

**MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT CCR6 RECEPTOR**

Data Sheet

PRODUCT INFORMATION

Catalog Number: C1014b

Lot Number: C1014b-031516

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 CCR6 cDNA (GenBank Accession Number NM_004367) 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

Background: CCR6 is a receptor for macrophage inflammatory protein (MIP)-3α (CCL20). It is expressed in immature dendritic cells as well as in B lymphocytes and memory T cells. In gene-targeted mice lacking CCR6, myeloid dendritic cells are either absent or underrepresented in the subepithelial dome compared with wild-type mice. CCR6 and its ligands contribute to the normal homeostatic regulation of extrathymic T cell development in the intestine.

Application: Functional assays

Figure 1

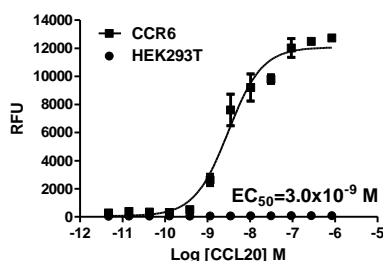


Figure 2

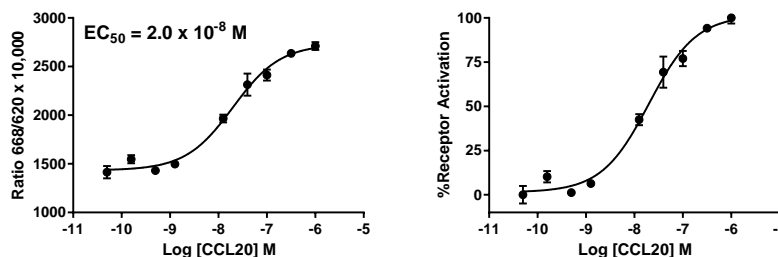


Figure 3

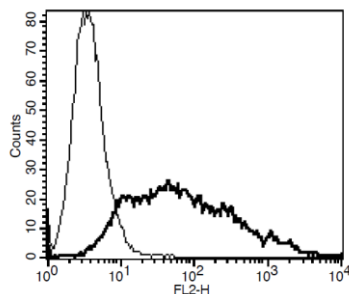


Figure 1. Dose-dependent calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET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

Baba et al. (1997) Identification of CCR6, the specific receptor for a novel lymphocytedirected CC chemokine LARC. *J Biol Chem* 272:14893-14898.

Cook et al. (2000) CCR6 mediates dendritic cell localization, lymphocyte homeostasis, and immune responses in mucosal tissue. *Immunity* 12:495-503.

Lugering et al. (2003) Lymphoid precursors in intestinal cryptopatches express CCR6 and undergo dysregulated development in the absence of CCR6. *J Immunol* 171:2208-2215.

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