

Sphingosine-1-Phosphate Receptor 5 (S1PR5) Cell Line | S1PR5 cell line

Sphingosine-1-Phosphate Receptor 5 (S1PR5) ACTOne Stable Cell Line, HEK293

CATALOG # AAA62097	HOST HEK-293 CNG cells
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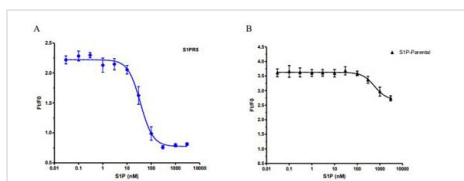
PRODUCT SYNONYMS

Sphingosine-1-Phosphate Receptor 5 (S1PR5); Sphingosine-1-Phosphate Receptor 5 (S1PR5) ACTOne Stable Cell Line; HEK293; Sphingosine-1-Phosphate Receptor 5 (S1PR5) ACTOne™ Stable Cell Line; S1PR5 cell line

PRODUCT SPECIFICATIONS

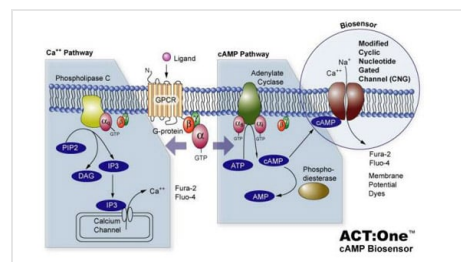
Host	HEK-293 CNG cells
Detection	FlexStation or Microplate reader
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Shipping Note	Product available only in the USA.
Preparation and Storage	Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130 degree C, preferably in liquid nitrogen vapor, until ready for use.

IMAGES



Application Data

Figure 1. Response of ACTOne™ S1PR5 cell line & parental cell line to S1P. ACTOne™ S1PR5 cells and parental cells were plated overnight in 20 µl culture medium on a 384 well Bi degree Coat plate. The next day, cells were dye-loaded with 20 µl/well of 1x Dye-loading solution (membrane potential dye kit). After 2 hours of incubation at room temperature, two readings were obtained prior to and 30 min after the addition of S1P. Ratios of the two readings (F/F0) are plotted in the figure. A. Dose response curve of S1P in ACTOne™ S1PR5 cell line. EC50 = 36 nM in the presence of PDE inhibitor Ro 20-1724 and ?-adren degree Ceptor agonist isoproterenol. B. Parental cells do not respond to S1P.



Application Data

ADDITIONAL INFORMATION

Related Product Information for S1PR5 cell line

Introduction: S1PR5 is a G-protein-coupled receptor which binds the bioactive signaling molecule sphingosine 1-phosphate (S1P). S1PR5 belongs to a sphingosine-1-phosphate receptor subfamily comprising five members (S1PR5-5). They are expressed in a wide variety of tissues, with each subtype exhibiting a different cell specificity, although they are found at their highest density on leukocytes. S1PR5 may play a regulatory role in the transformation of radial glial cells into astrocytes and may affect proliferative activity of these cells. **Description:** Human S1PR5 ACTOne™ is a HEK-293 CNG cell line that expresses recombinant human S1PR5. HEK-293 CNG cells express a modified CNG (Cyclic Nucleotide Gated) channel that opens in response to elevated intracellular cAMP levels and consequently result in ion flux (often detectable by calcium-responsive dye) and cell membrane depolarization which can be easily measured with fluorescent Membrane Potential Dye. The assay allows both end-point and kinetic measurement of intracellular cAMP changes with a FDSS, FLIPR, or a fluorescence microplate reader.

This cell line is a HEK-293-CNG cell line that expresses a recombinant human S1PR5. HEK-293-CNG cells express a modified CNG (Cyclic Nucleotide Gated) channel that opens in response to elevated intracellular cAMP levels and consequently result in ion flux and cell membrane depolarization.

Product Categories/Family for S1PR5 cell line	Membrane Receptor Stable Cell Lines; ACTOne GPCR Stable Cell Lines; Sphingosine-1-Phosphate Receptor 5 (S1PR5) ACTOne Stable Cell Line
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NCBI AND UNIPROT INFORMATION

NCBI GI #	261278306
NCBI GeneID	53637
NCBI Accession #	NP_001159687.1
NCBI GenBank Nucleotide #	NM_001166215.1
UniProt Accession #	Q9H228; Q6NW11
Molecular Weight	32,279 Da
NCBI Official Full Name	sphingosine 1-phosphate receptor 5
NCBI Official Synonym Full Names	sphingosine-1-phosphate receptor 5
NCBI Official Symbol	S1PR5
NCBI Official Synonym Symbols	EDG8; S1P5; Edg-8; SPPR-1; SPPR-2
NCBI Protein Information	sphingosine 1-phosphate receptor 5
UniProt Protein Name	Sphingosine 1-phosphate receptor 5
UniProt Gene Name	S1PR5
UniProt Synonym Gene Names	EDG8; S1P receptor 5; S1P5; S1P receptor Edg-8
UniProt Entry Name	S1PR5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.