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RSPO4 Rabbit pAb

Catalog # AP99056

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q2I0M5
Other Accession	Q2I0M5
Predicted	Rat, Pig, Human, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26171
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RSPO4
Epitope Specificity	21-120/234
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the R-spondin family. Contains 1 FU (furin-like) repeat. Contains 1 TSP type-1 domain.
Post-translational modifications	Tyr-112 may be phosphorylated; however as this position is probably extracellular, the vivo relevance is not proven.
DISEASE	Defects in RSPO4 are the cause of anonychia congenita (ANONC) [MIM:206800]. A rare condition characterized by the absence or severe hypoplasia of all fingernails and toenails without significant bone anomalies.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the R-spondin family of proteins that share a common domain organization consisting of a signal peptide, cysteine-rich/furin-like domain, thrombospondin domain and a C-terminal basic region. The encoded protein may be involved in activation of Wnt/beta-catenin signaling pathways. Mutations in this gene are associated with anonychia congenital. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Sep 2009]

Additional Information

Gene ID	343637
Other Names	C20orf182; CRISTIN4; A730099F22; A930029K19Rik; RGD1563415; RSPO4_HUMAN; RSPO4; Roof plate-specific spondin-4 (hRspo4); RSPO4_MOUSE; Cysteine-rich and single thrombospondin domain-containing protein 4 (Cristin-4 | mCristin-4); Roof plate-specific spondin-4; R-spondin 4; chromosome 20 open reading frame 182; R-spondin family, member 4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	RSPO4
Synonyms	C20orf182
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 (PubMed:21727895, PubMed:21909076).
Cellular Location	Secreted.

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