PRODUCT INFORMATION

Target	LGR5
Synonyms	LGR5, GPR49, GPR67, GRP49, HG38, FEX, Leucine-Rich Repeat-Containing G Protein-Coupled Receptor 5, G Protein-Coupled Receptor 49
Description	Recombinant Cynomolgus LGR5 protein with C-terminal human Fc tag
Delivery	In STOCK
Uniprot ID	G7PI19
Expression Host	HEK293
Tag	C-Human Fc tag
Molecular Characterization	LGR5(Ser22-Gly557)+hFc(Glu99-Ala330)
Molecular Weight	The protein has a predicted molecular mass of 86.0 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
Storage&Shipping	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). Lyophilized proteins are shipped at ambient temperature.
Background	LGR5, also known as GPR49, is a seven-transmembrane G protein-coupled receptor characterized by a large extracellular domain containing multiple leucine-rich repeats. LGR5 functions as a receptor for R-spondin proteins and enhances canonical Wnt signaling, a pathway involved in cell proliferation, differentiation, and tissue homeostasis. LGR5 is widely recognized as a marker of adult stem cells in tissues such as the intestinal epithelium, stomach, hair follicles, and other regenerative organs. It contributes to the maintenance and self-renewal of tissue stem-cell populations. Aberrant LGR5 expression has been identified in several cancers and may be associated with cancer stem-cell properties, tumor growth, metastasis, and treatment resistance. LGR5 is therefore an important target for stem-cell biology, regenerative medicine, oncology, and antibody-drug development.
Usage	Research use only
Conjugate	Unconjugated

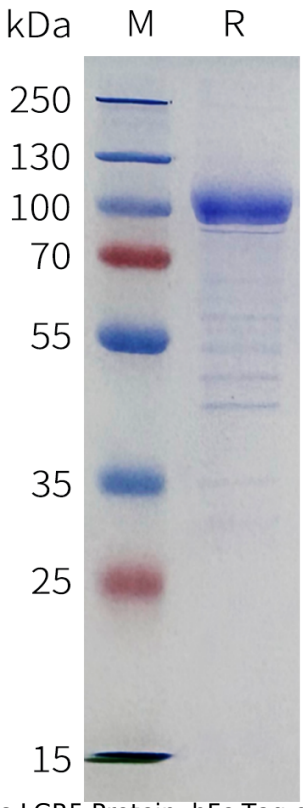

Figure 1. Cynomolgus LGR5 Protein, hFc Tag on SDS-PAGE under reducing condition.