



Synonym

RSP01,CRISTIN3,FLJ40906,RP11-566C13.1,R-spondin-1

Source

Human R-Spondin 1, His Tag(RS1-H4221) is expressed from human 293 cells (HEK293). It contains AA Ser 21 - Ala 263 (Accession # [Q2MKA7-1](#)).

Predicted N-terminus: Ser 21

Molecular Characterization

R-Spondin 1(Ser 21 - Ala 263)
Q2MKA7-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.7 kDa. The protein migrates as 38-42 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

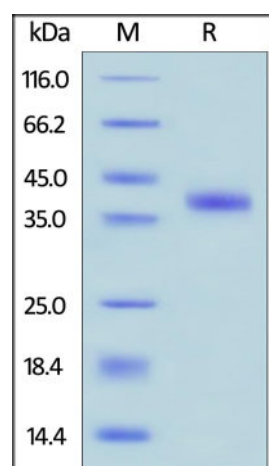
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



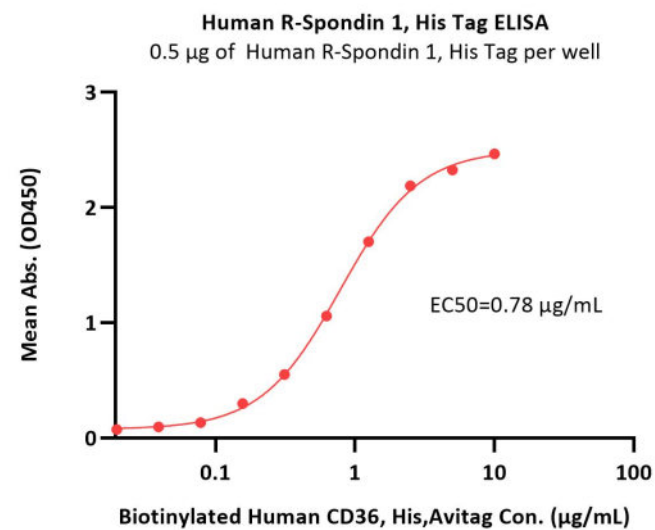
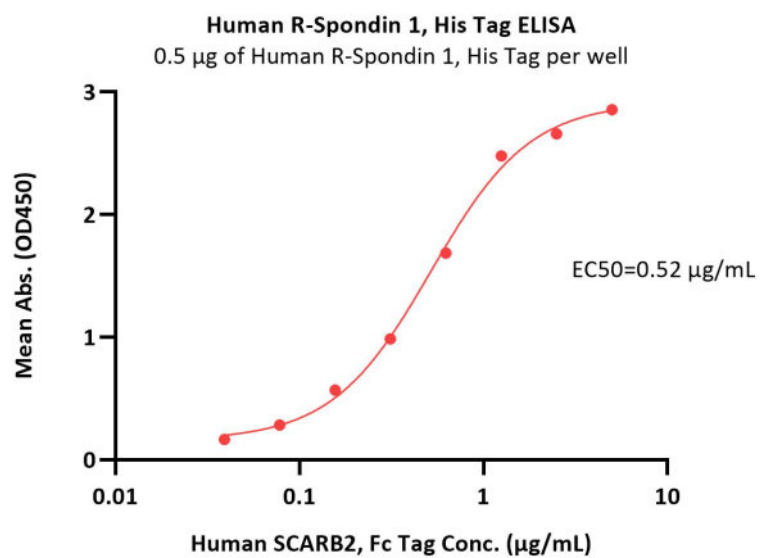
Human R-Spondin 1, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

