

MULTISCREEN™ MEMBRANE PREPARATION HUMAN RECOMBINANT APJ RECEPTOR

PRODUCT INFORMATION

Catalog Number: MC1196a

Lot Number: MC1196a-042523

Quantity: 1 vial (7.7 mg/mL),
1mg or 10mg

Packaging Buffer: 20mM Gly-Gly, 1
mM MgCl₂, 25mM Sucrose (pH 7.2)

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. Avoid
repeated freeze-thaw.

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

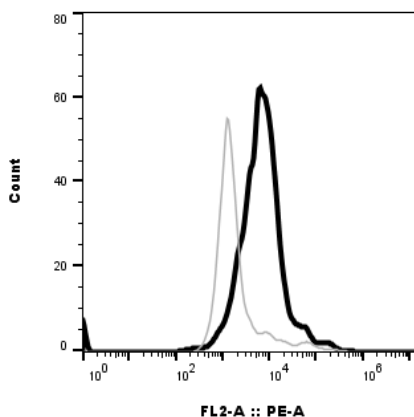


Figure 1. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

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

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