MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT SST2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1346-1

Lot Number: C1346-1-030609

Quantity: 1 vial (2 x 10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human SSTR2 cDNA (GenBank Accession Number AY236542) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 µg/ mL puromycin

Stability: Stable after minimum of two months continuous growth

Background: Somatostatin receptors are activated by somatostatin secreted from nerve and endocrine cells. The Somatostatin Receptors (SSTRs) are expressed in a tissue-specific manner and involved in the regulation of secretion of insulin, glucagon and growth hormone as well as cell growth induced by neuronal excitation in both the central and peripheral nervous systems. Aberrent expression of somatostatin receptors is known in a large number of human tumours. SSTR2 is expressed in highest levels in the stomach, jejunum, cerebrum, thyroid and kidney. Its gene expression is lost in 90% of human pancreatic adenocarcinomas while SSTR2 expression in neuroblastoma correlates positively to overall and event-free survival. Expression of SSTR-2 and SSTR-5 may be important in the growth inhibitory effect of somatostatin in human pancreatic cancer.

Application: Functional assays

Figure 1

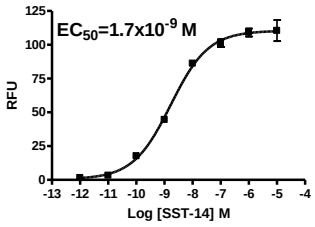

Figure 2

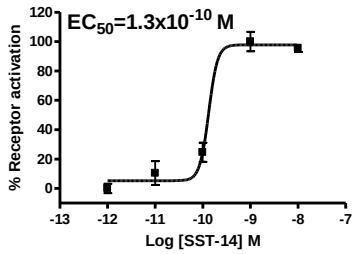

Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

References:

Ardjomand *et al*. (2003) Expression of somatostatin receptors in uveal melanomas. *Invest. Ophthal Vis Sci* 44:980-987.

Bertherat *et al*. (2003) Somatostatin receptors 2 and 5 are the major somatostatin receptors in insulinomas: an in vivo and in vitro study. *J Clin Endocr Metab* 88:5353-5360.

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