

Mouse R spondin 1/RSPO1 Protein

Cat. No. RS1-MM101

Description

Source	Recombinant Mouse R spondin 1/RSPO1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ser21-Gln265.
Accession	Q9Z132
Molecular Weight	The protein has a predicted MW of 28.3 kDa. Due to glycosylation, the protein migrates to 45-48 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

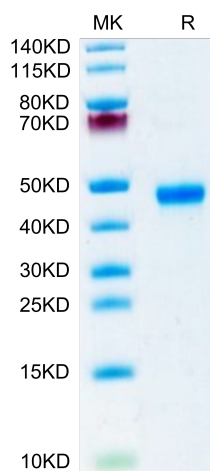
Formulation	Lyophilized from 0.22 μm filtered solution in 20mM MES, 150mM NaCl, 200mM Arginine (pH 5.5). Normally 8% trehalose / 8% mannitol is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in 20mM MES, 150mM NaCl, 200mM Arginine (pH 5.5).
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 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

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

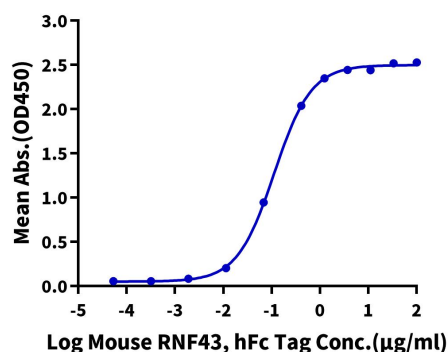


Mouse R spondin 1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Mouse R spondin 1, His Tag ELISA

0.2 μg Mouse R spondin 1, His Tag Per Well

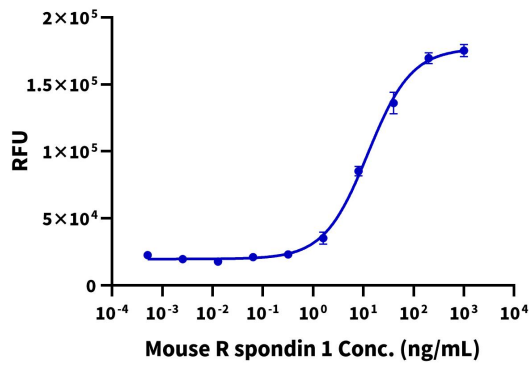


Immobilized Mouse R spondin 1, His Tag at 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{Well}$) on the plate. Dose response curve for Mouse RNF43, hFc Tag with the EC50 of 0.11 $\mu\text{g}/\text{ml}$ determined by ELISA.

Assay Data

Cell Based Assay

Recombinant Mouse 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 10 - 50 ng/mL in the presence of 5 ng/mL recombinant Human Wnt Surrogate-Fc Fusion (WNT-HM23A) (QC Test).