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

Catalog Number: PKSH031268

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

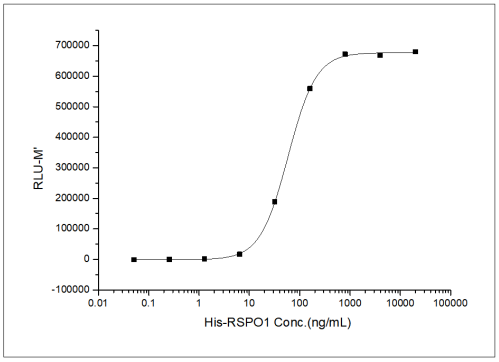
Description

Species	Human
Source	HEK293 Cells-derived Human R-Spondin 1/RSPO1 protein Met 1-Ala 146, with an C-terminal His
Calculated MW	14 kDa
Observed MW	23 kDa
Accession	NP_001033722.1
Bio-activity	Measured by its ability to bind recombinant mouse CD36 in a functional ELISA.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Measured by its ability to induce activation of β-catenin response in a Topflash Luciferase assay using HEK293T human embryonic kidney cells. The ED_{50} for this effect is typically 0.1-0.5 μg/mL in the presence of 5 ng/mL recombinant mouse Wnt3a.

Background

Toll-free: 1-888-852-8623
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RSPO1 gene is a member of the R-spondin family. It encodes RSPO1 which is known as a secreted activator protein with 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.

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