

# Human LGR-5 Protein

Cat. No. LGR-HM205

## Description

<b>Source</b>	Recombinant Human LGR-5 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Gly22-Pro543.
<b>Accession</b>	O75473-1
<b>Molecular Weight</b>	The protein has a predicted MW of 85 kDa. Due to glycosylation, the protein migrates to 110-120 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

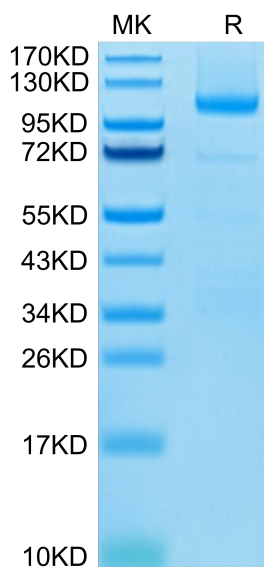
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS, 5mM DTT (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

G protein-coupled receptor 5 (LGR5), known as a stem cell marker for colon cancer and gastric cancer, can serve as a novel GSC marker involved in EMT and a therapeutic target in glioma. LGR5 is a new functional GSC marker and prognostic indicator that can promote EMT by activating the Wnt/ $\beta$ -catenin pathway and would thus be a novel therapeutic target for glioma.

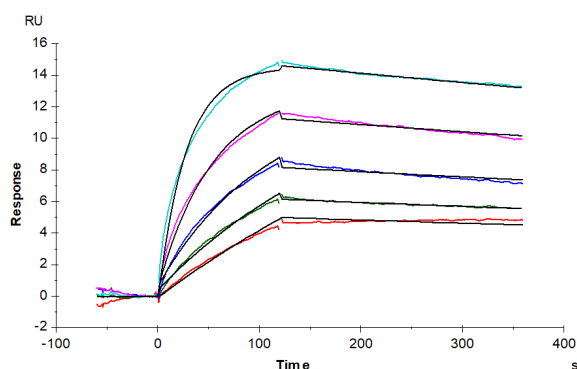
## Assay Data

### Bis-Tris PAGE



Human LGR-5 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SPR Data



Human LGR-5, hFc Tag captured on CM5 Chip via Protein A can bind Human R-Spondin 3, His Tag with an affinity constant of 0.59 nM as determined in SPR assay (Biacore T200).