

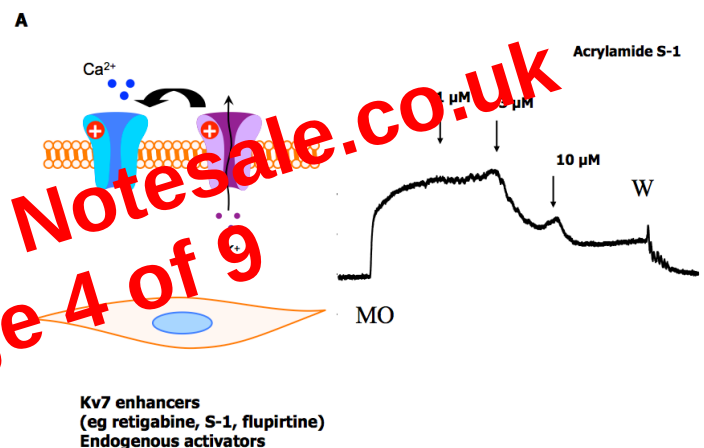
Blood Vessel	Q1	Q2	Q3	Q4	Q5*
Mouse PV*	●	●	●	●	●
Mouse aorta (T)*	●	●	●	●	●
Mouse aorta (ab)*	●	●	●	●	●
Mouse carotid*	●	●	●	●	●
Mouse femoral	●	ND	ND	ND	ND
Mouse mesentery	●	●	●	●	●
Mouse PA*	●	●	●	●	●
Mouse basilar	●	●	-	●	-
Rat basilar	●	●	●	●	-

Key:

- Small blue = little expression
- Big red = lots of expression

• Kv7 enhancers

- KCNQ 2,3,4,5 - anti epilepsy
- E.g. Retigabine, S-1, Flupirtine
- Endogenous activators
- Side effect - postural hypotension



1uM = contracted

3uM-10uM = Relaxing/relaxed

- KCNQ channel blockers increase cerebral vasospasm
- KCNQ channel openers prevent cerebral vasospasm
- Hence these are good targets for pathological vasospasm
- Myogenic response
 - Vessel dilates as pressure goes up but then constricts
- Aorta and conduit arteries express KCNQ genes
- KCNQ blockers that do NOT differentiate KCNQ isoforms are spasmogenic