

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT GPR97 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1396

Lot Number: C1396-082815

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 GPR97 cDNA (GenBank accession Number BC064508) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable for a minimum of two months in continuous culture

Background: Human G-protein coupled receptor 97 (ADGRG3), a member of the adhesion GPCR family, is a recently orphanized receptor for beclomethasone dipropionate. GPR97 is expressed in immune cells, specifically thymocytes and pre-B cells. Current research studies on knockout mice demonstrate the importance of GPR97 in B-cell development and its potential as a therapeutic target for the treatment of immunological disorders.

Application: Functional assays

Figure 1

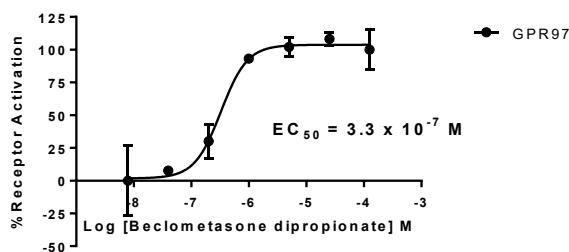


Figure 2

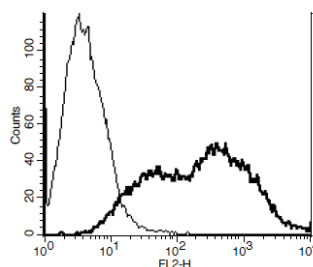


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Fredriksson R, Lagerström MC, Höglund PJ, Schiöth HB (Nov 2002). "Novel human G protein-coupled receptors with long N-terminals containing GPS domains and Ser/Thr-rich regions". *FEBS Letters* **531** (3): 407–14.

Stacey M, Yona S (2011). *Adhesion-GPCRs: Structure to Function (Advances in Experimental Medicine and Biology)*. Berlin: Springer.

Wang, J., Zhang, L., Zhang, H., Shen, C., Lu, S., Kuang, Y., ... Wang, Z. (2013). Gpr97 is essential for the follicular versus marginal zone B-lymphocyte fate decision. *Cell Death & Disease*, **4**(10), e853–. doi:10.1038/cddis.2013.346.

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