

Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein
RSPO3, CRISTIN1, PWTSR, THSD2
Catalog # PBV11084r**Specification****Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein - Product info**Primary Accession
Calculated MW[Q9BXY4](#)

This protein is fused with 6×His tag at the C-terminus, has a calculated MW of 15.3 kDa. The predicted N-terminus is Gln 22. DTT-reduced Protein migrates as 18 kDa and 24 kDa due to different glycosylation. KDa

Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
RSPO3, CRISTIN1, PWTSR, THSD284870
RSPO3Gene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Results

Human
HEK293 cells
SDS-PAGE; ≥95%
N/A;
Yes
Measured by its ability to induce activation of beta -catenin response in a Topflash Luciferase assay using HEK293T human embryonic kidney cells. The ED50 for this effect is typically 0.5 - 2.0 ng/ml in the presence of 5 ng/mL rmWnt-3a.

Target/Specificity
R-Spondin 3 /RSPO3 (22-146)**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp R-Spondin 3 /RSPO3 (22-146), 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](#)

Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein - Images**Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein - Background**

R-Spondin 3 (RSPO3), also called cysteine-rich and single thrombospondin domain containing-1 (CRISTIN1), Protein with TSP type-1 repeat (PWTSR), is a member of the R-Spondin protein family. R-spondins (RSPO) are a recently discovered secretory protein family with four members in human and mouse. Although all four RSPO proteins activate the canonical Wnt pathway, RSPO2 and RSPO3 are more potent than RSPO1, whereas RSPO4 is relatively inactive. RSPO-3 is expressed ubiquitously and expressed at higher level in placenta, small intestine, fetal thymus and lymph node. RSPO3 is the activator of the beta-catenin signaling cascade, leading to TCF-dependent gene activation. RSPO3 acts both in the canonical Wnt/beta-catenin-dependent pathway and in non-canonical Wnt signaling pathway, probably by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. RSPO3 also acts as a ligand for frizzled FZD8 and LRP6 and may negatively regulate the TGF-beta pathway.

Human CellExp R-Spondin 3 /RSPO3 (22-146), human recombinant protein - References

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Mungall A.J., et al. Nature 425:805-811(2003).
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