

$\begin{array}{c} \textbf{MULTISCREEN}^{\text{TM}} \ \textbf{DIVISION-ARRESTED} \ \textbf{CELL LINE} \\ \textbf{HUMAN RECOMBINANT MAS1 RECEPTOR} \end{array}$

PRODUCT INFORMATION

Catalog Number: DC1225

Lot Number: DC1225-102023

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2

(Amsbio 11891)

Host cell: HEK293T

Transfection: Full-length Human MAS1 cDNA (GenBank Accession Number NM_002377) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

Propagation Medium: DMEM, 10%

FBS

Data sheet

Background: MAS1 belongs to the family of MAS-related orphan G protein coupled receptors, which are primarily expressed in primary sensory neurons and mast cells. The MAS-related GPCRs may be implicated in nociception, pruritus, sleep, cell proliferation, circulation, and mast cell degranulation. The MAS1 receptor when activated by binding angiotensin-(1-7) opposes many of the effects of angiotensin-lactivated angiotensin receptor. Receptor agonists have similar therapeutic effects as angiotensin-III receptor antagonists including lowering blood pressure. Angiotensin peptide metabolites including angiotensin-III have also been reported to activate MAS1.

Application: Functional assays

Figure 1

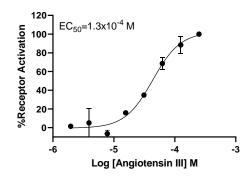


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Kalyan C. Tirupula1, Russell Desnoyer1, Robert C. Speth2, Sadashiva S. Karnik (2014). Atypical Signaling and Functional Desensitization Response of MAS Receptor to Peptide Ligands. *PLOS ONE*. V9 (7) e103520.

Solinski HJ, Gudermann T, Breit A (2014) Pharmacology and signaling of MAS-related G protein-coupled receptors. *Pharmacol. Rev. Jul;*66(3):570-97.

Young D, Waitches G, Birchmeier C, Fasano O, Wigler M (1986). "Isolation and characterization of a new cellular oncogene encoding a protein with multiple potential transmembrane domains". Cell. **45** (5): 711–9.