

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT CCR2 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1010

Lot Number: C1010-061510

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human CCR2 cDNA (GenBank accession number NM_000647.3) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable in culture for minimum of two months

Data sheet

Background: CCR2 (C-C chemokine receptor type 2 or monocyte chemoattractant protein 1 receptor) is a receptor for the MCP-1, MCP-3 and MCP-4 chemokines. It is also an alternative coreceptor with CD4 for HIV-1 infection. CCR2 has been widely considered as a potential therapeutic target for autoimmune disease and inflammatory disorders of the lung, particularly rheumatoid arthritis, and various CCR2 blocking agents have been developed, some of which might have therapeutic values.

Application: Functional assays

Figure 1

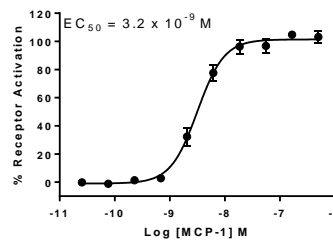


Figure 2

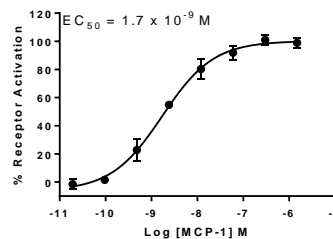


Figure 3

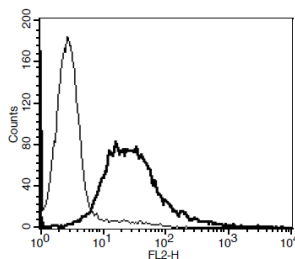


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 3.** 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:

Quinones *et al.* (2005) The complex role of the chemokine receptor CCR2 in collagen-induced arthritis: implications for therapeutic targeting of CCR2 in rheumatoid arthritis. *J Mol Med* 83:672-681.

Rose *et al.* (2003) Significant involvement of CCL2 (MCP-1) in inflammatory disorders of the lung. *Microcirculation* 10:273-288.

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