

MULTISCREENTM DIVISION-ARRESTED CELL LINE HUMAN RECOMBINANT MRGX2 RECEPTOR

PRODUCT INFORMATION

Catalog Number: DC1257a

Lot Number: DC1257a-050124

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2

Host cell: HEK293T

Transfection: Full-length human MRGX2 cDNA (GenBank Accession Number NM_054030) with FLAG tag

sequence at N-terminus

Recommended Storage: Liquid

nitrogen upon receiving

Propagation Medium: DMEM, 10%

FBS

Data sheet

Background: MRGX2 (MAS-related GPR member X2) is widely known as a receptor for cortistatin. It is probably involved in the function of nociceptive neurons and regulation of nociceptor function and/or development, including the sensation or modulation of pain. Cortistatin-14, a high potency agonist at the receptor, has biological functions including sleep regulation, locomotor activity and cortical function. Recent studies have found that MrgX2 is also a potential human PAMP-12 receptor that acts by inhibiting of the forskolin-elevated cAMP accumulation and regulates catecholamine secretion from adrenal glands.

Application: Functional assays

Figure 1

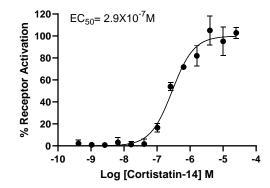


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Robas et al. (2003) MrgX2 is a high potency cortistatin receptor expressed in dorsal root ganglion. J Biol Chem 278:44400-44404.

Kamohara et al. (2005) Identification of MrgX2 as a human G-protein-coupled receptor for proadrenomedullin N-terminal peptides. Biochem Biophys Res Commun 330:1146-1152.