

# CHAMOT

**重组人R-脊椎蛋白1 /Recombinant R-spondin 1,  
Human, Animal-Free**

CM181-5HP

CM181-20HP

CM181-100HP

CM181-500HP

CM181-1000HP



CHAMOT

乔默®生物

*Specialize In Cytokines*



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## 重组人R-脊椎蛋白1 /Recombinant R-spondin 1, Human, Animal-Free

|      |           |            |             |             |              |
|------|-----------|------------|-------------|-------------|--------------|
| 产品编号 | CM181-5HP | CM181-20HP | CM181-100HP | CM181-500HP | CM181-1000HP |
| 规格   | 5 µg      | 20 µg      | 100 µg      | 500 µg      | 1 mg         |

### 产品简介

#### 背景描述

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/ $\beta$ -catenin signaling. The signal cascade is essential for regulating stem cell proliferation, embryonic development, and tissue homeostasis.

#### 别称

RSPO1, Roof plate-specific spondin-1

#### 蛋白编码

Q2MKA7

#### 分子量

The protein has a calculated MW of 46.8 kDa. The protein migrates as 62-68 kDa under reducing condition (SDS-PAGE analysis).

#### 表达系统

HEK293

#### 纯度

>95% as determined by SDS-PAGE.

#### 生物活性

R-Spondin-1 enhances BMP-2-mediated differentiation of MC3T3-E1 cells. The ED<sub>50</sub> for this effect is < 3 µg/mL.

#### 内毒素检测

<1 EU per 1 µg of the protein by the LAL method.

#### 蛋白序列

A DNA sequence encoding Human R-Spondin 1 Protein (#Q2MKA7) (Ser21 - Ala263) was expressed with polyhistidine-SUMO tag at the N-terminus.

#### 产品形式

Liquid (1X PBS, pH 7.4). If you have any concerns or special requirements, please confirm with us.

#### 产品应用

Cell Culture

## 浓度

Please refer to the product label.

## 产品使用

1. Before opening, centrifuge at 3000 rpm for 5 mins.

### 2. Stock Solution

- Store at 2°C to 8°C for up to 1 week, -20°C or -80°C for 12 months.

### 3. Dilution

- Further dilute the stock solution in a buffer containing a carrier protein or stabilizer (e.g., 0.1% BSA, 10% FBS, 5% HSA, or 5% trehalose solution). The final concentration is not less than 10 µg/ml.
- Prepare aliquots (≥20 µl).
- Store at -20°C or -80°C for 3 to 6 months.

Avoid repeated freeze-thaw cycles.

## 产品储存/运输

### 储存

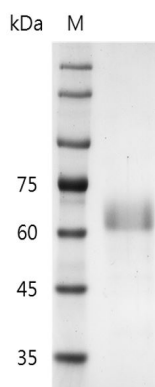
**Stock Solution:** Store at 2°C to 8°C for up to 1 week, -20°C or -80°C for 12 months.

**Dilution:** Store at -20°C or -80°C for 3 to 6 months with a carrier protein or stabilizer.

### 运输

Blue Ice

## 实验数据展示



SDS-PAGE analysis of recombinant human R-spondin 1

For Research Use or Further Manufacturing Only

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