

RSPO1 / RSPO Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS13527

Specification

RSPO1 / RSPO Antibody (N-Terminus) - Product Information

Application IF, WB, IHC Primary Accession Q2MKA7

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 29kDa KDa

RSPO1 / RSPO Antibody (N-Terminus) - Additional Information

Gene ID 284654

Other Names

R-spondin-1, Roof plate-specific spondin-1, hRspo1, RSPO1

Target/Specificity

Human RSPO1

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

RSPO1 / RSPO Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

RSPO1 / RSPO Antibody (N-Terminus) - Protein Information

Name RSP01

Function

Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors (PubMed:29769720). 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. Has a essential roles in ovary determination. Regulates Wnt signaling by antagonizing DKK1/KREM1- mediated internalization of LRP6 through an interaction with KREM1 (PubMed:17804805).

Cellular Location



Secreted. Nucleus {ECO:0000250|UniProtKB:Q9Z132} Note=Seems to mainly localize to nucleoli {ECO:0000250|UniProtKB:Q9Z132}

Tissue Location

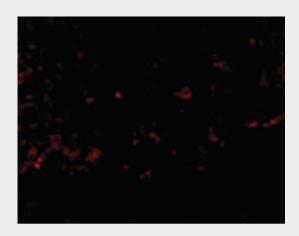
Abundantly expressed in adrenal glands, ovary, testis, thyroid and trachea but not in bone marrow, spinal cord, stomach, leukocytes colon, small intestine, prostate, thymus and spleen.

RSPO1 / RSPO Antibody (N-Terminus) - Protocols

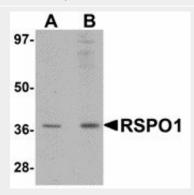
Provided below are standard protocols that you may find useful for product applications.

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

RSPO1 / RSPO Antibody (N-Terminus) - Images

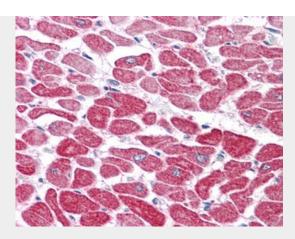


Immunofluorescence of RSPO1 in Human Spleen cells with RSPO1 antibody at 20 ug/ml.



Western blot of RSPO1 in rat spleen tissue lysate with RSPO1 antibody at (A) 1 and (B) 2 ug/ml.





Anti-RSPO1 antibody IHC of human heart.

RSPO1 / RSPO Antibody (N-Terminus) - 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. Has a essential roles in ovary determination.

RSPO1 / RSPO Antibody (N-Terminus) - 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).