

MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT MTNR1B/MT2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1224

Lot Number: C1224-073005

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T Gαq5

Transfection: Full-length human MTNR1B/MT2 (GenBank Accession Number NM_005959)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 200 μg/mL hygromycin, 1 μg/mL puromycin

Stability: Stable after minimum of two months continuous growth

Background: MT2 receptor, also known as MTNR1B (Melatonin receptor type 1B), is a high affinity receptor for melatonin. It is known to mediate the reproductive and circadian actions of melatonin and is considered as a novel therapeutic target for the development of subtype-selective analogs for the treatment of circadian sleep and mood-related disorders. MT2 receptor is also likely to mediate the interfering with the apoptotic pathway activated by heat shock in HL-60 cells.

Application: Functional assays

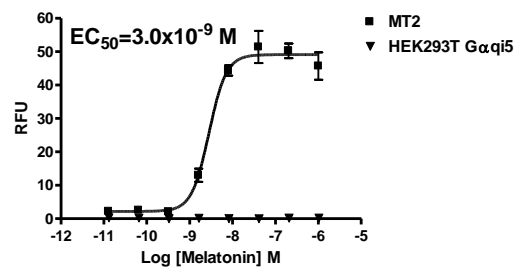


Figure legend: Dose-dependent calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Reppert *et al.* (1995) Molecular characterization of a second melatonin receptor expressed in human retina and brain: the Mel1b melatonin receptor. *Proc Natl Acad Sci USA* 92:8734-8738.

Cabrera *et al.* (2003) Melatonin prevents apoptosis and enhances HSP27 mRNA expression induced by heat shock in HL-60 cells: possible involvement of the MT2 receptor. *J Pineal Res* 35:231-238.

Dubocovich *et al.* (1998) Selective MT2 melatonin receptor antagonists block melatonin-mediated phase advances of circadian rhythms. *FASEB J* 12:1211-1220.

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