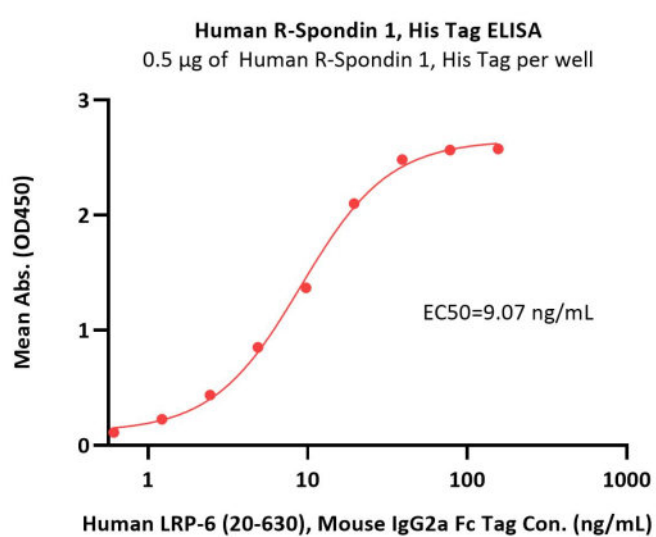
Discounts, Gifts,
and more!





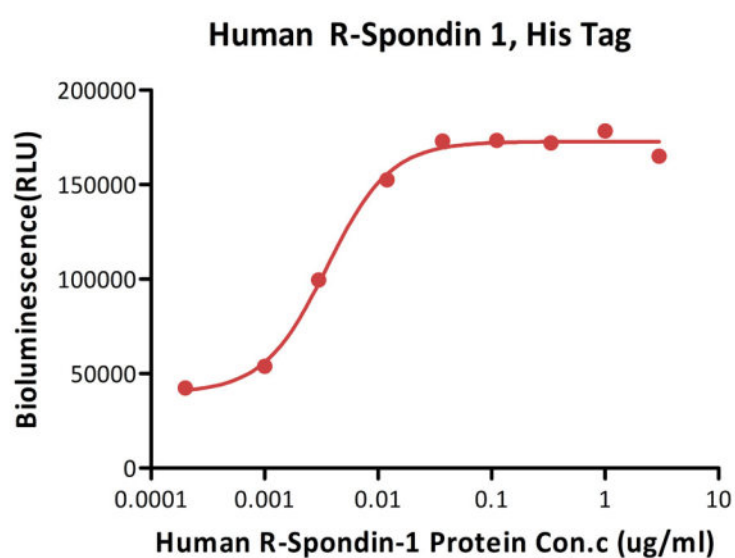
Immobilized Human R-Spondin 1, His Tag (Cat. No. RS1-H4221) at 5 µg/mL (100 µL/well) can bind Human SCARB2, Fc Tag (Cat. No. SC2-H5250) with a linear range of 0.02-1.25 µg/mL (Routinely tested).

Immobilized Human R-Spondin 1, His Tag (Cat. No. RS1-H4221) at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD36, His,Avitag (Cat. No. CD6-H82E9) with a linear range of 0.01-1.25 µg/mL (Routinely tested).



Immobilized Human R-Spondin 1, His Tag (Cat. No. RS1-H4221) at 5 µg/mL (100 µL/well) can bind Human LRP-6 (20-630), Mouse IgG2a Fc Tag (Cat. No. LR6-H5253) with a linear range of 1-20 ng/mL (Routinely tested).

Bioactivity-Bioactivity CELL BASE



Human R-Spondin 1, His Tag (Cat. No. RS1-H4221) induced TCF reporter activity in HEK293 cells. The EC50 for this effect is 0.0035-0.0040 µg/mL (Routinely tested).

Discounts, Gifts, and more!





Background

R-spondin-1 is also known as Roof plate-specific Spondin 1 (RSPO1) and cysteine-rich and single thrombospondin domain containing protein 3 (Cristin 3), which is a secreted protein which belongs to the R-Spondin family and encodes a secreted activator protein with two cysteine-rich, furin-like domains and one thrombospondin type 1 domain. All R-spondins regulate Wnt/ β -catenin signaling, but have distinct expression patterns. Like other R-Spondins, R-Spondin-1 contains two adjacent cysteine-rich furin-like domains (aa 34-135) with one potential N-glycosylation site, followed by a thrombospondin (TSP1) motif (aa 147-207) and a region rich in basic residues (aa 211-263). Only the furin-like domains are needed for β -catenin stabilization. A putative nuclear localization signal at the C-terminus may allow some expression in the nucleus.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

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