

MULTISCREENTM DIVISION ARRESTED CELL LINE HUMAN RECOMBINANT LPA3 RECEPTOR

PRODUCT INFORMATION

Catalog Number: DC1053-6

Lot Number: 03/07/13

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing

Medium (C-6164)

Host cell: RH7777

Transfection: Expression vector containing full-length human LPAR3 cDNA (GenBank Accession Number NM_012152) with FLAG tag sequence

at N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

Propagation Medium: DMEM, 10%

FBS

Stability: Stable for 1-2 days after

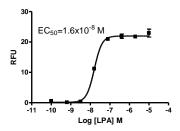
thawing

Data sheet

Background: LPA and the structurally related lysophoslipid mediator sphingosine 1-phosphate (S1P) signal cells through a set of G protein-coupled receptors known as EDG receptors. Some EDG receptors (e.g., EDG1) are S1P receptors; others (e.g., EDG2) are LPA receptors. LPA3 receptor (EDG7) mediates responses preferentially to unsaturated LPA, whereas LPA2 receptor (EDG4) mediates responses to both saturated and unsaturated LPA.

Application: Functional assays

Figure 1



Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Bandoh *et al.* (1999) Molecular cloning and characterization of a novel human G-protein-coupled receptor, EDG7, for lysophosphatidic acid. *J. Biol. Chem.* 274:27776-27785.

Ye et al. (2005) LPA3-mediated lysophosphatidic acid signalling in embryo implantation and spacing. Nature 435:104-108.