

**MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT AMY1 RECEPTOR**

Data sheet

PRODUCT INFORMATION

Catalog Number: C1509-1a

Lot Number: C1509-1a-100217

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

Freeze Medium: Cell Banker 2
(Amsbio 11891)

Host cell: CHO-K1

Transfection: Full-length Human CALCR cDNA (GenBank Accession Number NM_001742) 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, 10 μ g/mL puromycin, 250 μ g/mL hygromycin

Stability: In Progress

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 acts as a high affinity receptor for amylin, a hormone secreted by B cell of pancreas that has a major role in glucose regulation.

Application: Functional assays

Figure 1

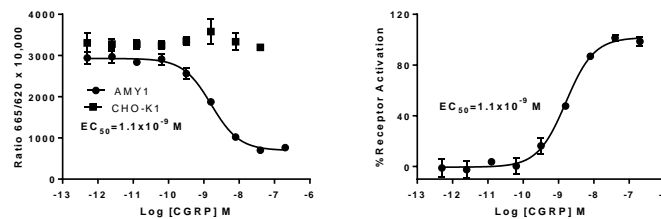


Figure 2

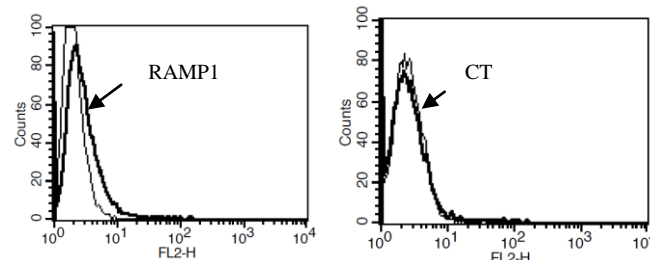


Figure 1. Dose-dependent increase of intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental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