

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT D2 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1336b

**Lot Number:** C1336b-102924

**Quantity:** 1 vial (2 x 10<sup>6</sup>) frozen cells

**Freeze Medium:** Cellbanker 2

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human DRD2 cDNA (GenBank accession number NM\_016574.4) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

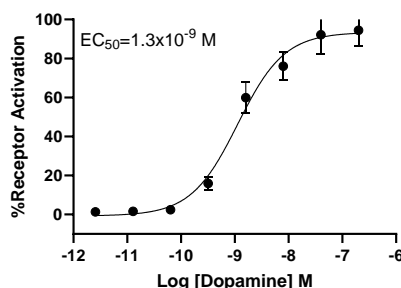
**Propagation Medium:** DMEM, 10% FBS, 1 µg/mL puromycin

**Stability:** Stable for a minimum of 2 months in continuous culture

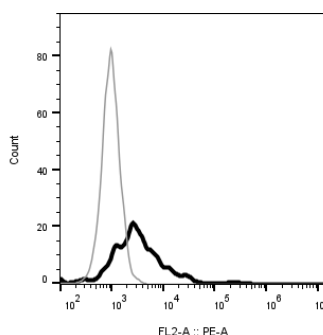
**Background:** The human dopamine receptor DRD2 (D2) is a G protein-coupled receptor for dopamine. It can be found on postsynaptic dopaminergic neurons that are centrally involved in reward-mediating mesocorticolimbic pathways. Signaling through dopamine D2 receptors governs physiological functions related to locomotion, hormone production, and drug abuse.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **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:

Grandy *et al.* (1989) Cloning of the cDNA and gene for a human D2 dopamine receptor. *Proc Nat Acad Sci USA* 86:9762-9766.

Neville *et al.* (2004) Identification and characterization of ANKK1: a novel kinase gene closely linked to DRD2 on chromosome band 11q23.1. *Hum Mutat* 23:540-545.

Usiello *et al.* (2000) Distinct functions of the two isoforms of dopamine D2 receptors. *Nature* 408:199-203.

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