Tango™ GALR2-*bla* U2OS cells

Catalog Numbers – K1811

Cell Line Descriptions

Tango™ GALR2-*bla* U2OS cells contain the human Galanin Receptor 2 (GALR2) linked to a TEV protease site and a Gal4-VP16 transcription factor stably integrated into the Tango™ GPCR-*bla* U2OS parental cell line. This parental cell line stably expresses a beta-arrestin/TEV protease fusion protein and the beta-lactamase reporter gene under the control of a UAS response element.

The Tango™ GALR2-*bla* U2OS cells have been functionally validated for Z' factor and EC_{50} concentrations of Galanin (1-30) (Figure 1).

Validation Summary

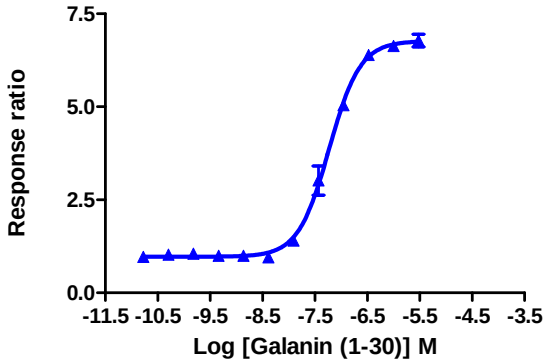
Testing and validation of this assay was evaluated in a 384-well format using LiveBLAzer™-FRET B/G Substrate.

1. **Galanin (1-30) dose response under optimized conditions**

	Dividing Cells
EC_{50}	16.84 nM
Z'-factor	0.84
Recommended cell no. /well	= 10,000
Recommended Stim. Time	= 5 hrs
Max. [Stimulation]	= 3000 nM

Primary Agonist Dose Response

Figure 1 — Tango™ GALR2-*bla* U2OS cells dose response to Galanin (1-30) under optimized conditions



Tango™ GALR2-*bla* U2OS 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 Galanin (1-30) (Tocris 1179) 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 Galanin (1-30).