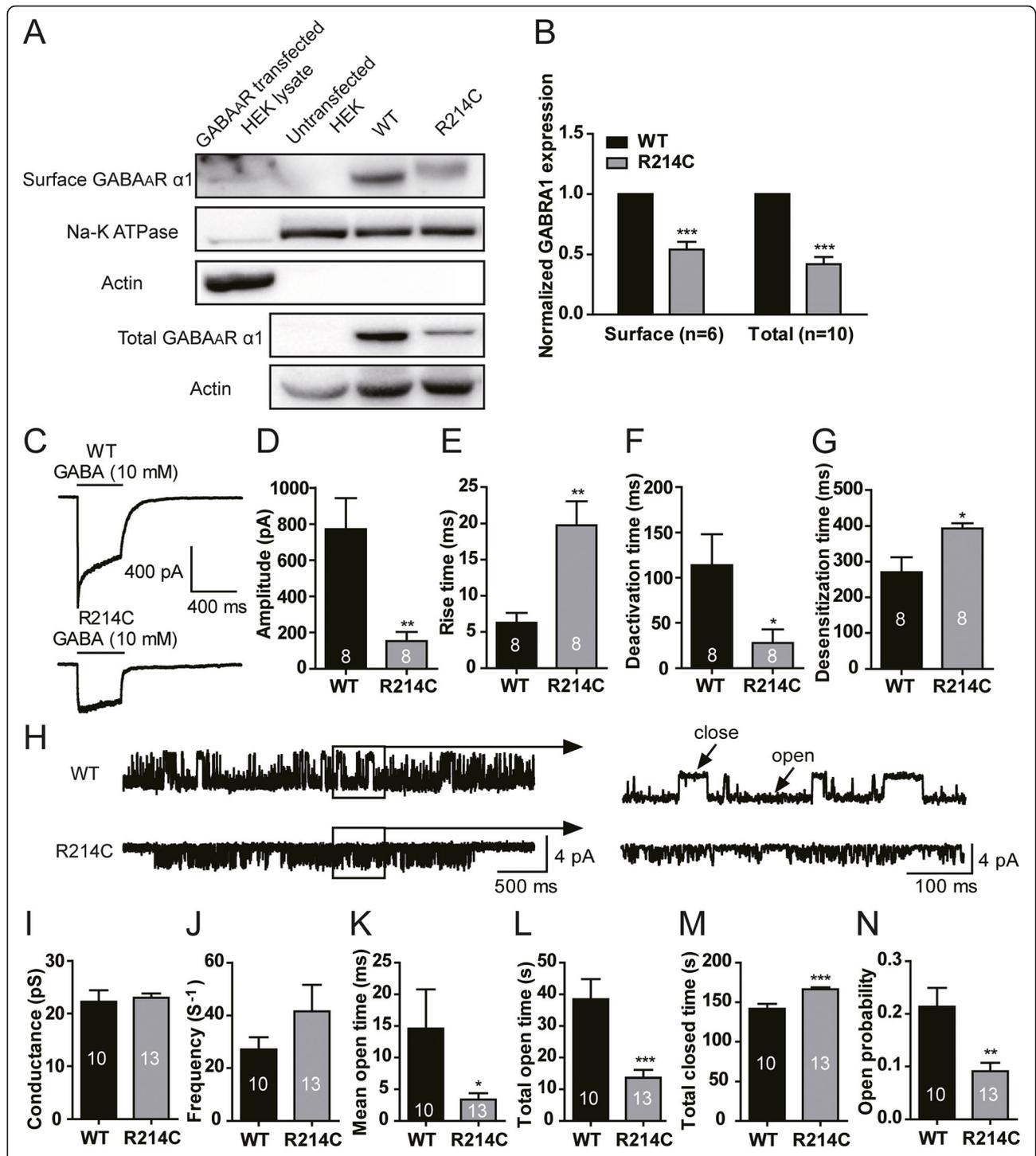
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**Fig. 4** The R214C mutation resulted in reduced surface and total expression levels of the  $\alpha 1$  subunit, and altered the kinetic and single channel properties of GABA<sub>A</sub>Rs. **a** Representative blots of biotinylation samples for surface receptor expression and cell lysates for total receptor expression from HEK293 cells expressing either WT or R214C GABA<sub>A</sub>Rs. **b** Quantification of surface  $\alpha 1$  subunits normalized to Na<sup>+</sup>/K<sup>+</sup> ATPase ( $n = 6$ ), and total  $\alpha 1$  subunits normalized to  $\beta$ -actin ( $n = 10$ ). Statistical differences were determined using student's *t*-test by comparing to expression levels of WT GABA<sub>A</sub>R expressing cells (\*\*\*\* $p < 0.001$ ). **c** Representative traces of GABA currents recorded in excised macro-patch membrane under outside-out configuration from WT or R214C GABA<sub>A</sub>R expressing cells. Currents were evoked by rapidly perfusion of 10 mM GABA to the membrane patch for 400 ms. Quantification of averaged peak current amplitudes (**d**), 10–90% rise time (**e**), deactivation rate (**f**) and desensitization (**g**) in WT ( $n = 8$ ) or R214C ( $n = 8$ ) GABA<sub>A</sub>R expressing cells. **h** Representative single channel current traces recorded under cell-attached configuration with a pipette containing GABA (1 mM) at a holding potential of +100 mV from cells expressing WT or R214C GABA<sub>A</sub>Rs. Quantified average of conductance (**i**), opening frequency (**j**), mean open time (**k**), total open time (**l**), total closed time (**m**), and open channel probability (**n**) of WT ( $n = 10$ ) or R214C ( $n = 13$ ) GABA<sub>A</sub>Rs. Statistical differences were determined using student's *t*-test by comparing to WT GABA<sub>A</sub>R cells (\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ )