



**MULTISPAN**  
Assay Experts in qPCRs and Beyond

## MULTISCREEN™ DIVISION-ARRESTED CELL LINE HUMAN RECOMBINANT D3 RECEPTOR

### PRODUCT INFORMATION

**Catalog Number:** DCG1337

**Lot Number:** DCG1337-092524

**Quantity:** 1 vial ( $4 \times 10^6$ ) frozen cells

**Freeze Medium:** Cellbanker 2 (Amsbio - 11891)

**Host cell:** HEK293T  $G\alpha_{qi5}$

**Transfection** Expression vector containing full-length human DRD3 cDNA (GenBank accession number NM\_000796.3 with FLAG tag sequence at N-terminus)

**Recommended Storage:** Liquid nitrogen upon receiving

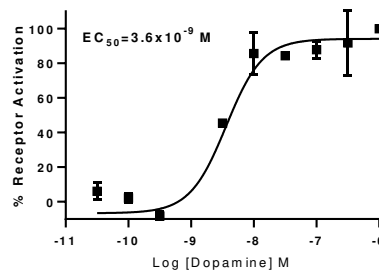
**Propagation Medium:** DMEM, 10% FBS

### Data sheet

**Background:** The human dopamine receptor DRD3 (D3) is a G protein-coupled receptor for dopamine. D3 receptor belongs to the D2-like family of dopamine receptors which are widely expressed in the central nervous system. D3 is involved in movement coordination, cognition, emotion, affects memory and the regulation of prolactin secretion by the pituitary. Alterations in D3 pathways can cause pathogenesis of neurological, neuropsychiatric and hormonal disorders, including Parkinson's Disease, schizophrenia and hyperprolactinemia.

**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).

### References:

Missale, C., Nash, S. R., Robinson, S. W., Jaber, M., & Caron, M. G. (1998). Dopamine receptors: from structure to function. *Physiological reviews*, 78(1), 189-225.

Taylor, M., Grundt, P., Griffin, S. A., Newman, A. H., & Luedtke, R. R. (2010). Dopamine D3 receptor selective ligands with varying intrinsic efficacies at adenylyl cyclase inhibition and mitogenic signaling pathways. *Synapse*, 64(3), 251-266.

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