



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 the automated patch clamp instrument QPatch 16X.

Cell-Based Assays validated on QPatch 16X			
Sub-family	Symbol	Aliases / Other Designations	GeneID
Ligand gated cationic channels	P2RX2/P2RX3	Heteromeric P2X2/P2X3 receptor	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 ⁺ channels	SCN9A (Nav1.7)	Na ⁺ channel, voltage-gated, type IX, alpha subunit	6335
Voltage gated K ⁺ channels	KCNA3 (Kv1.3)	K ⁺ voltage-gated channel, Shaker-related subfamily A, member 3	3738
	KCNA5 (Kv1.5)	K ⁺ voltage-gated channel, Shaker-related subfamily A, member 5	3741
	KCNB1 (Kv2.1)	K ⁺ voltage-gated channel, Shab-related subfamily B, member 1	3745
Voltage gated Ca ²⁺ channels	CACNA1C (Cav1.2)	Ca ²⁺ channel, voltage-dependent, L type, alpha 1C subunit	775
	CACNA1D (Cav1.3)	Ca ²⁺ channel, voltage-dependent, L type, alpha 1D subunit	776
Store-operated Ca ²⁺ channels	CRAC	ORAI1 (calcium release-activated calcium modulator 1) + STIM-1 (stromal interaction molecule 1)	84876 - 6786

Axxam is currently working on the validation of further cell lines and cell-based 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.