

R-Spondin-1, human recombinant protein
Roof plate-specific Spondin, Rspo1
Catalog # PBV10819r**Specification**

R-Spondin-1, human recombinant protein - Product info

Primary Accession [Q2MKA7](#)
Calculated MW **40.0 kDa KDa**

R-Spondin-1, human recombinant protein - Additional Info

Gene ID **284654**
Gene Symbol **RSP01**

Other Names

Roof plate-specific Spondin, Rspo1

Gene Source **Human**
Source **CHO Cells**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence **SRGIKGRQR RISAEGSQAC AKGCELCSEV
NGCLKCSPKL FILLERNDIR QVGVCLPSCP
PGYFDARNPD MNKCIKCKIE HCEACFSHNF
CTKCKEGLYL HKGRCYPACP EGSSAANGTM
ECSSPAQCEM SEWSPWGPCS KKQQLCGFRR
GSEERTRRVL HAPVGDHAAC SDTKETRRCT
VRRVPCPEGQ KRRKGGQGRR ENANRNLARK
ESKEAGAGSR RRRKGQQQQQ QGTVGPLTSA
GPA**

Target/Specificity

R-Spondin-1

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-1, 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-1, human recombinant protein - Images

R-Spondin-1, human recombinant protein - Background

R-Spondin-1 (Rspo-1) belongs 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. Rspo-1 is expressed in certain areas of the developing central nervous system, as well as in adrenal glands, ovary, testis, thyroid, and trachea. Rspo can interact with the Frizzled/LRP6 receptor complex in a manner that stimulates the Wnt/beta-catenin signaling pathway. Recombinant human R-Spondin-1 is a 26.7 kDa protein consisting of 243 amino acid residues. Due to glycosylation, R-Spondin-1 migrates at an apparent molecular weight of approximately 40.0 kDa by SDS PAGE analysis under reducing conditions.

R-Spondin-1, human recombinant protein - References

Kim K.-A., et al. Science 309:1256-1259(2005).
Parma P., et al. Nat. Genet. 38:1304-1309(2006).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Gregory S.G., et al. Nature 441:315-321(2006).
Hao H.X., et al. Nature 485:195-200(2012).