

## 32-20580: Recombinant Human R-Spondin-3(Discontinued)

**Reactivity :** Mouse

**Alternative Name :** Roof plate-specific spondin-3, RSPO3, PWTSR, THSD2

### Description

#### Source:CHO cells

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.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MHPNVSQGCQ GGCATCSDYN GCLCKPRLF FALERIGMKQ IGVCLSSCPS GYGTRYPDI NKCTCKKADC  
DTCFNKNFCT KCKSGFYLHL GKCLDNCPEG LEANNHTMEC VSIVHCEVSE WNPWSPCTKK  
GKTCGFKRGT ETRVREIIQH PSAKGNLCP TNETRKCTVQ RKKCQKGERG KKGREKRKK PNKGESKEAI  
PDSKSLESSK EIPEQRENKQ QQKKRKVQDK QKSVSVSTVH

### Application Note

R-Spondin-3 enhances BMP-2-mediated differentiation of MC3T3-E1 cells. The expected  $ED_{50}$  for this effect is  $0.8 \pm 2.0 \mu\text{g/ml}$ .