

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT CCR3 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1011

Lot Number: C1011-072611

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human CCR3 cDNA (GenBank Accession Number NM_001837) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: In progress

Background: CCR3 (C-C chemokine receptor type 3 or eosinophil eotaxin receptor) is a receptor for a C-C type chemokine and binds to eotaxin, eotaxin-3, MCP-3, MCP-4, RANTES and MIP-1 delta. The receptor subsequently transduces a signal by increasing the intracellular calcium level. Similar to CCR2, it is another alternative coreceptor with CD4 for HIV-1 infection. CCR3 is expressed on eosinophils, basophils, mast cell subpopulations, activated Th2 cells, macrophages and airway epithelial cells. Hence, CCR3 is closely associated with asthma and allergy and blockade of this receptor may have pronounced beneficial effects in these diseases.

Application: Functional assays

Figure 1

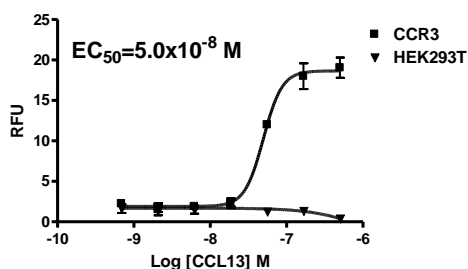


Figure 2

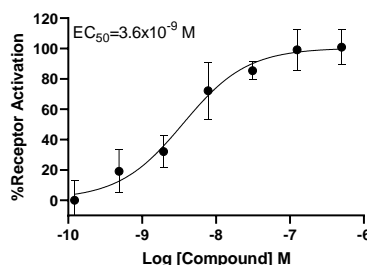


Figure 3

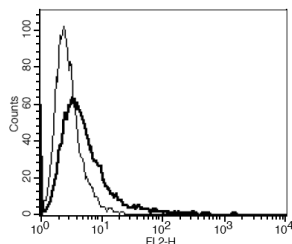


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with MULTISCREEN™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

Erin *et al.* (2002) Eotaxin receptor (CCR3) antagonism in asthma and allergic disease. *Curr Drug Targets Inflamm Allergy* 1:201-214.

Gangur *et al.* (2003) CCR3 and CXCR3 as drug targets for allergy: principles and potential. *Curr Drug Targets Inflamm Allergy* 2:53-62.

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