

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT SST5 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** CG1349-1

**Lot Number:** CG1349-1-081407

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** CHO-K1 Gα16

**Transfection:** Full-length Human SSTR5 cDNA (GenBank Accession Number NM\_001053) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

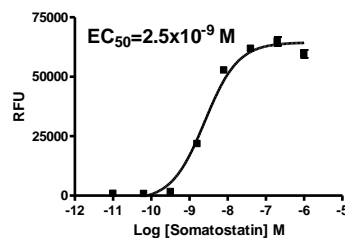
**Propagation Medium:** DMEM/F12, 10% FBS, 800 µg/mL G418, 10 µg/mL puromycin

**Stability:** Stable in culture for minimum of two months

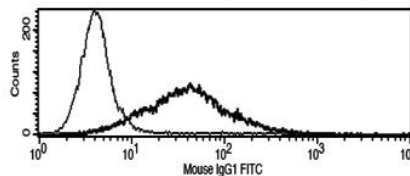
**Background:** Somatostatin receptors are activated by somatostatin secreted from nerve and endocrine cells. The Somatostatin Receptors (SSTRs) are expressed in a tissue-specific manner and involved in the regulation of secretion of insulin, glucagon and growth hormone as well as cell growth induced by neuronal excitation in both the central and peripheral nervous systems. Aberrant expression of somatostatin receptors is known in a large number of human tumors. The human medullary thyroid carcinoma cell line TT expresses all SSTR subtypes. SSTR5 is expressed in adult pituitary gland, heart, small intestine, adrenal gland, cerebellum and fetal hypothalamus. Expression has not been detected in fetal or adult kidney, liver, pancreas, uterus, spleen, lung, thyroid or ovary. SSTR5 is a candidate gene for bipolar affective disorder (BPAD) as well as for other neuropsychiatric disorders. Expression of SSTR2 and SSTR5 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.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

#### References:

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

Ballare *et al.* (2001) Mutation of somatostatin receptor type 5 in an acromegalic patient resistant to somatostatin analog treatment. *J Clin Endocr Metab* 86:3809-3814.

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