

MULTISCREEN™ DIVISION ARRESTED CELL LINE
HUMAN RECOMBINANT AMY2 (CALCITONIN+RAMP2) RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1510-1a

Lot Number: DC1510-1a-112125

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2

Host cell: CHO-K1

Transfection: Full-length Human CT cDNA (GenBank Accession Number NM_001742) with FLAG-tag sequence at the N-terminus and Full-length Human receptor activity modifying protein 2 (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

Background: Amylin receptors are multimeric complexes and have been closely associated with Calcitonin receptor (CT). CT, in the presence of the receptor activity modifying proteins (RAMP1, RAMP2 and RAMP3), forms pharmacologically distinct Amylin subtypes (AMY1, AMY2 and AMY3) which it acts as a high affinity receptor for amylin, a hormone secrete by B cell of pancreas and has a major role in glucose regulation. The Calcitonin/RAMP1 complex has been known as the Amylin subtype AMY1 receptor.

Application: Functional assays

Figure 1

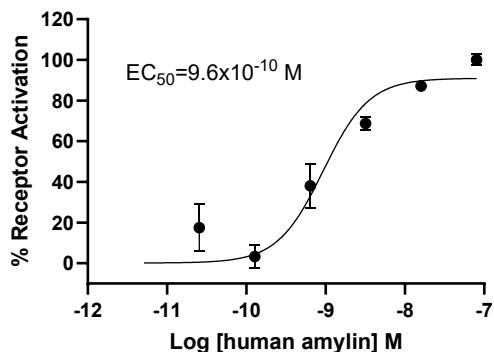


Figure 1. Dose-dependent stimulation of intracellular cAMP level upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

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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