

# Recombinant Human R-spondin-3/ RSPO3 Protein

Catalog No.: RP01952 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot Human 84870 O9BXY4

## **Tags**

C-His

#### **Synonyms**

RSPO3; PWTSR; THSD2;R-spondin-3; Protein with TSP type-1 repeat; hPWTSR; Roof plate-specific spondin-3; hRspo3; Thrombospondin type-1 domaincontaining protein 2

## **Product Information**

Source Purification

HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

29.17 kDa 40-60 kDa

# Endotoxin

 $< 0.1 \; \text{EU/}\mu\text{g}$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

## Reconstitution

Centrifµge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## **Contact**

<b>a</b>	400-999-6126
<b>×</b>	cn.market@abclonal.com.cn
	www.abclonal.com.cn

## **Background**

R-spondin 3 (RSPO3) 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. RSPO2 and RSPO3 are more potent than RSPO1, whereas RSPO4 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. RSPO3/PCP signaling during gastrulation requires Wnt5a and is transduced via Fz7, Dvl, and JNK. RSPO3 functions by inducing Sdc4-dependent, clathrin-mediated endocytosis. RSPO3 is a novel, evolutionarily conserved angiogenic factor in embryogenesis. RSPO3 has a key role in the interaction between chorion and allantois in labyrinthine development.

## **Basic Information**

#### **Description**

Recombinant Human R-spondin-3/ RSPO3 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln22-His272)of Human R-spondin-3/ RSPO3 (Accession #NP\_116173.2) fused with a His tag at the C-terminus.

#### **Bio-Activity**

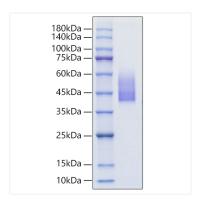
#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80°C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human R-spondin-3/RSPO3 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.