

# Human SG3/Secretogranin 3 Protein

Cat. No. SGS-HM101

## Description

<b>Source</b>	Recombinant Human SG3/Secretogranin 3 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe20-Leu468.
<b>Accession</b>	Q8WXD2-1
<b>Molecular Weight</b>	The protein has a predicted MW of 52.1 kDa. Due to glycosylation, the protein migrates to 55-68 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

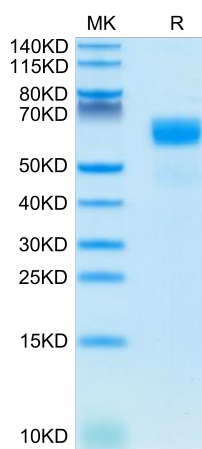
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Secretogranin III (Scg3) is a member of the granin protein family that regulates the biogenesis of secretory granules. Scg3 was recently discovered as an angiogenic factor, expanding its functional role to extrinsic regulation. Unlike many other known angiogenic factors, the pro-angiogenic actions of Scg3 are restricted to pathological conditions. Among thousands of quantified endothelial ligands, Scg3 has the highest binding activity ratio to diabetic vs.

## Assay Data

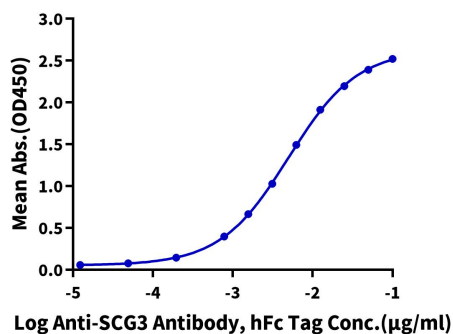
### Bis-Tris PAGE



Human SG3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

**Human SG3, His Tag ELISA**  
0.05 $\mu\text{g}$  Human SG3, His Tag Per Well



Immobilized Human SG3, His Tag at 0.5 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}/\text{Well}$ ) on the plate. Dose response curve for Anti-SG3 Antibody, hFc Tag with the EC50 of 5.0ng/ml determined by ELISA.