

1 Interneuron migration

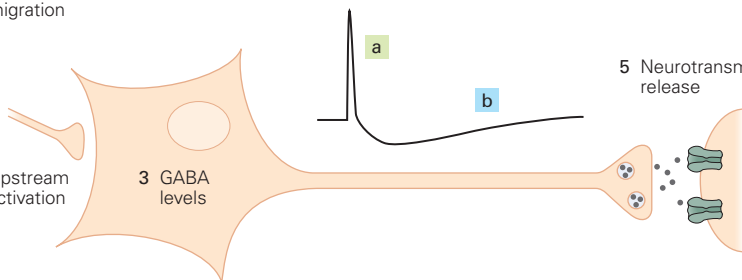
2 Upstream activation

3 GABA levels

4 Excitability (channelopathies)

5 Neurotransmitter release

6 Response to neurotransmitter (channelopathies)



	Channel	Subunits affected	Epilepsy
a	Voltage-gated Na <sup>+</sup>	Na <sub>V</sub> 1.1, Na <sub>V</sub> 1.2, β1	Generalized epilepsy with febrile seizures plus (GEFS+) Severe myoclonic epilepsy of infancy Benign infantile epilepsy
	Voltage-gated K <sup>+</sup>	K <sub>V</sub> 1.1	Temporal lobe epilepsy
	Ca <sup>2+</sup> -activated K <sup>+</sup>	Ca <sub>V</sub> 1.1	Absence epilepsy
b	GABA <sub>A</sub> receptor	α1, β3, γ2	GEFS+ Juvenile myoclonic epilepsy Childhood absence epilepsy
	M-type K <sup>+</sup>	KCNQ2/3	Benign neonatal epilepsy
	Voltage-gated Ca <sup>2+</sup>	Ca <sub>V</sub> 2.1	Absence epilepsy
	Cl <sup>-</sup>	CLCN2	Juvenile myoclonic epilepsy