

Datasheet for ABIN7317631

R-Spondin 3 Protein (RSP03) (AA 1-146) (His tag)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	R-Spondin 3 (RSP03)
Protein Characteristics:	AA 1-146
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This R-Spondin 3 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human RSP03 Protein (aa 1-146, His Tag)(Active)
Sequence:	Met 1-Val 146
Characteristics:	A DNA sequence encoding the amino acids (Met 1-Val 146) of human RSP03 (Q9BXY4-1) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its binding ability in a functional ELISA.2. Immobilized RSP03-His (146) at 10 µg/mL (100 µL/well) can bind human RNF43-Fc .The EC50 of human RNF43-Fc is 0.01-0.03µg/mL.

Target Details

Target:	R-Spondin 3 (RSP03)
Alternative Name:	RSP03 (RSP03 Products)
Background:	<p>Background: R-spondin 3 (RSP03) is a member of the R-Spondin (RSPO) family in vertebrates that activate Wnt/beta-catenin signaling, plays a key role in these processes. The RSPO family of secreted Wnt modulators is involved in development and disease and holds therapeutic promise as stem cell growth factors. The four members have high structural homology. RSP02 and RSP03 are more potent than RSP01, whereas RSP04 is relatively inactive. All RSPO members require Wnt ligands and LRP6 for activity and amplify signaling of Wnt3A, Wnt1, and Wnt7A, suggesting that RSPO proteins are general regulators of canonical Wnt signaling. RSP03/PCP signaling during gastrulation requires Wnt5a and is transduced via Fz7, Dvl, and JNK. RSP03 functions by inducing Sdc4-dependent, clathrin-mediated endocytosis. RSP03 is a novel, evolutionarily conserved angiogenic factor in embryogenesis. RSP03 has a key role in the interaction between chorion and allantois in labyrinthine development.</p> <p>Synonym: R-spondin-3,RSP03,Protein with TSP type-1 repeat, Roof plate-specific spondin-3, Thrombospondin type-1 domain-containing protein 2, PWTSR, THSD2, CRISTIN1</p>
Molecular Weight:	15.3 kDa

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.</p> <p>Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>