R-spondin 1/RSPO1, Human, Recombinant

Cat. No. : PCK214

General Information

Synonyms	RSPO1;R-spondin1;RP11-566C13.1;CRISTIN3;FLJ40906;RSPO Rspo1;R-spondin;Rspondin; RP23-325M14.2;Roof plate-specific spondin-1
Species	Human
Expression host	Mammalian
Sequence	Ser21-Ala263
Accession	Q2MKA7
Tag	6His tag at the C-terminus
Mol mass	27.8 KDa
Expiration date	12 months
Bio activity	Measured by its ability to induce Topflash reporter activity in HEK293T human embryonic kidney cells. The ED50 for this effect is 1-10 ng/mL.

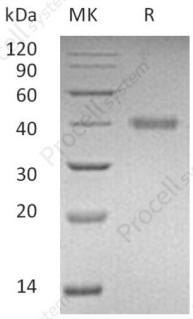
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-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 -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, 4% Mannitol, 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 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

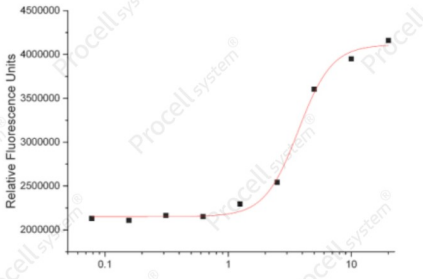
Background

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



Bio activity



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