

# Rabbit Anti-RSPO1 antibody

# SL21386R

<b>Product Name:</b>	RSPO1
Chinese Name:	分泌性蛋白RSPO1抗体
Alias:	CRISTIN3; FLJ40906; hRspo1; R spondin homolog (Xenopus laevis); R spondin homolog; R spondin1; R-spondin-1; Roof plate specific spondin; Roof plate-specific spondin-1; RP11-566C13.1; RSPO; Rspo1; RSPO1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,Dog,Pig,Rabbit,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RSPO1 :21-120/263
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	RSPO1 is a member of the R-spondin family and encodes a secreted activator protein with two cystein-rich, furin-like domains and one thrombospondin type 1 domain. In mice, the protein induces the rapid onset of crypt cell proliferation and increases intestinal epithelial healing, providing a protective effect against chemotherapy-induced adverse effects.

#### **Function:**

Activator of the beta-catenin signaling cascade, leading to TCF-dependent gene activation. Acts both in the canonical Wnt/beta-catenin-dependent pathway, possibly via a direct interaction with Wnt proteins, and in a Wnt-independent beta catenin pathway through a receptor signaling pathway that may not use frizzled/LRP receptors. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway. Has a essential roles in ovary determination.

#### **Subunit:**

Interacts with the extracellular domain of FZD8 and LRP6. It however does not form a ternary complex with FZD8 and LRP6. Interacts with WNT1. Binds heparin (By similarity).

#### **Subcellular Location:**

Secreted.

### Tissue Specificity:

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.

#### **DISEASE:**

Defects in RSPO1 are the cause of palmoplantar keratoderma with squamous cell carcinoma of skin and sex reversal (PKKSCC) [MIM:610644]. This recessive syndrome is characterized by XX (female to male) SRY-independent sex reversal, palmoplantar hyperkeratosis and predisposition to squamous cell carcinoma of the skin.

#### Similarity:

Belongs to the R-spondin family. Contains 2 FU (furin-like) repeats. Contains 1 TSP type-1 domain.

## SWISS: Q2MKA7

# **Gene ID:** 284654

#### Database links:

Entrez Gene: 284654Human

Entrez Gene: 192199 Mouse

Entrez Gene: 313589Rat

Omim: 609595Human

SwissProt: Q2MKA7Human

SwissProt: Q9Z132Mouse

Unigene: 135015Human

Unigene: 42202 Mouse

### **Important Note:**

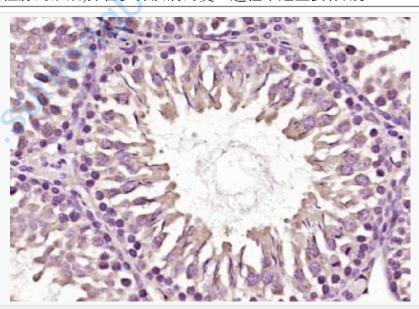
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#### R-

spondin(Rspo)是近年来新发现的蛋白家族,包括4个成员(Rspo1~4)。Rspo蛋白家族所有成员均为分泌性蛋白,均有两个富含半胱氨酸的furin-

like结构域、1个TSP1结构域和富含碱性氨基酸的C端区域。Rspos通过激活并协同Wnt/β-

catenin信号通路参与对细胞增殖和分化的调控,影响骨骼、肌肉、血管等组织的发育以及肢体和性腺的形成,并在多种疾病的发生过程中起重要作用。



#### Picture:

Paraformaldehyde-fixed, paraffin embedded (rat testis tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

for 30min; Antibody incubation with (RSPO1) Polyclonal Antibody, Unconjugated
(SL21386R) at 1:200 overnight at 4°C, followed by operating according to SP
Kit(Rabbit) (sp-0023) instructions and DAB staining.

