

MULTISCREENTM STABLE CELL LINE MEMBRANE HUMAN RECOMBINANT APJ RECEPTOR

PRODUCT INFORMATION

Catalog Number: MC1196-1 Lot Number: C1196-1-111215

Quantity: 6.2mg/mL, 1mg

Packaging Buffer: 20 mM Gly-Gly, 1 mM MgCl₂, 250 mM Sucrose

Host cell: CHO-K1

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

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

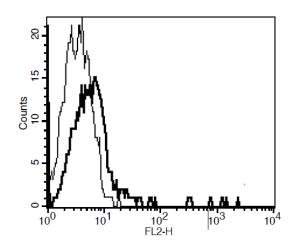


Figure 1. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Cayabyab *et al.* (2000) Apelin, the natural ligand of the orphan seventransmembrane 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.

© 2005 Multispan Inc. All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.