
Optimization of the Tango™ CXCR1-*bla* U2OS Cell Line

Tango™ CXCR1-*bla* U2OS cells

Catalog Numbers – K1807

Cell Line Descriptions

Tango™ CXCR1-*bla* U2OS cells contain the human Chemokine (C-X-C motif) receptor 1 (CXCR1) 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™ CXCR1-*bla* U2OS cells have been functionally validated for Z' factor and EC₅₀ concentrations of IL-8 (Figure 1).

Validation Summary

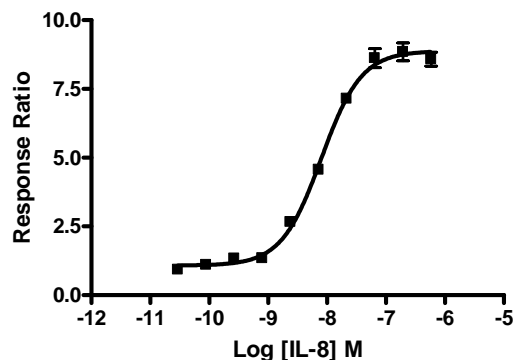
Testing and validation of this assay was evaluated in a 384-well format using LiveBLAzer™-FRET B/G Substrate.

1. IL-8 dose response under optimized conditions

EC ₅₀	8 nM
Z'-factor	3
Recommended cell no. /well	= 10,000
Recommended Stim. Time	= 5 hrs
Max. [Stimulation]	= 580 nM

Primary Agonist Dose Response

Figure 1 — Tango™ CXCR1-bla U2OS cells and cells dose response to IL-8 under optimized conditions



Tango™ CXCR1-bla U2OS cells and (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 IL-8 (Biosource PHC0885) 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 IL-8.