

**MULTISCREEN™ DIVISION ARRESTED CELL LINE  
HUMAN RECOMBINANT D4 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** DC1338

**Lot Number:** DC1338-040712

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

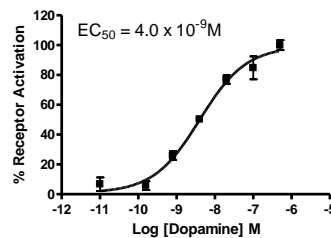
**Propagation Medium:** DMEM, 10% FBS,

**Stability:** Stable for 1-2 days after thawing

**Background:** The human dopamine receptor D4 is a D2-like receptor that inhibits adenylyl cyclase activity and activates K<sup>+</sup> 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 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).

**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

**FOR RESEARCH USE ONLY.**

Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.