MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT AM1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1516-1

Lot Number: C1516-1- 081617

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

Freeze Medium: Cell Banker 2 (Amsbio 11891)

Host cell: CHO-K1

Transfection: Full-length Human CALCRL cDNA (GenBank Accession Number (NM_005795) with FLAG-tag sequence at the N-terminus and Full-length Human receptor activity modifying protein 1 (RAMP2) cDNA (GenBank Accession Number NM_005854.2) with myc-tag at the C-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DME/F12, 10% FBS, 10 μg/mL puromycin, 250μg/mL hygromycin

Stability: Stable in culture for minimum of two months

Data sheet

Background: CALCRL (calcitonin receptor-like receptor) is a calcitonin family receptor. The function and pharmacology of this receptor is modified in the presence of receptor activity-modifying proteins (RAMPs), which are single Transmembrane domain proteins of about 160 amino acids, having three isoforms: RAMP1, RAMP2 and RAMP3. CALCR can function either as a calcitonin gene-related peptide (CGRP) receptor or an adrenomedullin (AM) receptor, depending on which members of RAMPs, are co-expressed..The CALCRL/RAMP2 complex has been known as the adrenomedullin (AM1) receptor.

Application: Functional assays

Figure 1

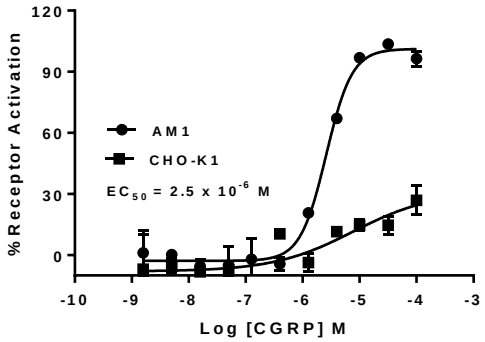

Figure 2

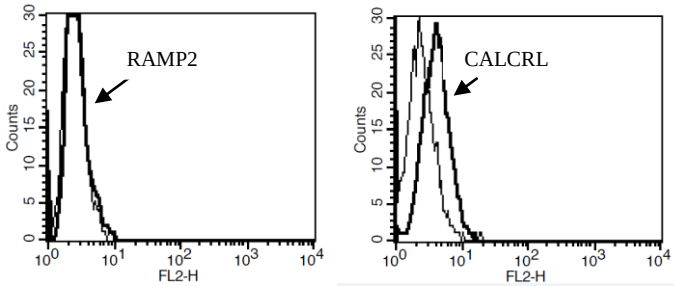

Figure 1. Dose-dependent increase of intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Morfis *et al. (*2008*)* Receptor Activity-Modifying Proteins Differentially Modulate the G Protein-coupling Efficiency of Amylin Receptors. Endocrinology: 149(11):5423–5431.

Hay *et al*. (2005) Pharmacological Discrimination of Calcitonin Receptor: Receptor Activity-Modifying Protein Complexes. *Mol Pharmacol* 67:1655–1665.

Gorn *et al.* (1992) Cloning, characterization, and expression of a human calcitonin receptor from an ovarian carcinoma cell line. *J Clin Invest* 90:1726-1735.

RJ Bailey et al.(2011). Pharmacological characterization of rat amylin receptors: implications for the identification of amylin receptor subtypes. BJP 166:151–167

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