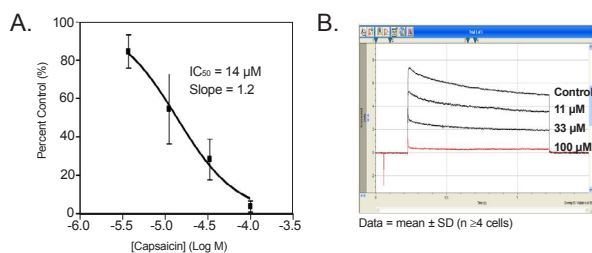




# Transfection to the $N^{th}$ Power.

## Ion Channel Expression

### Ion Channel Antagonist Pharmacology



Compound	MaxCyte transfected cells	Stable cell line	Literature
	End Step IC <sub>50</sub>	End Step IC <sub>50</sub>	IC <sub>50</sub>
Capsaicin	12 μM	48 μM	23 μM
Nifedipine	10 μM	16 μM	27 μM
Bupivacaine	49 μM	66 μM	13 μM

**Automated Electrophysiology Assays using MaxCyte transiently transfected cells.** *Table: CHO K1 cells transiently transfected with a Kv1.5 expression plasmid were incubated with varying concentrations of three ion channel inhibitors and assayed on the PatchXpress. IC<sub>50</sub> values for each compound compared favorably to data obtained using a stable cell line (data not shown). A). Pharmacological analysis of transiently transfected cells using the PatchXpress instrument. B). Representative current tracings that depict a step-wise loss of Kv1.5 activity in response to increasing concentrations of the inhibitor capsaicin. Data courtesy of BioFocus.*

The MaxCyte<sup>®</sup> STX<sup>™</sup> Scalable Transfection System uses electroporation technology and is an ideal solution for expressing functional multi-subunit ion channels. MaxCyte electroporation rapidly produces cells with high viability, transfection efficiency, and cell membrane integrity. Whether used immediately or cryopreserved for future use, transfected cells produce superior performance in downstream cellular assays such as calcium flux and automated electrophysiology assays. Results are comparable to stable cell lines, yet assays can be developed and conducted in just a fraction of the time.

### MaxCyte STX Scalable Electroporation

- • • Express functional multi-subunit, intractable or toxic Ion Channels
- • • Eliminate the reliance on stable cell lines
- • • Proven performance in downstream ion channel assays including FLIPR<sup>®</sup>, IonWorks<sup>®</sup> Quattro<sup>™</sup> & PatchXpress<sup>®</sup>
- • • Fully scalable, able to transfect  $5 \times 10^5$  cells in seconds up to  $1 \times 10^{10}$  cells in < 30 minutes

Contact us today to arrange a customized demonstration.