

MULTISCREEN™ DIVISION ARRESTED CELL LINE HUMAN RECOMBINANT AM2 (CALCRL+RAMP3) RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1517-1

Lot Number: DC1516-1-040925

Quantity: 1 vial (4×10^6) frozen cells

Freeze Medium: Cell Banker 2

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 3 (RAMP3) cDNA (GenBank Accession Number BC053852) with myc-tag at the C-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DME/F12, 10% FBS

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. CALCRL 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/RAMP3 complex has been known as the adrenomedullin (AM2) receptor.

Application: Functional assays

Figure 1

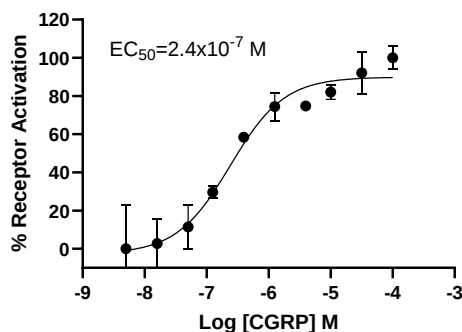


Figure 1. Dose-dependent increase of intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

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.

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