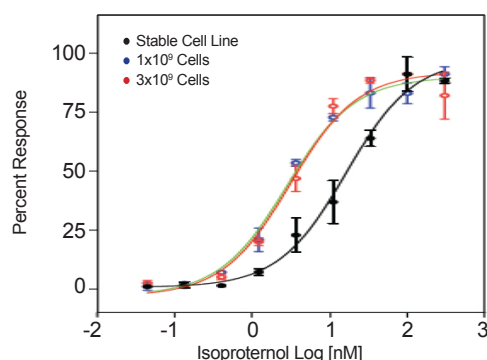




Transfection to the N^{th} Power.

GPCR Expression

GPCR Activation - cAMP Assay



Cells	Viability (%)	S/B	EC ₅₀ (nM)
1 x 10 ⁹ Transfected	97.5	3.8	3.00
3 x 10 ⁹ Transfected	97.2	5.0	2.83
CHO β2A Stable Cell Line	96.4	4.0	19.49

β2 Adrenergic Receptor Transfection: cAMP Assay Performance Comparison to Stable Cell Line. CHO K1 cells were transiently transfected with a plasmid encoding the β2 adrenergic receptor:eGFP fusion protein. Transfected cells and CHO cells stably expressing the non-modified β2A receptor were stimulated with various concentrations of isoproterenol and functional responses assessed using the DiscoverX cAMP kit. Two large scale transfections produced high quality, consistent results with cell viability of greater than 98%. Electroporation did not significantly affect cell viability or assay quality as the level of PI exclusion and assay S/B ratios were nearly identical to those of a reference stable cell line expressing native β2 adrenergic receptor. Importantly, transiently transfected cells performed similarly to the reference cell line in a cAMP assay as demonstrated by comparable isoproterenol EC₅₀ values.

The MaxCyte[®] STX[™] Scalable Transfection System uses electroporation to rapidly and reproducibly transfect up to 10¹⁰ cells in less than thirty minutes. It produces cells with high viability, transfection efficiency, and cell membrane integrity. Whether used immediately or cryopreserved for future use, transfected cells produce high quality results in downstream GPCR functional assays such as cAMP and calcium flux 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

- • • Eliminates the need for relying on GPCR expressing stable cell lines
- • • Expresses functional GPCRS with proven performance in cAMP and FLIPR[®] assays
- • • Compatible with primary cells, stems cells or other difficult-to-transfect cell lines
- • • Superior performance with reduced day-to-day assay variability
- • • Fully scalable, able to transfect 5x10⁵ cells in seconds up to 1x10¹⁰ cells in < 30 minutes

Contact us today to arrange a customized demonstration.