

## R-Spondin Monoclonal Antibody

<b>Catalog No :</b>	YM0566
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	R-Spondin
<b>Fields :</b>	>>Wnt signaling pathway
<b>Gene Name :</b>	RSPO1
<b>Protein Name :</b>	R-spondin-1
<b>Human Gene Id :</b>	284654
<b>Human Swiss Prot No :</b>	Q2MKA7
<b>Mouse Swiss Prot No :</b>	Q9Z132
<b>Immunogen :</b>	Purified recombinant fragment of R-spondin1 expressed in E. Coli.
<b>Specificity :</b>	R-Spondin Monoclonal Antibody detects endogenous levels of R-Spondin protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	29kD

**P References :**

1. Nat Genet. 2006 Nov;38(11):1304-9.
2. Hum Mutat. 2008 Feb;29(2):220-6.

**Background :**

This gene encodes a secreted activator protein with two cysteine-rich, furin-like domains and one thrombospondin type 1 domain. The encoded protein is a ligand for leucine-rich repeat-containing G-protein coupled receptors (LGR proteins) and positively regulates the Wnt signaling pathway. 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014],

**Function :**

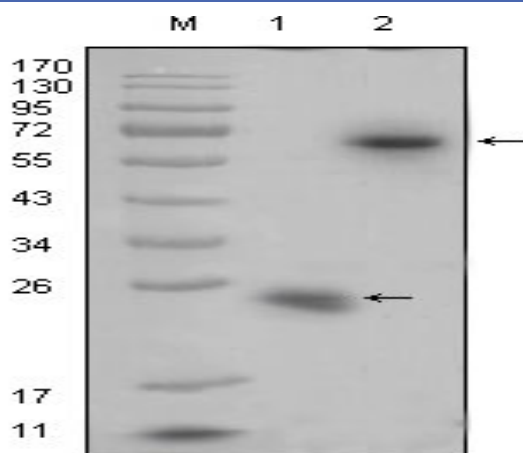
disease:Defects in RSPO1 are the cause of palmoplantar keratoderma with squamous cell carcinoma of skin and sex reversal (PKKSCC) [MIM:610644]. This recessive syndrome is characterized by XX (female to male) SRY-independent sex reversal, palmoplantar hyperkeratosis and predisposition to squamous cell carcinoma of the skin.,domain:The FU repeats are required for activation and stabilization of beta-catenin.,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.,miscellaneous

**Subcellular Location :**

Secreted . Nucleus . Seems to mainly localize to nucleoli. .

**Expression :**

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.

**Products Images**

Western Blot analysis using R-Spondin Monoclonal Antibody against recombinant R-spondin1 protein (1) and R-spondin1(aa21-263)-hlgGFc transfected HEK293 cell lysate(2).