MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT D4 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1338

Lot Number: CG1338-100813

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

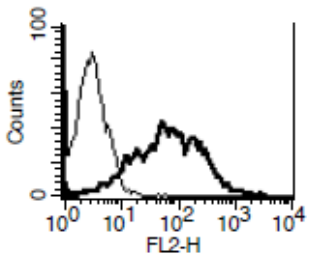
Transfection: Full-length Human DRD4 cDNA (GenBank Accession NM_000797) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 250 µg/mL hygromycin, 1µg/mL puromycin

Stability: Stable in culture for minimum of two months

Figure 2



Background: The human dopamine receptor D4 is a D2-like receptor that inhibits adenylyl cyclase activity and activates K+ channels. D4 receptor antagonists show great potential in the treatment of human personality and psychiatric disorders, such as ADHD (Attention deficit hyperactivity disorder), schizophrenia, alcoholism, and drug addiction.

Application: Functional assays

Figure 1

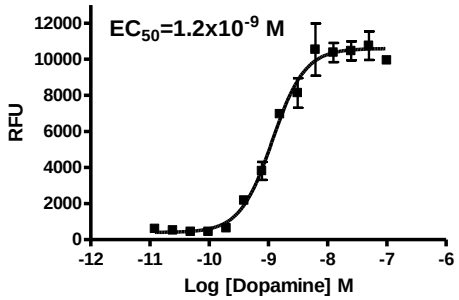


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).
Figure 2. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: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

References:

Kulkarni SK, et al. (2000) Dopamine D4 receptors and development of newer antipsychotic drugs. *Fundam Clin Pharmacol* 14(6):529-39.

Missale C, et al. (1998) Dopamine receptors: from structure to function. *Physiol Rev* 78(1):189-225.

Van Tol HH, et al. (1991) Cloning of the gene for a human dopamine D4 receptor with high affinity for the antipsychotic clozapine. *Nature* 350(6319):610-4

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