

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT SSTR4 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1348-1

Lot Number: CG1348-1-081407

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1 Gα16

Transfection: Expression vector containing full-length human SSTR4 (GenBank Accession Number NM_001052.1) cDNA with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 800 µg/mL G418, 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. Aberrant expression of somatostatin receptors is known in a large number of human tumours. The human medullary thyroid carcinoma cell line TT expresses all SSTR subtypes. SSTR4 inhibits the release of many hormones and other secretory proteins. It is highly expressed in human brain (fetal and adult), adult lungs, and the gastrointestinal tract, pancreas, and prostates.

Application: Functional assays

Figure 1

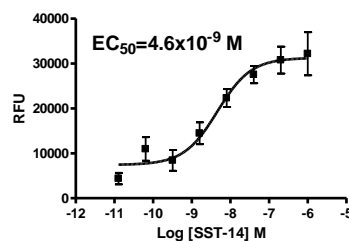


Figure 2

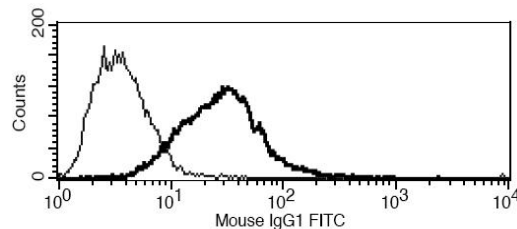


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Brinkmeier and Camper (1997) Localization of somatostatin receptor genes on mouse chromosomes 2, 11, 12, 15, and 17: correlation with growth QTLs. *Genomics* 43:9-14.

Demchyshyn *et al.* (1993) Cloning and expression of a human somatostatin-14-selective receptor variant (somatostatin receptor 4) located on chromosome 20. *Molec Pharm* 43:894-901.

FOR RESEARCH USE ONLY.

Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.