

R-Spondin-3, human recombinant protein
PWTSR, THSD2, Roof plate-specific spondin-3, RSPO3
Catalog # PBV10821r**Specification**

R-Spondin-3, human recombinant protein - Product info

Primary Accession [Q9BXY4](#)
Calculated MW **37.0 kDa** KDa

R-Spondin-3, human recombinant protein - Additional Info

Gene ID **84870**
Gene Symbol **RSPO3**

Other Names

PWTSR, THSD2, Roof plate-specific spondin-3, RSPO3

Gene Source **Human**
Source **CHO Cells**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence **MHPNVSQGCQ GGCATCSDYN GCLSCKPRLF
FALERIGMKQ IGVCLSSCPs GYYGTRYPDI
NKCTKCKADC DTCFNKNFCT KCKSGFYHLH
GKCLDNCPEG LEANNHTMEC VSIVHCEVSE
WNPWSPCTKK GKTCGFKRGT ETRVREIIQH
PSAKGNLCPp TNETRKCTVQ RKKCQKGERG
KKGREKRKK PNKGESKEAI PDSKSLESSK
EIPEQRENKQ QQKKRKVQDK QKSVSVSTVH**

Target/Specificity

R-Spondin-3

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10mM Sodium Phosphate, pH 7.5 and 150 mM NaCl.

R-Spondin-3, human recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

R-Spondin-3, human recombinant protein - Images

R-Spondin-3, human recombinant protein - Background

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, β -catenin. This activity effectively activates and increases the subsequent nuclear signaling of β -catenin. R-Spondin can also bind to the previously discovered G-protein coupled receptors, LGR-4 and LGR-5. Rspo/ β -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.

R-Spondin-3, human recombinant protein - References

Chen J.-Z., et al. Mol. Biol. Rep. 29:287-292(2002).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Mungall A.J., et al. Nature 425:805-811(2003).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
Kim K.-A., et al. Cell Cycle 5:23-26(2006).