

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT CXCR1 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1001a

**Lot Number:** C1001a-070909

**Quantity:** 1 vial (2 x 10<sup>6</sup>) frozen cells

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

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human CXCR1 cDNA (GenBank Accession Number NM\_000634.2) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

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

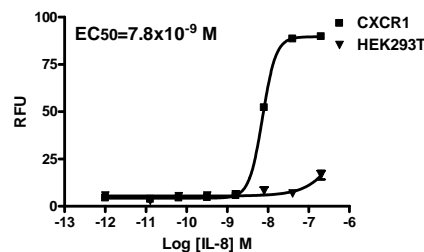
**Stability:** Stable in culture for minimum of two months

**Background:** CXCR1 is a high affinity interleukin-8 receptor (IL-8RA). Binding of IL-8 to the receptor causes activation of neutrophils. Neutrophils have been implicated in the pathogenesis of many inflammatory lung diseases, including acute respiratory distress syndrome, chronic obstructive pulmonary disease, and asthma. Antagonists of CXCR1 may block *in vivo* trafficking of neutrophils, suggesting that antagonism of IL-8 at the receptor level is a viable therapeutic strategy.

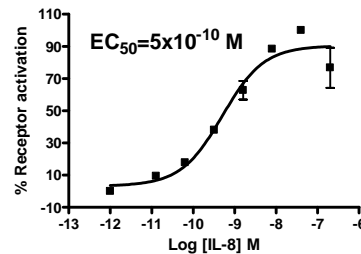
The Multispan HEK-CXCR1 cell line expresses IL8RA cDNA that is identical to GenBank NM\_000634.2 except for 2 missense mutations, Met → Arg at position 31 and Arg → Cys at position 335. Both have been reported to be natural variants.

**Application:** Functional assays

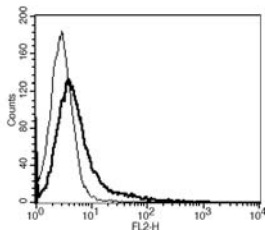
**Figure 1**



**Figure 2**



**Figure 3**



**Figure 1.** Dose-dependent stimulation of calcium flux upon treatment with ligand, monitored with FlexStation. **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with cAMP HiRange kit (Cisbio 62AM6PEC). **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:**

Pease and Sabroe (2002) The role of interleukin-8 and its receptors in inflammatory lung disease: implications for therapy. *Am J Respir Med* 1:19-25.

Varney *et al.* (2003) Expression of CXCR1 and CXCR2 receptors in malignant melanoma with different metastatic potential and their role in interleukin-8 (CXCL-8)-mediated modulation of metastatic phenotype. *Clin Exp Metastasis* 20:723-731.

**FOR RESEARCH USE ONLY.**

© 2005 Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.

www.multispaninc.com  
sales@multispaninc.com  
support@multispaninc.com

Ver. October 2005

Phone: +1 (510) 887-0817  
Fax: +1 (510) 887-0863  
26219 Eden Landing Road  
Hayward, CA 94545-3718  
U.S.A.