

# Human R spondin 1/RSPO1 Protein

Cat. No. RS1-HM101

Description	
Source	Recombinant Human R spondin 1/RSPO1 Protein is expressed from CHO with His tag at the C-Terminus. It contains Arg31-Ala263.
Accession	Q2MKA7
Molecular Weight	The protein has a predicted MW of 27.3 kDa. Due to glycosylation, the protein migrates to 38-42 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

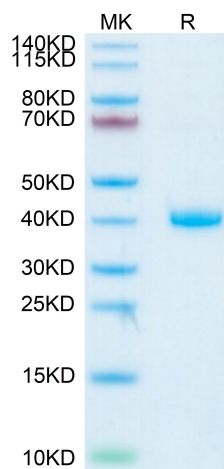
Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state 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**

The R-spondins are members of a superfamily of thrombospondin type 1 repeat (TSR-1)-containing proteins. The prototype member (discovered in 1971) was isolated from platelets that had been stimulated with thrombin, and was therefore designated "thrombin-sensitive protein."

## Assay Data

### Tris-Bis PAGE



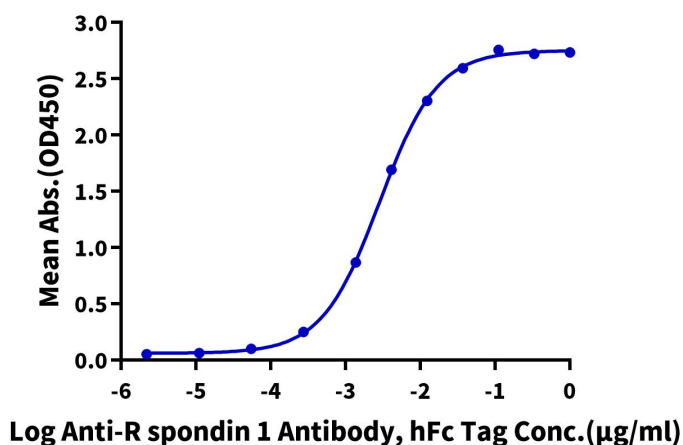
Human R spondin 1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

Assay Data

**Human R spondin 1, His Tag ELISA**

0.05µg Human R spondin 1, His Tag Per Well

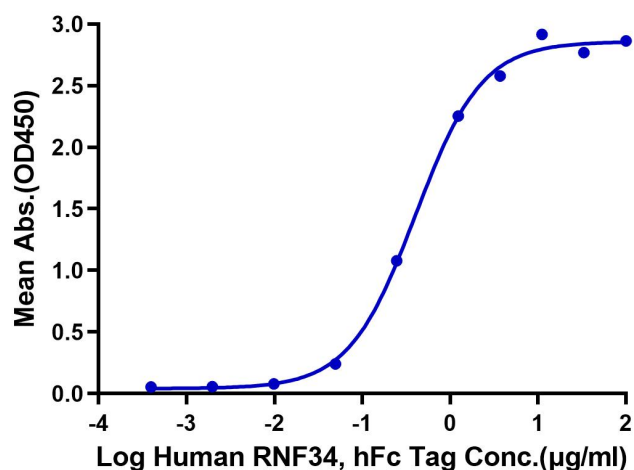


Immobilized Human R spondin 1, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-R spondin 1 Antibody, hFc Tag with the EC50 of 2.9ng/ml determined by ELISA (QC Test).

ELISA Data

**Human R spondin 1, His Tag ELISA**

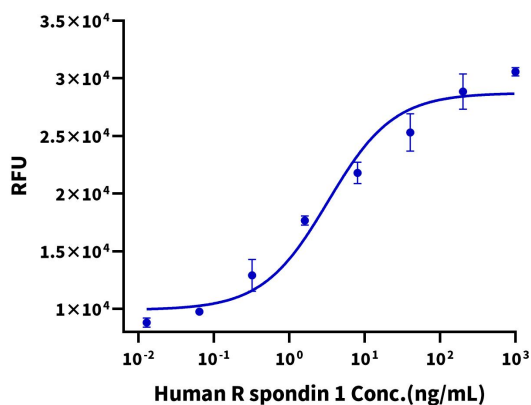
0.5µg Human R spondin 1, His Tag Per Well



Immobilized Human R spondin 1, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human RNF34, hFc Tag with the EC50 of 0.4µg/ml determined by ELISA.

Cell Based Assay

**Recombinant Human R spondin 1 Bioactivity**



Measured by its ability to induce Topflash reporter activity in HEK293T human embryonic kidney cells. The ED50 for this effect is 1.0 - 10.0 ng/mL in the presence of 5 ng/mL recombinant Human Wnt Surrogate-Fc Fusion (WNT-HM23A) (QC Test).