

Product Information

NativeExtract™ Human GPR149 Membrane Protein (Full length, Super Nanodisc)

Cat. No.: **S01YF-1023-KX244**

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

This product is recombinant Human GPR149 protein in native nanodisc form. The synthetic compound we developed can solubilize the GPR149 protein from membrane while retaining the native structure.

Product Specifications

Host Species

Human

Target Protein

GPR149

Protein Length

Full length

Molecular Weight

81kDa

Sequence

Accession # [Q86SP6](#)

Product Description

Activity

Yes

Application

ELISA; SPR Binding Assays; Phage Display Screening; Immunity; Functional Assays

Expression Systems

HEK293 expression system

Tag

Flag tag at the C-terminus

Protein Format

Native Nanodisc

Form

Liquid

Buffer

20 mM Tris-HCl, 150 mM NaCl, pH 8.0

Storage

The product should be stored at -20°C to -80°C.

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

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

Gene ID

[344758](#)

UniProt ID

[Q86SP6](#)