

Product Information

MemDX™ Membrane Protein Human RGR (Retinal G protein coupled receptor) for Antibody

Discovery

Cat. No.: **MP1079X**

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

This product is a 58.19 kDa Human RGR membrane protein expressed in *In vitro* wheat germ expression system. 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

Molecular Weight

58.19 kDa

TMD

7

Sequence

MAETSALPTGFGELEVLAVGMVLLVEALSGLSLNTLTIFSFKTPELRTPCHLLVLSLALADSGISLNALVAATSSLLRVSHRRWPYGS

Product Description

Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

Expression Systems

In vitro wheat germ expression system

Tag

GST-tag at N-terminal

Form

Liquid

Purification

Glutathione Sepharose 4 Fast Flow

Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0

Storage

Store at +4°C for up to one week or several months at -80°C

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

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

Gene ID

[5995](#)

UniProt ID

[P47804](#)