

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

**PRODUCT INFORMATION**

**Catalog Number:** C1196a

**Lot Number:** C1196-021115

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human APLNR cDNA (GenBank Accession Number NM\_005161) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin

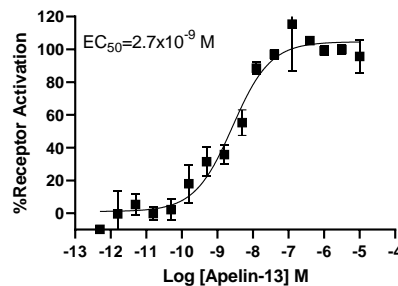
**Stability:** Stable after minimum of two months continuous growth

**Data sheet**

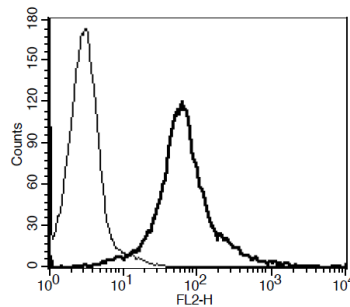
**Background:** APJ (also called AGTRL1, angiotensin II receptor-like 1) is a G-protein-coupled receptor that mediates diverse physiological effects of the neuropeptide apelin. It plays a role in the central and peripheral regulation of the cardiovascular system, in water and food intake, and possibly in immune function. APJ is highly expressed in the cardiovascular system and exerts the hypotensive effect *in vivo* and plays a counter-regulatory role against the repressor action of angiotensin II. APJ is also found to be a coreceptor for the entry of several HIV-1 and SIV strains, and apelin blocks the entry of HIV-1 and HIV-2.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent inhibition of forskolin-stimulated 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:**

Cayabyab *et al.* (2000) Apelin, the natural ligand of the orphan seven-transmembrane receptor APJ, inhibits human immunodeficiency virus type 1 entry. *J Virol* 74:11972-11976.

Katugampola *et al.* (2002) Discovery of recently adopted orphan receptors for apelin, urotensin II, and ghrelin identified using novel radioligands and functional role in the human cardiovascular system. *Can J Physiol Pharmacol* 80:369-374.

**FOR RESEARCH USE ONLY.**

Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.