



Recombinant Human RSPO1 (C-6His)

Catalog #	EPT157
Expression Host	Human Cells
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
Synonyms	RSPO1; R-spondin1; RP11-566C13.1; CRISTIN3; FLJ40906; RSPO Rspo1; R-spondin; Rspodin; RP23-325M14.2; Roof plate-specific spondin-1
Mol Mass	27.8 KDa
AP Mol Mass	40 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.01 EU/ μ g as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
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 $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ 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 β catenin, which activates





downstream targets. RSPO1 is necessary in female sex development. It augments the WNT/ β 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.

SDS-PAGE

