

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT D2

### PRODUCT INFORMATION

**Catalog Number:** CG1336a

**Lot Number:** CG1336a-080525

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

**Freeze Medium:** Cellbanker 2

**Host cell:** HEK293T Gaqi5

**Transfection:** Expression vector containing full-length human D2 cDNA (Genbank Accession Number: NM\_000795) with flag tag sequence at N-terminus.

**Propagation Medium:** DMEM, 10% FBS, 1 µg/mL puromycin, 50 µg/mL hygromycin

**Recommended Storage:** Liquid nitrogen upon receiving

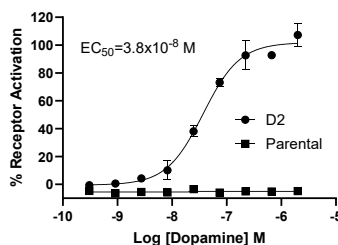
**Stability:** In progress

### Data sheet

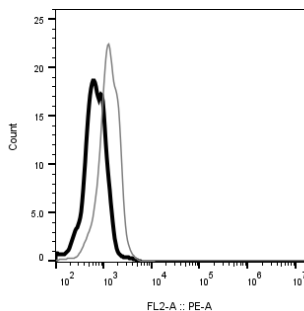
**Background:** The human dopamine receptor D2 (DRD2) is a G-protein-coupled receptor. It has 443 amino acids with predicted 7-transmembrane domains. The DRD2 locates on postsynaptic dopaminergic neurons that is centrally involved in reward-mediating mesocorticolimbic pathways. Signaling through dopamine D2 receptors governs physiologic functions related to locomotion, hormone production, and drug abuse.

**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. Black line: parental cells; gray line: receptor-expressing cells.

### References:

Grandy, D. K.; Marchionni, M. A.; Makam, H.; Stofko, R. E.; Alfano, M.; Frothingham, L.; Fischer, J. B.; Burke-Howie, K. J.; Bunzow, J. R.; Server, A. C.; Civelli, O. : Cloning of the cDNA and gene for a human D2 dopamine receptor. Proc. Nat. Acad. Sci. 86: 9762-9766, 1989.

Neville, M. J.; Johnstone, E. C.; Walton, R. T. : Identification and characterization of ANKK1: a novel kinase gene closely linked to DRD2 on chromosome band 11q23.1. Hum. Mutat. 23: 540-545, 2004.

Usiello, A.; Baik, J.-H.; Rouge-Pont, F.; Picetti, R.; Dierich, A.; LeMeur, M.; Piazza, P. V.; Borrelli, E. : Distinct functions of the two isoforms of dopamine D2 receptors. Nature 408: 199-203, 2000

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