

# Recombinant Human R-Spondin-3

Catalog # PBG10388

# **Specification**

### Recombinant Human R-Spondin-3 - Product Information

## Recombinant Human R-Spondin-3 - Additional Information

### **Description**

The R-Spondin (Rspo) proteins belong to the Rspo family of Wnt modulators. Currently, the family consists of four structurally related secreted ligands (Rspo 1-4), all containing furin-like and thrombospondin structural domains. The Rspo proteins can interact with the Frizzled/LRP6 receptor complex in a manner that causes the stabilization and resulting accumulation of the intracellular signaling protein,  $\beta$ -catenin. This activity effectively activates and increases the subsequent nuclear signaling of  $\beta$ -catenin. R-Spondin can also bind to the previously discovered G-protein coupled receptors, LGR-4 and LGR-5. Rspo/ $\beta$ -catenin signaling can act as an inducer of the transformed phenotype, and can also regulate the proliferation and differentiation of certain stem cell populations. Recombinant human R-Spondin-3 is a 26.9 kDa protein consisting of 240 amino acid residues. Due to glycosylation, R-Spondin-3 migrates at an apparent molecular weight of approximately 37.0 kDa by SDS PAGE analysis under reducing conditions.

### **Biological**Activity

R-Spondin-3 enhances BMP-2 mediated differentiation of MC3T3-E1 cells.

#### **Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### Endotoxin

Endotoxin level is  $<0.1 \text{ ng}/\mu\text{g}$  of protein ( $<1\text{EU}/\mu\text{g}$ ).

# **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

# **Storage**

-20°C

#### **Precautions**

Recombinant Human R-Spondin-3 is for research use only and not for use in diagnostic or therapeutic procedures.

# Recombinant Human R-Spondin-3 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry





- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human R-Spondin-3 - Images