

Human R-Spondin 1, His-SUMO Tag, HEK293

 Catalog Number
 LDG013PHM

 Package
 5 ug / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



Specifications

Species of Origin

Human

Affinity Tag

His-SUMO Tag (N-term)

Buffer

Liquid. Phosphate buffered saline, pH 7.4.

Molecular weight

The protein has a calculated MW of 46.8 kDa. The protein migrates as 62-68 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin level

<1 EU per 1 µg of the protein by the LAL method.

Expression system

HEK293

Concentration

Please refer to the product label.

Purity

>95% as determined by SDS-PAGE analysis.

Activity

R-Spondin-1 enhances BMP-2-mediated differentiation of MC3T3-E1 cells. The ED $_{50}$ for this effect is < 3 μ g/mL.

Form

Liquid

Background



Background

R-spondin 1 (RSPO1, Roof plate-specific Spondin 1) is a cysteine-rich secreted glycoprotein that belongs to the R-Spondin family. Structurally, R-spondin 1 harbors an N-terminal signal peptide, two cysteine-rich furin-like (FU1-FU2) domains, a thrombospondin (TSP) domain, and a basic amino acid-rich (BR) C-terminal domain. R-spondin 1 acts as a ligand for the leucine-rich repeat-containing G-protein coupled receptor (LGR) family (LGR4/5/6), subsequent clearing negative regulators ZNRF3 /RNF43 from the membrane, leading to the availability of Wnt receptor and activating Wnt/β-catenin signaling. The signal cascade is essential for regulating stem cell proliferation, embryonic development, and tissue homeostasis.

Uniprot ID

Q2MKA7

Synonyms

Roof plate-specific spondin-1, hRspo1

Sequence Note

Ser21-Ala263

Instruction

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long-term storage.

Stability & Storage

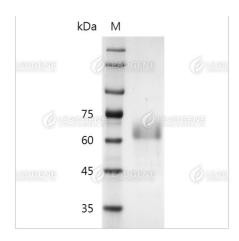
This product is stable after storage at:

 -80°C for long-term storage under sterile conditions.

Avoid repeated free-thaw cycles.

Image





SDS-PAGE analysis of recombinant human R-Spondin 1.

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