

## Recombinant Human R-Spondin 1/RSPO1 Protein (aa 1-146, His Tag)

**Catalog No.** PKSH031268

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

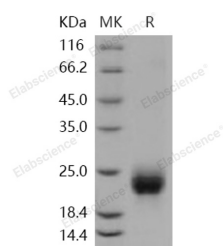
### Description

|                                    |                                                                                                                            |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>                    | RSPO1;R-spondin1;RP11-566C13.1;CRISTIN3;FLJ40906;RSPO Rspo1;R-spondin;Rspondin;RP23-325M14.2;Roof plate-specific spondin-1 |
| <b>Species</b>                     | Human                                                                                                                      |
| <b>Expression Host</b>             | HEK293 Cells                                                                                                               |
| <b>Sequence</b>                    | Met 1-Ala 146                                                                                                              |
| <b>Accession</b>                   | NP_001033722.1                                                                                                             |
| <b>Calculated Molecular Weight</b> | 14 kDa                                                                                                                     |
| <b>Observed molecular weight</b>   | 23 kDa                                                                                                                     |
| <b>Tag</b>                         | C-His                                                                                                                      |
| <b>Bioactivity</b>                 | Measured by its ability to bind recombinant mouse CD36 in a functional ELISA.                                              |

### Properties

|                       |                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 98 % as determined by reducing SDS-PAGE.                                                                                                                                                                                            |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.                                                                                                                                                                       |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                       |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 7.4<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.            |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.                                                                                                                                                                          |

### Data



> 98 % as determined by reducing SDS-PAGE.

### Background

RSPO1 gene is a member of the R-spondin family. It encodes RSPO1 which is known as a secreted activator protein with

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two cystein-rich, furin-like domains and one thrombospondin type 1 domain. In mice, RSPO1 induces the rapid onset of crypt cell proliferation and increases intestinal epithelial healing, providing a protective effect against chemotherapy-induced adverse effects. This protein is an activator of the beta-catenin signaling cascade, leading to TCF-dependent gene activation. RSPO1 acts both in the canonical Wnt/beta-catenin-dependent pathway and in non-canonical Wnt signaling pathway, probably by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. It also acts as a ligand for frizzled FZD8 and LRP6.