

## MULTISCREEN™ DIVISION ARRESTED CELL LINE HUMAN RECOMBINANT CGRP (CALCRL+RAMP1) RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** DC1515-1

**Lot Number:** DC1515-1-040925

**Quantity:** 1 vial (4 x 10<sup>6</sup>) 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 1 (RAMP1) cDNA (GenBank Accession Number BC000548) with myc-tag at the C-terminus

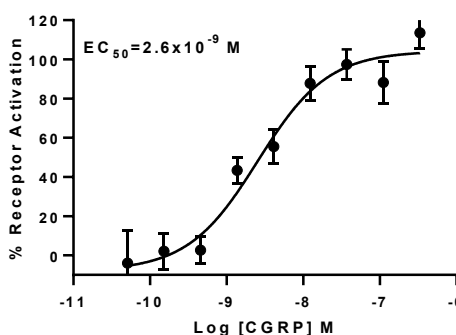
**Recommended Storage:** Liquid nitrogen upon receiving

**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/RAMP1 complex has been known as the CGRP receptor and has a very high affinity for CGRP. The CALCRL/RAMP1 complex has been known as the CGRP 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.

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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