CHAMOT

Recombinant R-spondin 1, Human, Animal-Free

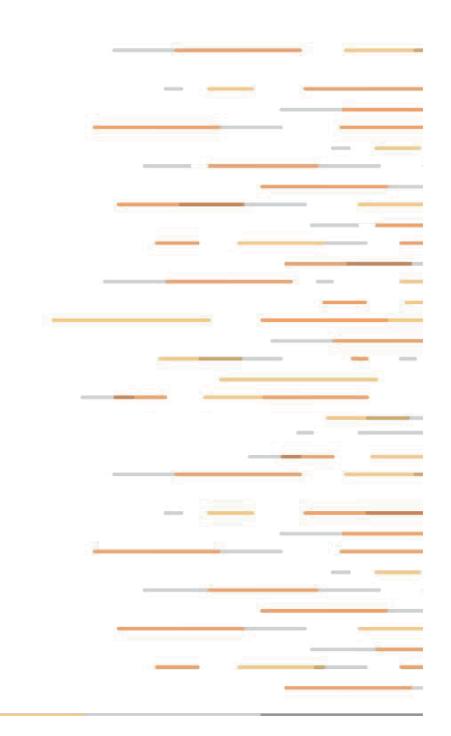
CM181-5HP

CM181-20HP

CM181-100HP

CM181-500HP

CM181-1000HP





トスツと

- 1 Product Specifications
- 2 Product Note
- 3 Storage/Shipping
- 4 Scientific Data



Product Datasheet

Recombinant R-spondin 1, Human, Animal-Free

Catalog#	CM181-5HP	CM181-20HP	CM181-100HP	CM181-500HP	CM181- 1000HP
Size	5 ug	20 ug	100 ug	500 ug	1 mg

Product Specifications

Background

R-spondin 1 (RSPO1, Roof plate-specific Spondin 1) is a cysteine-rich secreted glycoprotein that belongs to the R-Spondin family. Structurally, R-spondin 1 harbors an N-terminal signal peptide, two cysteine-rich furin-like (FU1-FU2) domains, a thrombospondin (TSP) domain, and a basic amino acid-rich (BR) C-terminal domain. R-spondin 1 acts as a ligand for the leucine-rich repeat-containing G-protein coupled receptor (LGR) family (LGR4/5/6), subsequent clearing negative regulators ZNRF3/RNF43 from the membrane, leading to the availability of Wnt receptor and activating Wnt/ β -catenin signaling. The signal cascade is essential for regulating stem cell proliferation, embryonic development, and tissue homeostasis.

Synonyms	RSPO1, Roof plate-specific spondin-1		
Uniprot ID	Q2MKA7		
Molecular Weight	The protein has a calculated MW of 46.8 kDa. The protein migrates as 62-68 kDa under reducing condition (SDS-PAGE analysis).		
Expression System	HEK293		
Purity	>95% as determined by SDS-PAGE.		
Activity	R-Spondin-1 enhances BMP-2-mediated differentiation of MC3T3-E1 cells. The ED $_{50}$ for this effect is 1-3 μ g/mL.		
Endotoxin Level	<1 EU per 1 μ g of the protein by the LAL method.		
Protein Sequence	A DNA sequence encoding Human R-Spondin 1 Protein (#Q2MKA7) (Ser21 - Ala263) was expressed with polyhistidine-SUMO tag at the N-terminus.		
Form	Liquid (1X PBS, pH 7.4) If you have any concerns or special requirements, please confirm with us.		

Product Note

Centrifuge at 3000 rpm for 5 mins before opening. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Storage/Shipping

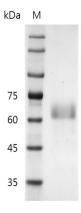
Stability & Storage

Store at 2°C to 8°C for up to 2 weeks, -20°C or -80°C for 6 months. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

Shipping

Blue Ice

Scientific Data



SDS- PAGE analysis of recombinant human R-spondin 1

For Research Use or Further Manufacturing Only

Chamot Biotechnology(Shanghai) Co., Ltd. www.chamot-bio.com

Tel: 021-51880030 Mail: info@chamot-bio.com QQ: 864920491