

Product Information

MemDX™ Membrane Protein Human GPR149 (G protein-coupled receptor 149) Expressed *in vitro* *E.coli* expression system, Full Length

Cat. No.: **MPX3655K**

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

This product is a Human GPR149 membrane protein expressed *in vitro* *E.coli* 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

GPR149

Protein Length

Full Length

Protein Class

GPCR

TMD

7

Sequence

MSLFLSNLSTNDSSLWKENHNSTDLLNPPGTLNIYLFCLTCLMTFAALVGSIYSLISLLKMQNRTTVSMLVASWSVDDLMSVLSVTIF

Product Description

Expression Systems

in vitro *E.coli* expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

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

GPR149

Full Name

G protein-coupled receptor 149

Introduction

This gene encodes a seven-transmembrane G protein coupled receptor (GPCR) class A family member. Although categorized as a class A GPCR, the encoded protein lacks the first two charged amino acids of the highly conserved Asp-Arg-Tyr (DRY) motif found in the third transmembrane helix of class A receptors which is important for efficient G protein-coupled signal transduction. Mice with a knockout of the orthologous gene are viable and have normal maturation of the ovarian follicle, but show enhanced fertility and ovulation. All GPCRs have a common structural architecture consisting of seven transmembrane alpha-helices interconnected by three extracellular and three intracellular loops. A general feature of GPCR signaling is agonist-induced conformational changes in the receptor, leading to activation of the heterotrimeric G proteins, which consist of the guanine nucleotide-binding G-alpha subunit and the dimeric G-beta-gamma subunits. The activated G proteins then bind to and activate numerous downstream effector proteins, which generate second messengers that mediate a broad range of cellular and physiological processes.

Alternative Names

GPR149; R35; IEDA; PGR10; probable G-protein coupled receptor 149; G protein-coupled receptor PGR10; G protein-coupled receptor 149

Gene ID

[344758](#)

UniProt ID

[Q86SP6](#)