



## Cell-Based Assays validated on QPatch 16X

Axxam offers both **manual and automated patch-clamp facilities** together with a long standing experience in working with electrogenic proteins and a deep understanding of ion channel biology. Axxam researchers have validated **several cell-based assays** for both ligand-gated and voltage-gated ion channels on an automated patch clamp platform.

### Cell-Based Assays validated on QPatch 16X

Sub-family	Symbol	Aliases / Other Designations	GenElD
Ligand gated cationic channels	P2RX2/3	Purinergic receptor P2X, ligand-gated ion channel, 2 / 3	22953 / 5024
	P2RX3	Purinergic receptor P2X, ligand-gated ion channel, 3	5024
	P2RX4	Purinergic receptor P2X, ligand-gated ion channel, 4	5025
	P2RX7	Purinergic receptor P2X, ligand-gated ion channel, 7	5027
	P2rx7 (mouse)	Mouse purinergic receptor P2X, ligand-gated ion channel, 7	18439
Transient receptor potential channels	TRPM2	Transient receptor potential cation channel, subfamily M, member 2	7226
	TRPM8	Transient receptor potential cation channel, subfamily M, member 8	79054
	TRPV1	Transient receptor potential cation channel, subfamily V, member 1	7442
Voltage gated Na <sup>+</sup> channels	<b>SCN5A (Nav1.5)</b>	Na <sup>+</sup> channel, voltage-gated, type V, alpha subunit	6331
	SCN9A (Nav1.7)	Na <sup>+</sup> channel, voltage-gated, type IX, alpha subunit	6335
Voltage gated K <sup>+</sup> channels	KCNA3 (Kv1.3)	K <sup>+</sup> voltage-gated channel, Shaker-related subfamily A, member 3	3738
	<b>KCNA5 (Kv1.5)</b>	K <sup>+</sup> voltage-gated channel, Shaker-related subfamily A, member 5	3741
	KCNB1 (Kv2.1)	K <sup>+</sup> voltage-gated channel, Shab-related subfamily B, member 1	3745
	KCNQ4 (Kv7.4)	K <sup>+</sup> voltage-gated channel, KQT-like subfamily Q, member 4	9132
	<b>KCNH2 (Kv11.1)</b>	K <sup>+</sup> voltage-gated channel, eag related subfamily H, member 2	3757
Inwardly rectifying K <sup>+</sup> channels	KCNJ4 (Kir2.3)	K <sup>+</sup> inwardly-rectifying channel, subfamily J, member 4	3761
Voltage gated Ca <sup>2+</sup> channels	<b>CACNA1C (Cav1.2)</b>	Ca <sup>2+</sup> channel, voltage-dependent, L type, alpha 1C subunit	775
	CACNA1D (Cav1.3)	Ca <sup>2+</sup> channel, voltage-dependent, L type, alpha 1D subunit	776
Ca <sup>2+</sup> activated K <sup>+</sup> channels	KCNN4 (KCa3.1)	Ca <sup>2+</sup> activated intermediate/small conductance subfamily N alpha, member 4	3783
Cyclic nucleotide-regulated channels	BCNG2 (HCN2)	hyperpolarization activated cyclic nucleotide gated K <sup>+</sup> channel 2	610
Store-operated Ca <sup>2+</sup> channels	CRAC	ORAI1 (calcium release-activated calcium modulator 1) + STIM-1 (stromal interaction molecule 1)	84876 - 6786

**We are constantly working on the validation of new assays and can adapt customer cell lines upon request.**

#### The QPatch 16X based Automated Patch Clamp unit allows:

- More than 300 data points per day
- Medium throughput screening for hit discovery, hit confirmation and **cardiac safety**
- Compound profiling on ready-to-use Axxam assays or on adapted client assays

*Please be aware that provision of the above listed assays may require third party licenses. All products are for research use only.*