

MULTISCREEN™ MEMBRANE PREPARATION HUMAN RECOMBINANT D5 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: MC1339

Lot Number: MC1339-020726

Quantity: Available 1mg, 5mg, or 10mg per vial

Protein concentration: 16.11 mg/mL

Packaging Buffer: 20mM Gly-Gly, 1 mM MgCl₂, 25mM Sucrose (pH 7.2)

Host cell: HEK293T

Transfection: Expression vector containing full-length human DRD5 cDNA (GenBank Accession Number NM_000798.3) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Background: The human dopamine receptor D5 is a D1-like receptor and its activation stimulates adenylyl cyclase activity. It has a 10-fold higher affinity for dopamine than the D1 receptor. The D5 receptor is expressed in neurons in the limbic regions of the brain, and has been implicated in ADHD and addiction disorders.

Application: Functional assays

Figure 1

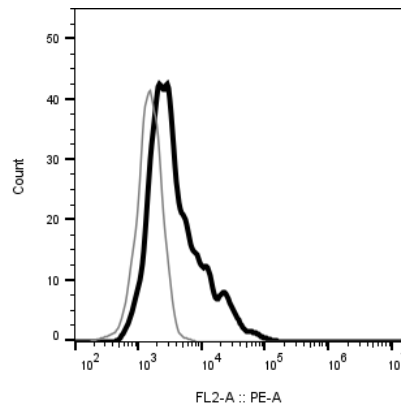


Figure 1. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Bergson *et al.* (1995) Regional, cellular, and subcellular variations in the distribution of D1 and D5 dopamine receptors in primate brain. *J Neurosci* 12:7821-7836.

Dearry *et al.* (1990) Molecular cloning and expression of the gene for a human D1 dopamine receptor. *Nature* 347:72-76.

Laplante *et al.* (2004) Reduction in Acetylcholine Release in the Hippocampus of Dopamine D5 Receptor-Deficient Mice. *Neuropsychopharmacology* 29:1620-1627.

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