

RSPO3 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21989b

Specification

RSPO3 Antibody (C-Term) - Product Information

Application WB,E
Primary Accession Q9BXY4
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 30929

RSPO3 Antibody (C-Term) - Additional Information

Gene ID 84870

Other Names

R-spondin-3, Protein with TSP type-1 repeat, hPWTSR, Roof plate-specific spondin-3, hRspo3, Thrombospondin type-1 domain-containing protein 2, RSPO3, PWTSR, THSD2

Target/Specificity

This RSPO3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 197-230 amino acids from human RSPO3.

Dilution

WB~~1:8000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RSPO3 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

RSPO3 Antibody (C-Term) - Protein Information

Name RSPO3

Synonyms PWTSR, THSD2



Function Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors, which acts as a key regulator of angiogenesis. Upon binding to LGR4-6 (LGR4, LGR5 or LGR6), LGR4-6 associate with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. Also regulates the canonical Wnt/beta-catenin-dependent pathway and non-canonical Wnt signaling by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway (PubMed:21727895, PubMed:21909076, PubMed:22615920). Acts as a key regulator of angiogenesis by controlling vascular stability and pruning: acts by activating the non-canonical Wnt signaling pathway in endothelial cells (By similarity) (PubMed:21727895, PubMed:21909076, PubMed:21615920). Can also amplify Wnt signaling pathway independently of LGR4-6 receptors, possibly by acting as a direct antagonistic ligand to RNF43 and ZNRF3 (PubMed:29769720).

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q2TJ95}.

Tissue Location

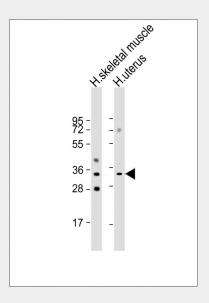
Ubiquitously expressed. Expressed at higher level in placenta, small intestine, fetal thymus and lymph node (PubMed:12463421). Highly expressed in endothelial cells (PubMed:26766444).

RSPO3 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RSPO3 Antibody (C-Term) - Images



All lanes: Anti-RSPO3 Antibody (C-Term) at 1:8000 dilution Lane 1: human skeletal muscle lysate



Lane 2: human uterus lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RSPO3 Antibody (C-Term) - Background

Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors. Upon binding to LGR4-6 (LGR4, LGR5 or LGR6), LGR4-6 associate with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. Also regulates the canonical Wnt/beta-catenin-dependent pathway and non-canonical Wnt signaling by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway.

RSPO3 Antibody (C-Term) - 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/DDBJ databases.
Kim K.-A.,et al.Cell Cycle 5:23-26(2006).