

GeneBLAzer® SCTR-CRE-*bla* CHO-K1 Cells

Catalog Numbers – K1805

Cell Line Descriptions

GeneBLAzer® SCTR-CRE-*bla* CHO-K1 cells contain the human Secretin Receptor (SCTR), (Accession # NM_002980.2) stably integrated into the CellSensor® CRE-*bla* CHO-K1 cell line. CellSensor® CRE-*bla* CHO-K1 cells (Cat. no. K1535) contain a beta-lactamase reporter gene under control of the CRE.

The GeneBLAzer® SCTR-CRE-*bla* CHO-K1 cells are functionally validated for Z'-factor and EC₅₀ concentrations of Secretin (Figure 1). In addition, GeneBLAzer® SCTR-CRE-*bla* CHO-K1 cells have been tested for assay performance under variable conditions.

Validation Summary

Testing and validation of this assay was evaluated in a 384-well format using LiveBLAzer™-FRET B/G Substrate.

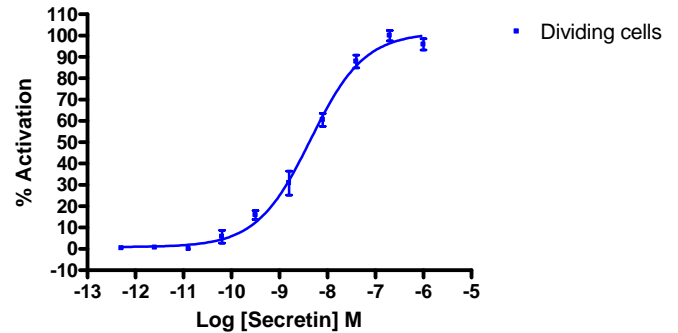
1. Secretin dose response under optimized conditions

	<u>Dividing Cells</u>
EC ₅₀	4.4 nM
Z'-factor	0.73
Recommended cell no. /well	= 10,000
Recommended Stim. Time	= 5 hrs
Max. [Stimulation]	= 1000 nM

	<u>DA cells</u>
EC ₅₀	8.6 pM
Z'-factor	0.66
Recommended cell no. /well	= 10,000
Recommended Stim. Time	= 5 hrs
Max. [Stimulation]	= 10 nM

Primary Agonist Dose Response

Figure 1 — GeneBLAzer® SCTR-CRE-bla CHO-K1 cells dose response to Secretin under optimized live cell conditions



GeneBLAzer® SCTR-CRE-bla CHO-K1 cells (10,000 cells/well) were plated in a 384-well format and incubated for 16-20 hours. Cells were stimulated with a dilution series of Secretin (Phoenix Pharmaceuticals 067-03) in the presence of 0.1% DMSO for 5 hours. Cells were then loaded with LiveBLAzer™-FRET B/G Substrate for 2 hours. Fluorescence emission values at 460 nm and 530 nm were obtained using a standard fluorescence plate reader and % Activation plotted for each replicate against the concentrations of Secretin.