

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT CXCR6 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** CG1006

**Lot Number:** CG1006-032213

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T Gaqi5

**Transfection:** Full-length Human CXCR6 cDNA (GenBank Accession Number NM\_006564) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

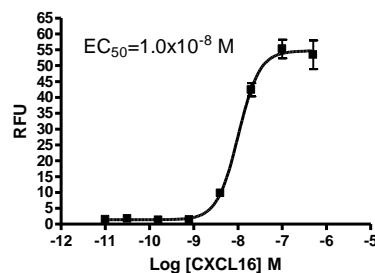
**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin, 250  $\mu$ g/mL hygromycin

**Stability:** In progress

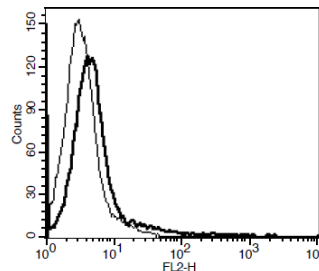
**Background:** CXCR6 (CXC-chemokine receptor type 6) is a receptor for CXC chemokine CXCL16. CXCR6 is expressed by naive CD8 T cells, natural killer T cells, a subset of memory CD4 T cells and plasma cells. CXCR6 and its ligand play an important role in the trafficking of the cells expressing them. It is demonstrated that CXCL16<sup>+</sup> macrophages in synovial fluid of rheumatoid arthritis patients lead to recruitment of CXCR6<sup>+</sup> memory T cells, thereby contributing to the inflammatory cascade associated with rheumatoid arthritis pathology. CXCR6 is also used as a coreceptor by simian immunodeficiency viruses (SIVs) and by strains of HIV-2 and M-tropic HIV-1.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**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.** 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:

Deng *et al.* (1997) Expression cloning of new receptors used by simian and human immunodeficiency viruses. *Nature* 388:296-300.

Blaak *et al.* (2005) CCR5, GPR15, and CXCR6 are major coreceptors of human immunodeficiency virus type 2 variants isolated from individuals with and without plasma viremia. *J Virol* 79:1686-1700.

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