MULTISPAN
Assay Experts in GPCRs and Beyond

MULTISCREEN^{TM} HOMOZYGOUS STABLE CELL LINE HUMAN RECOMBINANT GPR65 RECEPTOR CRISPR KNOCK OUT

PRODUCT INFORMATION

Catalog Number: C1121-CSP75

Lot Number: C1121-CSP75-051523

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

Freeze Medium: Cell Banker 2 (Amsbio 11891)

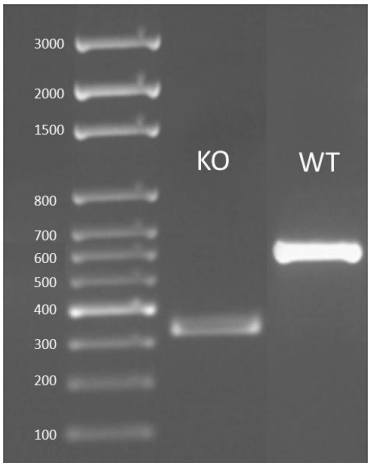
Host cell: Mia-Pa-Ca-2

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS

Stability: Stable for a minimum of 2 months in continuous culture

Figure 3: PCR confirmation of GPR65 knock-out clone by agarose gel electrophoresis



Data sheet

Background: GPR65 also known as T cell death-associated gene 8 (TDAG8) is a proton-sensing GPCR and plays a major role in pH homeostasis. This receptor is primarily expressed in lymphoid tissues (spleen, thymus, leukocytes and lymph nodes) and cancer tissues. The major function of this receptor is to reduce immune-mediated inflammation by regulating cytokine production from T cells and macrophages.

Application: Functional assays

Figure 1: Verified GPR65 coding sequence with deletion highlighted in grey.

ATGAACAGCACATGTATTGAAGAACAGCATGACCTGGATCACTATTTGTTTCCCATTGT
TTACATCTTTGTGATTATAGTCAGCATTCCAGCCAATATTGGATCTCTGTGTGTGTCTT
TCCTGCAAGCAAAGAAGGAAAGTGAACTAGGAATTTACCTCTTCAGTTTGTCACTATCA
GATTTACTCTATGCATTAACTCTCCCTTTATGGATTGATTATACCTGGAATAAAGACAA
CTGGACTTTCTCTCCTGCCTTGTGCAAAGGGAGTGCTTTTCTCATGTACATGAATTTTT
ACAGCAGCACAGCATTCCTCACCTGCATTGCCGTTGATCGGTATTTGGCTGTTGTCTAC
CCTTTGAAGTTTTTTTTCCTAAGGACAAGAAGATTTGCACTCATGGTCAGCCTGTCCAT
CTGGATATTGGAAACCATCTTCAATGCTGTCATGTTGTGGGAAGATGAAACAGTTGTTG
AATATTGCGATGCCGAAAAGTCTAATTTTACTTTATGCTATGACAAATACCCTTTAGAG
AAATGGCAAATCAACCTCAACTTGTTCAGGACGTGTACAGGCTATGCAATACCTTTGGT
CACCATCCTGATCTGCAACCGGAAAGTCTACCAAGCTGTGCGGCACAATAAAGCCACGG
AAAACAAGGAAAAGAAGAGAATCATAAAACTACTTGTCAGCATCACAGTTACTTTTGTC
TTATGCTTTACTCCCTTTCATGTGATGTTGCTGATTCGCTGCATTTTAGAGCATGCTGT
GAACTTCGAAGACCACAGCAATTCTGGGAAGCGAACTTACACAATGTATAGAATCACGG
TTGCATTAACAAGTTTAAATTGTGTTGCTGATCCAATTCTGTACTGTTTTGTAACCGAA
ACAGGAAGATATGATATGTGGAATATATTAAAATTCTGCACTGGGAGGTGTAATACATC
ACAAAGACAAAGAAAACGCATACTTTCTGTGTCTACAAAAGATACTATGGAATTAGAGG
TCCTTGAGTAG

Figure 2: Verified GPR65 knock out protein sequence product

MNSTCIEEQHDLDHYLFPIVYIFVIIVSIPANIGSLCVSFLQAKKESELGIYLFSLSLS
DLLYALTLPLWIDYTWNKDNWTFSPALCKGSAFLMYMNFYSSTAFLTCIQAMQYLWSPS
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References:

Ludwig, M.-G., Vanek, M., Guerini, D., Gasser, J. A., Jones, C. E., Junker, U., Hofstetter, H., Wolf, R. M., Seuwen, K. Proton-sensing G-protein-coupled receptors. Nature 425: 93-98, 2003.

Saxena, H., Deshpande, D., Tiegs, B., Yan, H., Battafarano, R., Burrows, W., Penn, R. (2012). The GPCR OGR1 (GPR68) mediates diverse signalling and contraction of airway smooth muscle in response to small reductions in extracellular pH. British Journal of Pharmacology, 166(3), 981–990.

Satoshi Ishii, Yasuyuki Kihara and Takao Shimizu (2005) Identification of T Cell Death-associated Gene 8 (TDAG8) as a Novel Acid Sensing G-protein-coupled Receptor. J Biol Chem 280: 9083-9087

FOR RESEARCH USE ONLY.

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