

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT NTS1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1276-1

Lot Number: C1276-1-013113

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human NTSR1 cDNA (GenBank Accession Number NM_002531.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: In progress

Background: Human NTS1 is a 418 amino acid transmembrane protein in the neurotensin receptor family. It is primarily expressed in the central nervous system and in peripheral tissues. The neurotensin family plays an important role in a wide range of biological activities, such as hypotension, hyperglycemia, and regulation of vascular permeability. Recent studies have shown that NTS1 antagonists have great potential to become novel drugs for the treatment of neurodegenerative diseases, such as Parkinson's disease.

Application: Functional assays

Figure 1

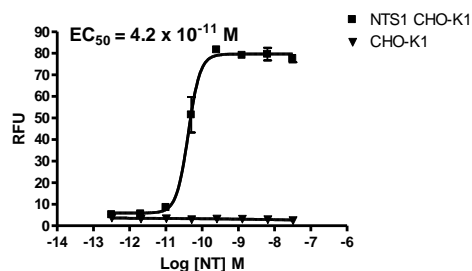


Figure 2

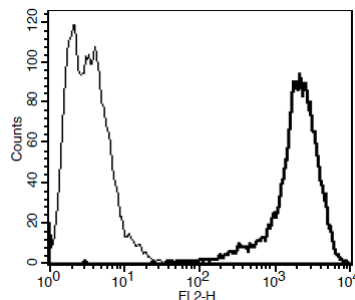


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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

References:

- Ferraro L, et al. (2009) "Emerging evidence for neurotensin receptor 1 antagonists as novel pharmaceuticals in neurodegenerative disorders." *Mini Rev Med Chem*. 9(12):1429-38.
- Vincent JP, et al. (1999) "Neurotensin and neurotensin receptors." *Trends Pharmacol Sci*. 20(7):302-9.

Wikberg JE, et al. (2008) "Targeting melanocortin receptors: an approach to treat weight disorders and sexual disorders." *Nat Rev Drug Discov*. 7(4):307-23.

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