MULTISPAN
Assay Experts in GPCRs and Beyond

MULTISCREEN^{TM} MEMBRANE PREPARATION RAT RECOMBINANT EP2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: MCr1202

Lot Number: MCr1202-033021

Quantity: 1 vial (16.12mg/mL), 1, 5, or 10mg

Packaging Buffer: 20mM Gly-Gly, 1 mM $MgCl_2$, 25mM Sucrose (pH 7.2)

Host cell: HEK293T

Transfection Expression vector containing full-length rat EP2 cDNA (GenBank Accession Number NM_031088.1) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving. Avoid repeated freeze-thaw

Background: The human prostaglandin E2 (PGE2) receptor EP2 (PTGER2) is abundantly expressed in various tissues including the corneal epithelium of the eye, spinal cord, forebrain, articular cartilage, and kidney. EP2 plays important roles in bronchodilation, dilation of arterioles and venules, blood pressure regulation, smooth muscle relaxation, and bone formation. Modification of PGE2-EP2 receptor signaling may provide a new therapeutic strategy for renal regulation and blood pressure illnesses, as well as bone disease such as osteoarthritis.

Figure 1

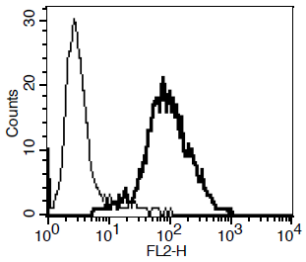

Figure 1. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells thick line: receptor-expressing cells.

References:

Morath *et al.* **(**1999) Immunolocalization of the four prostaglandin E2 receptor proteins EP1, EP2, EP3, and EP4 in human kidney. *J Am Soc Nephrol* 10:1851-1860.

Zhang *et al.* (2000) Characterization of murine vasopressor and vasodepressor prostaglandin E(2) receptors. *Hypertension* 35:1129-1134.

Li X *et al.* (2009) Prostaglandin E(2) and its cognate EP receptors control human adult articular cartilage homeostasis and are linked to the pathophysiology of osteoarthritis. *Arthritis Rheum* 60:513-523.

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