

Product Information

MemDX™ Membrane Protein Human RGR (Retinal G protein coupled receptor) Full Length

Cat. No.: **MPC1089K**

This product is for research use only and is not intended for diagnostic use.

This product is a 31.8 kDa Human RGR membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

RGR

Protein Length

Full length

Protein Class

GPCR

Molecular Weight

31.8 kDa

TMD

7

Sequence

MAETSALPTGFGELEVLAVGMVLLVEALSGLSLNTLTIFSFKTPELRTP
CHLLVLSLALADSGISLNALVAATSSLLRRWPYGSDGCQAHGFQGFVTAL
ASICSSAAIAWGRYHHYCTRSQAWNSAVSLVLFVWLSSAFWAALPLLGW
GHYDYEPLGTCCTLDYSKGDNRNFTSFLFTMSFFNFAMPLFITITSYSLME
QKLGKSGHLQVNTTLPARTLLLWGPGPYAILYLYAVIADVTSISPKLQMVP
ALIAKMVPTINAINYALGNEMVCRGIWQCLSPQKREKDRTK

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

RGR

Full Name

Retinal G protein coupled receptor

Introduction

This gene encodes a putative retinal G-protein coupled receptor. The gene is a member of the opsin subfamily of the 7 transmembrane, G-protein coupled receptor 1 family. Like other opsins which bind retinaldehyde, it contains a conserved lysine residue in the seventh transmembrane domain. The protein acts as a photoisomerase to catalyze the conversion of all-trans-retinal to 11-cis-retinal. The reverse isomerization occurs with rhodopsin in retinal photoreceptor cells. The protein is exclusively expressed in tissue adjacent to retinal photoreceptor cells, the retinal pigment epithelium and Mueller cells. This gene may be associated with autosomal recessive and autosomal dominant retinitis pigmentosa (arRP and adRP, respectively). Alternative splicing results in multiple transcript variants encoding different isoforms.

Alternative Names

RGR; RP44; RPE-retinal G protein-coupled receptor; RGR-opsin; Retinal G protein coupled receptor

Gene ID

[5995](#)

UniProt ID

[P47804](#)