Datasheet for ABIN7491689

# LGR5 Protein

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## Overview

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| Quantity: | 100 µg |
| Target: | LGR5 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Synthetic Nanodisc |

## Product Details

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| Purpose: | Human LGR5 full length protein-synthetic nanodisc |
| Characteristics: | Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified. |

## Target Details

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| Target: | LGR5 |
| Alternative Name: | LGR5 (LGR5 Products) |
| Background: | The protein is a leucine-rich repeat-containing receptor (LGR) and member of the G protein-coupled, 7-transmembrane receptor (GPCR) superfamily. The encoded protein is a receptor for R-spondins and is involved in the canonical Wnt signaling pathway. This protein plays a role in the formation and maintenance of adult intestinal stem cells during postembryonic development. Several transcript variants encoding different isoforms have been found for this |

## Target Details

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| | gene. |
| Molecular Weight: | The human full length LGR5 protein has a MW of 100.0 kDa |
| UniProt: | O75473 |
| Pathways: | WNT Signaling |

## Application Details

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| Comment: | Advantages of Synthetic Nanodiscs:<br>• Highly purified membrane proteins<br>• High solubility in aqueous solutions<br>• High stability<br>• Proteins are in a native membrane environment and remain biologically active<br>• No detergent and can be used for cell-based assays<br>• No MSP backbone proteins<br><br>Limitations of Synthetic Nanodiscs:<br>• Intolerant to acids and high concentrations of divalent metal ions |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Lyophilized |
| Buffer: | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0).<br>Normally 5 % - 8 % trehalose is added as protectants before lyophilization. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).<br>Lyophilized proteins are shipped at ambient temperature. |
| Expiry Date: | 12 months |