

MULTISCREEN™ MEMBRANE PREPARATION HUMAN RECOMBINANT DP2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: MH1105a

Lot Number: MH1105a-07202012

Quantity: 1 vial (15.6mg/ml)

Host cell: HEK293T

Transfection: Expression vector containing full-length human OPRL1 cDNA (GenBank Accession Number NM_000913.3) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen

Background: The chemoattractant-homologous receptor expressed on TH2 cells (CRTH2, also known as DP2 and GPR44) serves as a receptor for prostaglandin D2 (PGD2) and has been reported to mediate PGD2-dependent migration of eosinophils. DP2 mediates the pro-inflammatory effects of PGD2 generated in allergic inflammation. 11-Dehydro-thromboxane B2 (11-dehydro-TXB2) was found to be a full agonist of the DP2 receptor and hence might cause the receptor activation in cellular contexts where PGD-synthase is not present. Antagonism of the 11-dehydro-TXB2/DP2 axis may be of therapeutic relevance.

Application: Functional assays

Figure 1

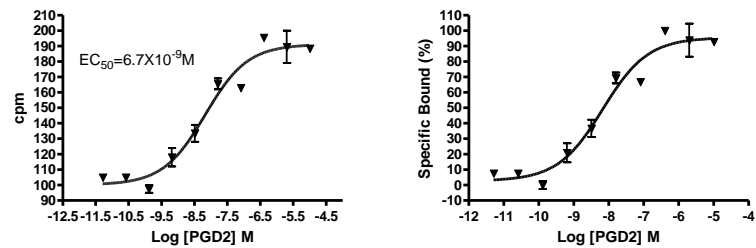


Figure 2

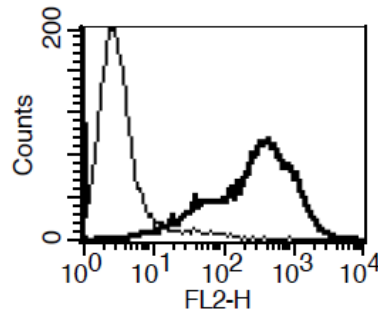


Figure 1. Dose-dependent [³⁵S]GTP γ S Binding to DP2 membrane upon treatment with agonist using homogenous proximity assay method. **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Nagata *et al.* (1999) CRTH2, an orphan receptor of T-helper-2-cells, is expressed on basophils and eosinophils and responds to mast cell-derived factor(s). *FEBS Lett* 459:195-199.

Bohm *et al.* (2004) 11-Dehydro-thromboxane B2, a stable thromboxane metabolite, is a full agonist of chemoattractant receptor-homologous molecule expressed on TH2 cells (CRTH2) in human eosinophils and basophils. *J Biol Chem* 279:7663-7670.

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.

www.multispaninc.com
sales@multispaninc.com
support@multispaninc.com

Ver. October 2005

Phone: +1 (510) 887-0817
Fax: +1 (510) 887-0863
26219 Eden Landing Road
Hayward, CA 94545-3718
U.S.A.