

## **Recombinant Human RSPO1 (C-6His)**

Catalog No: PMK2100

Known As: RSPO1; R-spondin1; RP11-566C13.1; CRISTIN3; FLJ40906; RSPO Rspo1; R-spondin; Rspondin;

RP23-325M14.2; Roof plate-specific spondin-1

## **PROPERTIES**

Description	Recombinant Human R-spondin-1 is produced by our Mammalian expression system and the target gene encoding Ser21-Ala263 is expressed with a 6His tag at the C-terminus.
Accession	Q2MKA7
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Size	10μg/50μg/500μg/1mg
Purity	> 95%
Endotoxin	$< 0.01 \; EU/\mu g$ as determined by LAL test.
Predicted Mol Mass	27.8 KDa
Apparent Mol Mass	40 KDa, reducing conditions
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.  Reconstituted protein solution can be stored at 2-8°C for 2-7 days.  Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Background	RSPO1 is a secreted protein, containing 2 FU(furin-like) repeats and 1 TSP type-1 domain and belonging to the R-spondin family. RSPO1 is required for the early development of gonads, regardless of sex. It has been found in mice only eleven days after fertilization. To induce cell proliferation, it acts synergistically with WNT4. They help stabilize $\beta$ catenin, which activates downstream targets. RSPO1 is necessary in female sex development. It augments the WNT/ $\beta$ catenin pathway to oppose male sex development. In critical gonadal stages, between six and nine weeks after fertilization, the ovaries upregulate it while the testes downregulate it. RSPO1 can potentially aid in the treatment of mucositis, which is characterized by inflammation of the oral cavity. This unfortunate condition often accompanies chemotherapy and radiation in cancer patients with head and neck tumors.

**NOTE:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.