

Product datasheet for TP727994

OriGene Technologies, Inc.

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RSPO1 Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human R-Spondin-1/RSPO1 (C-6His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Ser21-Ala263

Tag: C-His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

Note: 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.

Stability: 12 months from date of despatch

Locus ID: 284654
UniProt ID: Q2MKA7

Summary: 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 \hat{l}^2 catenin, which activates downstream targets. RSPO1 is necessary in female sex development. It augments the WNT/ \hat{l}^2 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.