SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-RSPO1 antibody

Catalog Number: SL6185R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	RSPO1
Immunogen:	KLH conjugated synthetic peptide derived from human RSPO1: 131-230/263
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	ELISA=1:5000-10000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	(predicted:Human,Mouse,Rat,Rabbit)
Predicted MW.:	27kDa
Subcellular Location:	Secretory protein
Background:	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).

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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	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. **Database links:** **Entrez Gene:** 284654 Human **Entrez Gene:** 192199 Mouse **Entrez Gene:** 313589 Rat Omim: 609595 Human **SwissProt:** Q2MKA7 Human **SwissProt:** Q9Z132 Mouse **Unigene:** 135015 Human **Unigene:** 42202 Mouse R-spondin (Rspo) is a newly discovered protein family in recent years, including 4 members (Rspo1-4). All members of the Rspo protein family are secretory proteins, each containing two cysteine-rich furin-like domains, one TSP1 domain, and a basic amino acid-rich C-terminal region. Rspos participate in the regulation of cell proliferation and differentiation by activating and synergizing with the Wnt/β-catenin signaling pathway, affect the development of tissues such as bone, muscle, and blood vessels as well as the formation of limbs and gonads, and play important roles in the occurrence of various diseases.

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